The Influence of Meditation Experience and Perceived Parental Warmth on Compassion

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ABSTRACT

Previous research shows an association between meditation experience and improved self-compassion and compassion from others. However, whether meditation influences the ability to receive compassion requires further research. Previous research has shown that self-compassion may be related to perceived warmth from parents. Previous research has not investigated the effects of perceived parental warmth on compassion for and from others. The current study investigated the influence of meditation experience and perceived parental warmth on three types of compassion. One hundred and forty-seven people recruited from the University of Adelaide and Facebook posts, aged 18 to 68 (M = 31.03, SD = 12.36) completed measures of self-compassion, compassion for others, receiving compassion from others, perceived parental warmth, and meditation experience in an online study. Results indicated that perceived parental warmth was significantly positively correlated with self-compassion and receiving compassion from others. There was a positive relationship between meditation frequency (years of meditation and sessions per week) and self-compassion. These findings suggest that perceived parental warmth influences levels of self-compassion and receiving compassion from others. Meditation frequency was also suggested to be a predictor of self-compassion. Predictors of compassion for others requires further research.

DECLARATION

This thesis contains no material which has been accepted for the award of any other degree of diploma in any University, and, to the best of my knowledge, this thesis contains no material previously published except where due reference is made. I give permission for the digital version of this thesis to be made available on the web, via the University of Adelaide's digital thesis repository, the Library Search and through web search engines, unless permission has been granted by the School to restrict access for a period of time.

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CHAPTER 1

Introduction

Compassion is associated with many positive outcomes for both the individual and for others. Compassionate people are often found to have stronger social relationships (Lewis, Haviland-Jones, & Barrett, 2010). Overall, high levels of compassion are associated with better mental health, including individuals being more comfortable with accepting help from their peers (Cosley, McCoy, Saslow, & Epel, 2010). Due to the various outcomes associated with levels of compassion, it is important to acknowledge that there are several predictors which may contribute. The current study investigates three aspects of compassion and two potential predictors of levels of compassion: meditation experience, and perceived parental warmth.

1.1 What is Compassion?

Compassion is valued by many major religions, including Buddhism. The Dalai Lama (1995), a prominent representative of Tibetan Buddhism defined compassion as; "An openness to suffering of others with a commitment to relieve it". Compassion in Buddhism is often associated with 'loving-kindness'. This is a construct which outlines the hope for all people to live a positive and happy life. Loving-kindness and compassion are combined into a type of mindfulness meditation which is referred to as *tonglen*. This meditation involves breathing in and out, symbolising accepting the suffering of another person, and releasing happiness of oneself (Shonin, Van Gordon, & Griffiths, 2014). This does not involve a feeling of pity for the other person. Instead, it consists of joy, loving-kindness, compassion, and equanimity, which are considered to be immeasurable attitudes (Shonin et al., 2014). It is suggested that loving-kindness and compassion can only be present if an individual practises meditation (Shonin et al., 2014). Buddhists believe that loving-kindness and compassion should be shown to all people who need it, regardless of any prior relationship with that

person (Bodhi, 1994). Overall, compassion in Buddhism involves the hope for all people to live a life without negativity or suffering. (Bodhi, 1994)

Compassion is also studied in Western Psychology. Defining compassion has been debated within Western Psychology, with previous research proposing three alternative theoretical understandings of compassion. Firstly, compassion is seen as an alternative term of empathic distress (Ekman, 2003; Hoffman, 1981). This suggests that compassion involves an individual taking on and vicariously feeling the distress of another person (Hatfield, Cacioppo, & Rapson, 1993). Secondly, it is proposed that compassion is a combination of sadness and love, rather than its own emotion (Post, 2002; Shaver, Schwartz, Kirson, & O'Connor, 1987; Sprecher & Fehr, 2005; Underwood, 2002). The third understanding however, suggests that compassion is its own affective state, that is separate from feelings of distress, sadness, and love (Goetz, Keltner, & Simon-Thomas, 2010).

Overall, Goetz and colleagues (2010) define compassion as a result of witnessing another being in distress and feeling the need to help. Western Psychology views compassion as being specific to a person or situation (Goetz et al., 2010). In contrast to the Buddhism understanding of compassion, Western Psychology suggests individuals will feel more compassionate towards people they have a strong relationship with, than people they do not know well (Fehr, Sprecher, & Underwood, 2009). However, although there are differences between the understanding of compassion in Buddhism and Western Psychology, both have a focus on alleviating human suffering and having concern for others (Levine, 2011).

Recent research has continued to attempt to develop a widely accepted definition of compassion. Compassion is seen as being more than simply emotional recognition of suffering by others, as it also involves motivation to help others when they are suffering (Gilbert, 2010; Strauss, et al., 2016; Weng, Fox, Hessenthaler, Stodola, & Davidson, 2015).

An individual who is compassionate is also expected to have the ability to accept their own response to suffering (Gilbert, 2010). It is also widely accepted that compassion consists of two main components: an understanding of the distress of self and others; and the motivation to assist to alleviate someone's distress or suffering (Gilbert & Choden, 2013).

It has also been argued that compassion consists of three distinct facets; noticing, feeling and responding. These three facets involve being aware, having an emotional response, and having a desire to help an individual who is suffering (Kanov, et al., 2004).

Gilbert's (2010) definition of compassion has similarities to Kanov and colleagues' (2004) definition. In Gilbert's definition, compassion involves six attributes: sensitivity (understanding when someone needs help); sympathy (showing concern); empathy (imagining what that person is feeling); motivation/caring (responding to someone's distress); distress tolerance (the ability to cope with one's own emotions when someone else is suffering); and non-judgement (being understanding and tolerant of another's situation and emotions).

Strauss and colleagues (2016) also attempted to develop a definition of compassion acceptable to researchers. Several databases were used to search for current measures of compassion and self-compassion. The findings of this research led to the development of a new definition, which referenced several previously proposed definitions from Buddhist and Western psychology perspectives, and is a cognitive, affective, and behavioural approach. Strauss and colleagues defined compassion as consisting of the following five elements: 1) recognising suffering; 2) understanding the concept of distress in the human experience; 3) emotionally connecting with others during their distress; 4) accepting one's own distress to allow the ability to accept other's and; 5) assisting or feeling motivated to lessen someone's distress.

There continues to be a discussion on an appropriate definition of compassion, however many of the recently proposed definitions take previous definitions and various perspectives into consideration. The current study uses Gilbert's (2010) definition of compassion. This definition encompasses the beliefs of compassion from both a Buddhist and Western Psychology perspective. Specifically, as suggested by the Dalai Lama (2002), Gilbert (2010) recognises that compassion can be extended even to people we do not know.

Buddhism discusses compassion for all people, which includes oneself as well as others. It therefore makes sense to measure levels of self-compassion in individuals. Neff (2003a) developed a definition for self-compassion based on definitions of compassion for others, and the Buddhist approach. This definition outlines self-compassion as consisting of three principal components: self-kindness, referring to being kind and not being critical towards the self; mindfulness, rather than overidentifying with distress individuals are able to hold this emotion in mindful awareness; and common humanity, understanding that suffering is part of the human experience (Neff, 2003a). In summary, self-compassion refers to individuals having the same understanding and acceptance of distress for oneself as would typically be shown for others (Allen & Leary, 2010). Research has shown self-compassion to be associated with many positive attributes including; greater social connectedness, life satisfaction, emotional intelligence, and ability to cope with adversity (Neff, 2003b, 2009; Neff, Hsieh, & Dejitthirat, 2005; Neff & Vonk, 2009). Previous research suggests that self-compassion is needed to have the ability to experience compassion from others (Goldstein, 2003).

The current study will be focused on three orientations of compassion; self-compassion, compassion for others, and receiving compassion from others. It is thought that experiencing compassion for others is easier than feeling compassion for oneself (Germer, 2009). Receiving compassion, however, has recently been a topic of interest for researchers.

In particular, research has focused on fear surrounding receipt of compassion from others. This often occurs when an individual feels as though they do not deserve kindness, or to be cared for by others. This is often associated with depression, anxiety and insecure attachment (Gilbert, McEwan, Matos, & Rivis, 2011).

1.2 Benefits of Compassion

There are many benefits to receiving compassion from others, as well as being compassionate to others and oneself (Gilbert, 2005). In particular, compassion for others has been found to benefit an individual (Cosley et al., 2010), such as increasing the amount of social support people believe is available to them. Many people who show others a high level of compassion report the feeling of receiving a high level of compassion from others (Crocker & Canevello, 2008; Lemay & Clark, 2008). Compassion also has shown benefits for relationships more generally, with individuals with higher levels of compassion for others also experiencing feelings of closeness, trust and social support from others (Crocker & Canevello, 2008). Overall, higher levels of compassion for and from others is associated with experiencing stronger social relationships, which in turn has a positive impact on an individual's mental health (Lewis et al., 2010; Wei, Liao, Ky, & Shaffer, 2011).

With regard to self-compassion, a major defining component is the absence of self-criticism (MacBeth & Gumley, 2012). This concept was supported by a study which involved participating in a mock interview which asked participants to describe their greatest weakness. The key difference found between highly self-compassionate and low self-compassionate people was the level of anxiety experienced from answering the interview questions. Participants with lower levels of self-compassion experienced greater levels of anxiety than people with higher levels of self-compassion (Neff, Kirkpatrick, & Rude, 2007). This supports the finding that having high levels of self-compassion may act as a protective

factor to experiencing anxiety (Neff, 2003b). A recent study by Dupasquier, Kelly, Moscovitch and Vidovic (2018) investigated consequences of levels of self-compassion. The findings of this study suggest an association between levels of self-compassion and ability to receive compassion. Specifically suggesting that higher levels of self-compassion may assist in reducing the fear of receiving compassion and of disclosing personal information to others.

1.3 Measuring Compassion

Strauss and Colleagues (2016) conducted a study reviewing measures of compassion. Quality ratings of measures were scored out of fourteen, with seven as the highest score of any of the reviewed measures. These low scores were due to low internal consistency, test-retest reliability, discriminant validity, and poor evidence for factor structure. These findings suggest that none of the measures reviewed in the study are reliable measures of compassion. Strauss and colleagues' (2016) then developed the new five element definition of compassion as outlined above. A recent review of Strauss and colleagues' (2016) definition found that it may be a good measure of compassion towards others. However, although the definition claims to measure self-compassion, the review suggests it does not sufficiently do so (Gu, Cavanagh, Baer, & Strauss, 2017). This is due to relatively limited research suggesting a relationship between compassion for the self and others. The review also found issues with the 'tolerating uncomfortable feelings' element, which was not significantly correlated with 'acting to alleviate suffering'. This result was not expected, and has led to the suggestion of future reviews of the measure, and the potential removal of the 'tolerating uncomfortable feelings' element. This is also in conjunction with some scale items appearing to be more of a measure of kindness or altruism, rather than a measure of compassion (Gu, 2017).

Gilbert and colleagues (2017) developed the Compassion Engagement and Action Scales, consisting of three scales, which were developed to measure three orientations of

compassion: compassion for others; receiving compassion from others; and compassion for the self. This scale filled a gap in current measures of compassion, with having one scale that was able to measure more than one level of compassion. The Compassion Engagement and Action Scale is in the form of a self-report survey, and focuses on an individual's motivation and ability to engage with distress. The underlying definition of compassion used for the development of this scale was a "sensitivity to suffering in self and others with a commitment to alleviate and prevent it" (Gilbert & Choden, 2013; Dalai Lama, 1995). A recent unpublished study used the Compassion Engagement and Action Scale to investigate three levels of compassion in a sample of adults (Lindsey, 2017). The results of this study suggest that the adults in the community sample had moderate levels of all three measured levels of compassion. Participants scored lowest on receiving compassion from others, which is in support of previous research, suggesting some people may have a fear of experiencing compassion from others due to past experiences of feeling lonely (Gilbert, 2010). According to Lindsey (2017), all scales had acceptable internal consistency.

Neff (2003a) developed the self-compassion scale to measure self-compassion, this is seen as an important component of compassion to measure. In Buddhist Psychology it is believed that an individual must experience compassion for themselves before they can feel and show compassion for others (Brown, 1999). The self-compassion scale consists of six subscales which each represent the different components of self-compassion; Self-Kindness, Self-Judgment, Common Humanity, Isolation, Mindfulness, and Over-identified (Neff, 2003a). The Self-Compassion Scale is a widely used measure in investigating levels and potential predictors of self-compassion. Previous use of the self-compassion scale has found self-compassion to be associated with levels of wellbeing for adolescents (Neff & McGehee, 2010), and has also found a positive relationship between self-compassion and meditation practice using podcasts (Albertson, Neff, & Dill-Shackleford, 2015).

1.4 Contributors to Levels of Compassion

There are many factors that are considered contributors to compassion. Firstly, the evolutionary theory of compassion suggests that compassion is a trait-like tendency (Goetz et al., 2010). One of the three main evolutionary theories of compassion suggests that compassion is a result of a caregiver's response to their vulnerable child (Frank, 1988; Keltner, 2009; Sober & Wilson, 1998). It is theorised that the instinct for a parent to care for their offspring is related to increasing the chance of reproduction (Goetz et al., 2010).

It is also suggested that culture may have an impact on levels of compassion. Some cultures, for example, may promote self-improvement in a way that is negative towards an individual's current state. In turn, this may result in an individual experiencing little or no self-compassion (Neff, Pisitsungkagarn, & Hsieh, 2008). Culture is sometimes also referred to as 'mental software'. This refers to the idea that the way an individual's mind is programmed, begins with the people they are surrounded by. This theory outlines six cultural dimensions that may contribute to self-compassion. These dimensions are; individualism-collectivism, masculinity-femininity, power distance, long-term orientation, uncertainty avoidance, and indulgence-restraint (Hofstede, Hofstede, & Minkov, 2010). Each of these cultural dimensions may create more of a focus on either positive or negative aspects of self-compassion items. For example, individualism involves an expectation of individual choices, rather than relatives taking care of them. In relation to self-compassion, individualism may be associated with isolating and competitive forms of interpersonal relating, which may create more of a focus on the negative self-compassion items (Gilbert, 2014). Although culture is suggested to be a prominent predictor of compassion, the current study will focus on more individual factors of perceived parental warmth and meditation experience. The potential findings of the current study may later be studied in terms of cultural differences.

1.5 Perceived Parental Warmth

Recently there has been interest in investigating the influence of perceived parental warmth on compassion. Perceived parental warmth refers to an individual's perception of how they were or are treated by their parents. This may be different to how their parents would describe their parenting (Cheng & Furnham, 2004; Markus, Lindhout, Boer, Hoogendijk, & Arrindell, 2003). Parents who create an environment where their children feel supported and encouraged are considered to have high parental warmth (Temel & Atalay, 2018).

Recent research has been taking the idea of perceived parental warmth as an influence of wellbeing to investigate its influence on compassion. In particular, perceived parental warmth has been suggested to influence levels of compassion towards oneself. Past research suggests that the development of self-compassion can be influenced by how children are taught to treat themselves, based on the level of support they receive from family members. Neff and McGehee's (2010) research findings on self-compassion among adolescents and young adults, suggest that higher levels of maternal support results in higher levels of self-compassion. In contrast, maternal criticism is associated with lower levels of self-compassion. Children who experience low parental warmth are likely to experience self-criticism and lower levels of self-compassion (Gilbert & Procter, 2006). This association has been supported by several studies investigating the influence of perceived parental warmth on self-compassion (Pepping, Davis, O'Donovan, & Pal, 2015; Temel & Atalay, 2018). Pepping and Colleagues (2015) investigated the role of attachment and parenting experiences in childhood using the self-compassion scale. The results of this study suggest that individuals who experience rejection, disapproval and a lack of feeling cared for by their parents experience lower levels of self-compassion. The findings of Temel and Atalay's (2018) study

suggest that adolescents who experienced emotional warmth from their mother are more likely to experience higher levels of self-compassion.

The question of whether perceived parental warmth influences an individual's ability to experience compassion for or from others has not received attention by researchers. However, it has been theorised that witnessing and experiencing a lack of caring may impact an individual's ability to receive and give compassion to others (Gilbert, 2009). Further research needs to be conducted to obtain a greater understanding of the possible association between perceived parental warmth and compassion for and from others.

1.6 Meditation and Compassion

Many people practise meditation as a way to calm their mind and body. Meditation is found to increase an individual's ability to cope with stress and illness (National Center for Complementary and Integrative Health, 2016). There are many different forms of meditation, and individuals may adapt the general principles of meditation into something that works best for them. The main components of meditation include; a quiet place with minimal distractions, a comfortable posture, focus of attention on something such as breathing, and a non-judgemental attitude (National Center for Complementary and Integrative Health, 2016).

Although many people may choose to create their own form of meditation based on the basic principles, there are some established forms of meditation that many people engage with. Mindfulness meditation for example was developed to assist in reducing psychological suffering (Germer, Siegel, & Fulton, 2016). Mindfulness involves an individual making a conscious effort to remain present in the moment, without judgement or expectations of what will happen (Kabat-Zinn, 1990, 2003). There are two main components associated with mindfulness: self-regulation of attention, which involves remaining attentive to the present experience; and orienting of attention which involves being curious, open and accepting of the experience (Bishop, et al., 2004). Mindfulness meditation therefore involves drawing

one's attention to noticing the present moment and being open and non-judgemental to the experience (Sears, Tirch, & Denton, 2011).

Concentrative meditation is a technique aimed to assist people in increasing their attention control (Semple, 1999). It involves fixing the mind on a particular object and shifting the mind back to the object when distracted by other thoughts or feelings (Goleman, 1988). This form of meditation can be very difficult at first because the mind needs to learn how to control thoughts and feelings which may be distracting (Cleeremans, 1997).

Meditation can also be associated with religion. Centering prayer is a Christian based method of meditation which allows individuals to feel connected to God (Pennington, 1980). This involves an individual focusing their attention on God by slowly repeating a word that they associate with their desire for God. At some point during meditation, the individual may not feel the need to continue repeating the word, but may resume saying the word when distractions become present (Pennington, 1980).

There are many physical, emotional and social benefits to practising meditation. Much of the focus of the benefits of meditation has been on decreasing negative emotions. However meditation has the ability to add many positive emotional outcomes as well. Research concerning outcomes of meditation practice has found that meditation can improve mental health issues such as anxiety and depression, and assist individuals with improving their overall emotional regulation and quality of life (Gotink, et al., 2015; Khoury, et al., 2013). Loving-kindness meditation has been suggested to increase social connectedness, including improving social emotions, and decreasing feelings of isolation (Hutcherson, Seppala, & Gross, 2008).

Meditation practice has been shown to improve emotion regulation, in particular distress tolerance (Chambers, Gullone, & Allen, 2009; Lotan & Bernstein, 2013). Therefore it

is inferred, and supported by some evidence, that meditation practice should have a positive influence on the way an individual is able to respond to a stressful situation, therefore increasing levels of compassion (Luberto, et al., 2017). Condon, Desbordes, Miller and DeSteno (2013) investigated the effects of meditation on compassion for others. Participants in this study were invited to participate in an 8-week study on meditation. Participants were randomly allocated to either the meditation group or the waiting-list group (control). At the conclusion of the program (or 8 weeks on the waiting list), participants were invited to participate in what they were informed was cognitive ability testing. However, the researchers were actually testing the participants' levels of compassion for others. Each participant walked into the waiting room where two confederates were already present. The participant was the last to enter the room and take the last available chair. Their level of compassion was inferred based on whether they gave up their seat to someone who appeared to be suffering or physically unable to stand. The results of the study suggest that people who meditate have higher levels of compassion towards others, as participants in the meditating group gave up their seat more often than non-meditating participants. However, although the effect of meditation on altruistic behaviour has been tested, effects on self-reported compassion for others have not been investigated.

Albertson and colleagues (2015) investigated the relationship between self-compassion and body dissatisfaction in women, using a trial of self-compassion meditation podcasts. The results of this study suggest that the use of the self-compassion meditation podcasts has a positive influence on levels of self-compassion and body image for women. Participants who were randomly assigned to the podcast listening group, were suggested to have a 19% increase in self-compassion, compared to the 5% increase for the control group. Finally, Neff and Pommier (2013) investigated the relationship between self-compassion and concern for others' wellbeing. The results of this study suggest that people who practice

Buddhist meditation have higher levels of self-compassion and compassion for humanity than non-meditating people. (Neff & Pommier, 2013)

1.7 The Present Study

As the preceding review has outlined, compassion for others and oneself are important constructs related to social relationships and psychological wellbeing. The current study used a recent measure which identifies three levels of compassion: self-compassion; receiving compassion from others; and compassion towards others (Gilbert, et al., 2017).

The current study is concerned with the influence of two demonstrated predictors of self-compassion on other aspects of compassion – compassion towards others and receiving compassion from others. The two factors to be investigated are the proximal factor of meditation experience, and the distal factor of perceived parental warmth. Previous research has suggested levels and development of self-compassion to be associated with perceived parental warmth, with much of the research suggesting that high levels of perceived parental warmth increase levels of self-compassion (Neff & McGehee, 2010; Pepping et al., 2015; Temel & Atalay, 2018). However, previous research has not focused on perceived parental warmth as a possible predictor for compassion for or from others, which was addressed in the current study.

In addition, as previously stated, an association between meditation experience and increased self-compassion and compassion for others has also been supported (Condon et al., 2013; Luberto, et al., 2017). However, there is still the question of whether meditation experience influences receiving compassion from others. Additionally, previous study methods have focused on comparing a meditation group to a non-meditation group. The current study will investigate how frequency and duration of meditation sessions influences levels of self-compassion, compassion for others, and receiving compassion from others.

A further understanding of potential predictors of compassion for and from others and the self, may contribute to continuing to develop compassion focused therapy. Compassion focused therapy acknowledges the importance of individuals having the capacity to cope with emotions for the self and others, and to experience compassion in a healthy way (Gilbert, 2014). Therefore, the current study assessed perceived parental warmth and meditation experience as predictors of levels of compassion for others and oneself. Additionally, the current study investigated the influence of meditation experience and perceived parental warmth on receiving compassion from others.

1.8 Hypotheses and Research Questions

The following three hypotheses were developed based on previous research.

H1) Meditation experience (frequency and duration of session) will positively influence levels of self-compassion.

H2) Meditation experience (frequency and duration of session) will positively influence levels of compassion towards others.

H3) Greater perceived warmth by parents in childhood and adolescence will be positively correlated with self-compassion.

In addition, research questions included the effect of perceived parental warmth on compassion from others and compassion towards others, and of the relationship of meditation experience to experiencing compassion from others.

CHAPTER 2

Method

2.1 Participants

Participants were recruited from two populations. Convenience sampling was used to recruit students and staff from the University of Adelaide's Unified website (N = 67), and passive snowballing was used to recruit participants from the wider community via the social networking site, Facebook (N = 80). Participants of the study were required to be at least 18 years of age and be fluent in English. There were no additional exclusion criteria. Two hundred and fifteen individuals consented to participating in the survey. Participants who did not complete the survey were deleted from the data, along with two participants who were under the age of 18. Forty-three participants had exited the survey by the completion of the demographic questions. The final sample included 147 participants, comprising of 120 females (81.6%), 24 males (16.3%), 2 others (1.4%), and 1 who preferred not to specify (.7%). Participant ages ranged from 18 to 68 years (M = 31.03, SD = 12.36). English was reported as the language spoken at home by 135 participants (91.8%). Eight participants had not completed high school (5.4%), 32 participants had completed high school (21.8%), 18 had completed a TAFE course (12.2%), 52 participants had completed an undergraduate degree (35.4%), and 25 had completed a postgraduate degree (17%).

2.2 Procedure

The study was approved by the School of Psychology Human Research Ethics Subcommittee (Approval 19/47). Participants were invited via posts on Facebook and Unified to participate in an online study hosted on the website, Survey Monkey. Participants were presented with an information page outlining the purpose of the study, assuring confidentiality of results, and the right to withdraw from the study without consequence. Choosing to commence and submit the survey was regarded as consent to participate in the

study. Subsequent to reading the information sheet and providing consent, participants were directed to the survey.

2.3 Measures

2.3.1 Demographic Measures.

Participants were asked to report their age in years, gender, language spoken at home, country of birth, country of residence, and highest level of completed education.

2.3.2 Meditation Experience.

Participants were asked to answer five questions, concerning years of meditation experience, frequency of meditation sessions per week, duration of meditation sessions, and type of meditation typically practised.

2.3.3 Compassion Engagement and Action Scales (CEAS; Gilbert, et al., 2017)

The measure consists of three scales measuring three types of compassion: Self-compassion; Compassion to Others; and Compassion from Others. Each scale consists of 13 items which are scored on a 10-point Likert scale from 1 (never) to 10 (always). The Self-compassion scale includes statements regarding motivation to address distress such as, *'I am motivated to engage and work with my distress when it arises*', and statements related to active compassionate coping such as, *'I direct my attention to what is likely to be helpful to me'* (Gilbert, 2017). In the present study, coefficient alpha was .84. The Compassion to Others scale includes statements regarding motivation to engage with other people's distress such as, *'I am motivated to engage and work with other peoples' distress when it arises,'* and compassionate coping items such as, *'I take the actions and do the things that will be helpful to others'*. In the present study, alpha was .88. The Compassion from Others scale included statements regarding motivation of others such as, *'Others notice and are sensitive to my distressed feelings when they arise in me,'* and statements related to compassionate coping by

others such as, '*Others are able to direct their attention to what is likely to be helpful to me'*. In the present study, alpha was .93.

2.3.4 Self-compassion Scale (SCS) – Short-form (SCS-SF; (Raes, Pommier, Neff, & Van Gucht, 2011).

The Self-compassion scale is the most widely used measure of self-compassion, with previous research during the development of the scale indicating good test-retest reliability (Neff, 2003a). The SCS short form includes 12-items scored on a 5-point Likert scale from 1 (Never) to 5 (Always). The self-compassion scale consists of six subscales measuring each component of self-compassion. The six components part of the self-compassion scale are, Self-Kindness, Self-Judgment, Common Humanity, Isolation, Mindfulness and, Over-identified. Statements used in the scale included, *'When I fail at something important to me I become consumed by feelings of inadequacy'* and *'When I'm going through a hard time, I give myself the caring and tenderness I need'*. According to Raes and colleagues (2011), the short form of the Self-Compassion Scale has acceptable internal consistency, with a total Cronbach's Alpha of .86. Each component also had an acceptable internal consistency with a Cronbach's alpha ranging from 0.55-0.81 (Raes et al., 2011). The short-form was also found to correlate highly with the original self-compassion scale ($r \geq 0.97$) (Neff, 2003a; Raes et al., 2011). Overall, the short-form self-compassion scale is found to be appropriate to use in place of the full version (Raes et al., 2011). In the present study, alpha was .85.

2.3.5 My Memories of Upbringing Scale (S-EMBU; (Arrindell, et al., 1999).

The scale consists of three subscales measuring parental (emotional) warmth, rejection, and overcontrol in childhood and adolescence (Arrindell, et al., 1999). The short version of this scale was used to reduce the burden for participants. A total of 23 statements are rated on a 4-point Likert scale from 1 (no, never) to 4 (yes, most of the time). Statements were adapted to past tense for participants over 18 to complete the measure. Statements used

in the scale included, *'My parents got angry with me without letting me know the reason'* and *'My parents were proud when I succeeded in something I had undertaken'*. Arrindell and Engebretsen (2000) evaluated the convergent and divergent validity of the S-EMBU in reference to the Parental Bonding Instrument (PBI) (Kendler, 1996; Parker, Tupling, & Brown, 1979). Results of this study found the S-EMBU to have sufficient variance in common with the PBI, therefore representing good convergent validity. Relationships between homologous scales were also found to be higher than non-homologous scales, suggesting good divergent validity (Arrindell & Engebretsen, 2000). It is also reported to have an overall Cronbach's Alpha of .76 (Temel & Atalay 2018). In the present study, for the My Memories of Upbringing Scale, alpha was .91.

CHAPTER 3

Results

3.1 Data Screening

Analyses were conducted using SPSS 25. Inspection of normality, linearity, homogeneity of variance, and outliers was conducted prior to running analyses for hypothesis testing. Histograms and scatterplots were used to assess normality and linearity, and the Shapiro-Wilk test was used for significance. All scales were found to be normally distributed according to histograms and Shapiro-Wilk tests. Scatterplots showed a linear relationship between all variables. Therefore, Pearson correlations were found to be appropriate for the current study. Hoaglin and Iglewicz (1987) investigated using 1.5 as the multiplier for outliers. However, they found that this multiplier may cause researchers to ignore important variables due to the range being too small. Therefore, it was suggested that 2.2 would be a more accurate multiplier for outliers. In the current study, one outlier was found for the Self-Compassion Scale when using multiplier 2.2. Other scores for this participant were investigated to determine if there were inconsistencies with scores. Due to this being the only score that presented as an outlier, the outlier was replaced with the second highest value for that scale.

3.2 Descriptive Statistics and Analyses

The means, standard deviations and minimum and maximum total scores of each scale are presented in Table 1. Total scores for compassion for others appeared higher than total scores for self-compassion and receiving compassion from others on the Compassion Engagement and Action Scale.

Table 1

Means, standard deviations and minimum and maximum total scores of each scale

	M	*SD*	Min	Max
CEAS – Self-	66.10	13.06	38.00	100.00
CEAS – to Others	77.78	12.91	45.00	100.00
CEAS – Receiving	60.08	15.99	11.00	100.00
SCS	2.94	.60	1.75	5.00
S-EMBU	51.93	7.50	36.00	70.00

Note: CEAS – Self = Compassion Engagement and Action Scale – Self-Compassion, CEAS – to Others = Compassion Engagement and Action Scale – Compassion to Others, CEAS – Receiving = Compassion Engagement and Action Scale – Receiving Compassion from Others, SCS = Self-Compassion Scale, S-EMBU = My Memories of Upbringing Scale (Perceived Parental Warmth).

Potential demographic covariates of study measures were examined. The effect of gender was analysed using an independent samples t-test. Due to small numbers of other categories, only male and female participants were included when checking for gender differences. Results of the t-test found female participants to have higher levels of compassion for others (M = 79.12, SD = 12.73*)* than male participants (M = 72.84, SD = 10.59), $t(142) = -2.30$, $p = .023$. It represented a medium-sized effect, Cohen's $d = .54$. There was no significant difference for gender and any of the remaining variables.

Age had a weak to moderate positive correlation with self-compassion ($r = .24$, $p = .004$), self-compassion (CEAS) ($r = .30$, $p = .000$), and compassion to others ($r = .24$, $p = .003$), and a negative weak to moderate correlation with perceived parental warmth ($r = -.26$,

p = .001), as can be seen in table 2. The results of a one-way ANOVA found there to be no significant relationship between level of education for any of the variables. Results of this one-way ANOVA are presented in Appendix J.

3.3 Hypothesis Testing and Research Questions

3.3.1 Correlations

Pearson correlations between measures are reported in Table 2.

Table 2

Participant Pearson Correlations (n = 147) for age and measures of Self-Compassion, Compassion for Others, Receiving Compassion from Others, and Perceived Parental Warmth

	Age	CEAS – Self	CEAS – to Others	CEAS - Receiving	SCS	PPW
Age	1					
CEAS – Self	.30**	1				
CEAS – to Others	.24**	.45**	1			
CEAS – Receiving	.04	.38**	.25**	1		
SCS	.24**	.63**	.21*	.26**	1	
PPW	-.26**	.21**	.05	.19*	.18*	1

Note: CEAS – Self = Compassion Engagement and Action Scale – Self-Compassion, CEAS – to Others = Compassion Engagement and Action Scale – Compassion to Others, CEAS – Receiving = Compassion Engagement and Action Scale – Receiving Compassion from Others, SCS = Self-Compassion Scale, PPW = Perceived Parental Warmth

*p = < 0.5, **p = < .01

A correlational analysis using Pearson's *r* was conducted to investigate the relationship between perceived parental warmth, and self-compassion, self-compassion (CEAS), compassion for others, and receiving compassion from others. Results showed that for hypothesis 3, perceived parental warmth had a weak to moderate positive correlation with SCS self-compassion ($r = .18$, $p = .027$) and CEAS self-compassion ($r = .21$, $p = .010$). With regard to research question 1, perceived parental warmth had a weak to moderate positive correlation with receiving compassion from others ($r = .19$, $p = .019$); however, there was no significant correlation between perceived parental warmth and compassion for others ($r = .05$, $p = .517$).

3.3.2 Meditation Experience

Frequencies of responses for years of meditation sessions per week, years of meditation experience, duration of meditation sessions, and types of meditation are reported in tables 3, 4, 5 and 6.

Table 3

Frequencies for frequency of meditation sessions per week

	Frequency	Percentage
Never	66	44.9
Some meditation	73	49.7
Daily (7+ times)	8	5.4

Table 4

Frequencies for years of meditation

	Frequency	Percentage
Never	65	44.2
Less than 1 year	38	25.9
1-5 years	32	21.8
> 6 years	12	8.2

Table 5

Frequencies for duration of meditation sessions in minutes

	Frequency	Percentage
0	81	55.1
1-10	31	21.1
11-19	9	6.1
20-29	13	8.8
30+	13	8.8

Table 6

Frequencies for types of meditation

	Frequency	Percentage
No Meditation	66	44.9
Centering Prayer	5	3.4
Concentrative Meditation	12	8.2
Mindfulness Meditation	50	34.0
Other Christian Meditation	1	.7
Other (please specify)	13	8.8

A one-way ANOVA was conducted to investigate the influence of meditation frequency on levels of compassion. Meditation frequency responses were categorised into 3 categories for analyses, based on number of responses. There was a statistically significant difference between frequencies for the Self-Compassion Scale, $F(2, 144) = 9.29$, $\eta^2 = .11$, $p = .000$. Post-hoc comparisons using the Tukey's HSD test were then conducted to investigate whether levels of self-compassion differed depending on frequency of meditation practice. Results of these post-hoc analyses revealed that individuals who meditate daily ($M = 3.69$, $SD = .55$) had higher levels of self-compassion than people who practice meditation less than daily ($M = 2.99$, $SD = .52$), and individuals who do not practise meditation at all ($M = 2.80$, $SD = .62$). There was no significant difference found between individuals who practise meditation less than daily, and not at all. There was also a statistically significant difference between frequencies of meditation for the Self-Compassion scale of the Compassion Engagement and Action Scale, $F(2, 144) = 7.33$, $\eta^2 = .09$, $p = .001$. Post-hoc comparisons using the Tukey's HSD test showed that individuals who meditate daily ($M = 80.13$, $SD = 9.71$) had higher levels of self-compassion than people who practise meditation less than

daily (M = 67.34, SD = 12.21), or not at all (M = 63.04, SD = 13.14). There was no significant difference found between individuals who practice meditation less than daily or not at all. There was no statistically significant difference between meditation frequencies for Compassion for Others, $F(2, 144) = 2.64$, $\eta^2 = .04$, $p = .075$, or Receiving Compassion from Others, $F(2, 144) = .14$, $\eta^2 = .00$, $p = .870$.

One-way ANOVAs were used to investigate the influence of years of meditation experience on levels of compassion. Years of meditation responses were categorised into 4 categories for analyses, based on number of responses. There was a statistically significant difference between number of years of meditation practice for the Self-Compassion scale, $F(3, 143) = 5.29$, $\eta^2 = .10$, $p = .002$. Post-hoc comparisons using the Tukey's HSD test were then conducted to investigate the source of differences. Individuals who have been practising meditation for more than 6 years (M = 3.32, SD = .45) or 1-5 years (M = 3.11, SD = .66) showed higher levels of self-compassion than individuals who have never practiced meditation (M = 2.75, SD = .57). There was no significant difference between individuals who have been practising meditation for less than one year and individuals who have been practicing for 1-5 years, more than 6 years, or have never practised meditation. There was also no significant difference between individuals who have been practising meditation for 1-5 years and more than 6 years. There was a statistically significant difference between number of years of meditation practice for the Self-Compassion scale of the Compassion Engagement and Action Scale, $F(3, 143) = 6.69$, $\eta^2 = .123$, $p = .000$. Post-hoc comparisons using the Tukey's HSD test were then conducted to investigate whether levels of compassion differed depending on meditation experience. Individuals who have been practising meditation for more than 6 years (M = 78.92, SD = 11.72) showed higher levels of self-compassion than people who have been practicing meditation for 1-5 years (M = 67.15, SD = 13.91), less than one year (M = 67.76, SD = 12.01), or not at all (M = 62.26, SD = 11.86).

There was no significant difference between individuals who have been practicing meditation for 1-5 years, less than one year, or not at all. There was also no statistically significant difference between meditation experience for Compassion for Others ($F(3, 143) = .77$, $\eta^2 = .02$, $p = .514$) or Receiving Compassion from Others ($F(3, 143) = .23$, $\eta^2 = .01$, $p = .875$).

One-way ANOVAs were also conducted to investigate the influence of duration of meditation sessions on levels of compassion. Duration of meditation session responses were categorised into 5 categories for analyses, based on number of responses. There was no statistically significant difference found for length of meditation sessions and self-compassion or compassion for the Self-Compassion Scale ($F(4, 142) = .45$, $\eta^2 = .01$, $p = .773$), or the Self-Compassion ($F(4, 142) = .30$, $\eta^2 = .01$, $p = .877$), Compassion for Others ($F(4, 142) = .32$, $\eta^2 = .01$, $p = .863$), or Receiving Compassion from Others ($F(4, 142) = .79$, $\eta^2 = .02$, $p = .532$) scales of the Compassion Engagement and Action Scale.

3.4 Prediction of Self-Compassion

Hierarchical multiple regression analyses were first conducted to investigate the influence of years of meditation and perceived parental warmth on levels of self-compassion. Age was entered at step 1, with self-compassion as the dependent variable. Effects coding was used to test whether a higher number of years of meditation practice would result in higher levels of self-compassion. Categories used were, Never, less than 1 year, 1-5 years, and more than 6 years. The reference category was more than 6 years. The three variables for years of meditation were entered at step 2. The regression statistics are reported in tables 7 and 8.

Table 7

Pooled Hierarchical Multiple Regression Analyses of Years of Meditation, Perceived Parental Warmth and Age Predicting Self-Compassion on the Self-Compassion Scale

Variable	*β*	*SE*	sr^2	*t*	*p*	R^2
Step 1						.05
Age	.24	.00	.05	2.93	.004	
Step 2						.18
Age	.23	.00	.04	2.60	.010	
PerParentalWarmth	.27	.01	.06	3.30	.001	
YearsofMed1	-.25	.08	-.05	-3.07	.003	
YearsofMed2	.02	.09	.00	.30	.762	
YearsofMed3	.08	.09	.09	1.13	.260	

Note: PerParentalWarmth = Perceived Parental Warmth, YearsofMed = Years of Meditation

The first hierarchical multiple regression used the self-compassion scores from the Self-Compassion Scale. This analysis revealed that at Step 1, age contributed significantly to the regression model, F (1, 145) = 8.54, p = .004 and accounted for 5.6% of the variation in levels of self-compassion. Adding perceived parental warmth and the meditation variables in step 2 explained a further 18.2% of variation in levels of self-compassion. This change in R^2 was significant, F (5, 141) = 6.27, p = .000. Participants who have no meditation experience were found to have lower levels of self-compassion than participants who have six or more years of meditation experience. Perceived parental warmth and age were also found to be significant predictors. There was no significant difference found between participants who have more than 6 years meditation experience and participants who have 1-5 years or less than one year of meditation experience. Together, all the independent variables included in step 2 account for 23.8% of the variance in self-compassion.

Table 8

Pooled Hierarchical Multiple Regression Analyses of Years of Meditation, Perceived Parental Warmth and Age Predicting Self-Compassion on the Self-Compassion scale of the Compassion Engagement and Action Scale

Variable	*β*	*SE*	sr^2	*t*	*p*	R^2
Step 1						.09
Age	.30	.08	.09	3.80	.000	
Step 2						.23
Age	.29	.09	.06	3.35	.001	
PerParentalWarmth	.30	.21	.08	.3.93	.000	
YearsofMed1	-.25	1.65	-.05	-3.11	.002	
YearsofMed2	.02	1.82	.00	.22	.827	
YearsofMed3	-.04	1.86	-.00	-.49	.626	

Note: PerParentalWarmth = Perceived Parental Warmth, YearsofMed = Years of Meditation

The second hierarchical multiple regression used the self-compassion scores from the self-compassion scale of the Compassion Engagement and Action Scale. This analysis revealed that at step one, age contributed significantly to the regression model, F (1, 145) = 14.49, p = .000 and accounted for 9.1% of the variation in levels of self-compassion. Adding perceived parental warmth and the meditation variables in step two explained a further 23.7% of variation in levels of self-compassion. This change in R^2 was significant, F (5, 141) = 8.75, p = .000. Participants who have no meditation experience were found to have lower levels of self-compassion than participants who have six or more years of meditation experience. Age remained a significant predictor in step 2, as well as perceived parental warmth. There was no significant difference found between participants who have more than 6 years meditation

experience and participants who have 1-5 years or less than one year of meditation experience. Together, all the independent variables included in step 2 account for 32.8% of the variance in self-compassion.

Hierarchical multiple regression analyses were also conducted to investigate the influence of meditation frequency on levels of self-compassion. Age was entered at step one, with self-compassion as the dependent variable. Effects coding was used to test whether a higher number of meditation sessions per week would result in higher levels of self-compassion. Categories used were, never, some meditation and daily (7+ times). The reference category was daily (7+ times). The two variables for meditation frequency were entered at step 2. The regression statistics have been reported in tables 9 and 10.

Table 9

Pooled Hierarchical Multiple Regression Analyses of Meditation Frequency, Perceived Parental Warmth and Age Predicting Self-Compassion on the Self-Compassion Scale

Variable	β	*SE*	sr^2	*t*	*p*	R^2
Step 1						.05
Age	.24	.00	.05	2.92	.004	
Step 2						.19
Age	.22	.00	.04	2.70	.008	
PerParentalWarmth	.26	.01	.06	3.37	.001	
MedFrequency1	-.31	.08	-.08	-3.75	.000	
MedFrequency2	-.13	.08	-.01	-1.55	.122	

Note: PerParentalWarmth = Perceived Parental Warmth, MedFrequency = Frequency of Meditation Sessions per week

The third hierarchical multiple regression used the self-compassion scores from the Self-Compassion Scale. This analysis revealed that at Step 1, age contributed significantly to the regression model, F (1, 145) = 8.54, p = .004 and accounted for 5.6% of the variation in levels of self-compassion. Adding perceived parental warmth and the meditation variables in step 2 explained a further 19.9% of variation in levels of self-compassion. This change in R^2 was significant, F (4, 142) = 8.82, p = .000. Participants who practise meditation daily were found to have higher levels of self-compassion than participants who meditate less than daily, or not at all. Age remained a significant predictor in step 2, as well as perceived parental warmth. Together, all the independent variables included in step 2 account for 25.5% of the variance in self-compassion

Table 10

Pooled Hierarchical Multiple Regression Analyses of Meditation Frequency, Perceived Parental Warmth and Age Predicting Self-Compassion on the Self-Compassion scale of the Compassion Engagement and Action Scale

Variable	*β*	*SE*	sr^2	*t*	*p*	R^2
Step 1						.09
Age	.30	.08	.09	3.81	.000	
Step 2						.23
Age	.32	.08	.08	3.97	.000	
PerParentalWarmth	.32	.21	.09	4.15	.000	
MedFrequency1	-.26	1.80	-.05	-3.12	.002	
MedFrequency2	-.07	1.73	-.00	-.921	.359	

Note: PerParentalWarmth = Perceived Parental Warmth, MedFrequency = Frequency of Meditation Sessions Per Week

The fourth hierarchical multiple regression used the scores of the self-compassion scale of the Compassion Engagement and Action Scale. This analysis revealed that at Step 1, age contributed significantly to the regression model, F (1, 145) = 14.49, p = .000 and accounted for 9.1% of the variation in levels of self-compassion. Adding perceived parental warmth and meditation variables in step 2 explained a further 23.5% of variation in levels of self-compassion. This change in R^2 was significant, F (4, 142) = 134.37, p = .000. Participants who practice meditation daily were found to have higher levels of self-compassion than participants who never meditate. Age remained a significant predictor of self-compassion in step 2, as well as perceived parental warmth. There was no significant difference found between participants who meditate daily and participants who meditate less than daily. Together, all the independent variables included in step 2 account for 32.6% of the variance in self-compassion.

CHAPTER 4

Discussion

4.1 Overview

Meditation has been identified as a possible predictor to increase levels of self-compassion and compassion towards others (Condon et al., 2013; Luberto, et al., 2017). However, there is minimal research investigating whether meditation experience influences the ability to receive compassion from others. The current study therefore aimed to investigate this relationship.

Additionally, the current study aimed to investigate whether perceived parental warmth influences levels of compassion for and from others. This is expanding from previous research that suggests there is a relationship between high levels of perceived parental warmth and increased levels of self-compassion (Pepping et al., 2015; Temel & Atalay, 2018).

4.2 Meditation and Self-Compassion

Meditation experience was measured in three categories; years of meditation, meditation sessions per week, and duration of meditation sessions. It was hypothesised that meditation experience (frequency and duration of session) would positively influence levels of self-compassion. This hypothesis was partially supported. The current study used two measures to evaluate levels of self-compassion: the short-form of the well-established Self-Compassion Scale (Neff, 2003a; Raes et al., 2011) and the newer Self-Compassion Scale of the Compassion Engagement and Action Scale (Gilbert, 2017). There was a significant positive relationship between self-compassion and meditation sessions per week, and years of meditation experience for both measures of self-compassion. This suggests that long-term, daily meditation sessions significantly increase levels of self-compassion. However, there was no significant relationship found between duration of meditation sessions and levels of

self-compassion for either measure. Results of regression analyses suggest meditation frequency to be a significant predictor of higher levels of self-compassion. These results expand on previous findings by Albertson and colleagues (2015) which suggest that meditation practice increases levels of self-compassion. The current study provides evidence to suggest frequency of meditation practice is important in increasing levels of self-compassion.

4.3 Meditation, Compassion for Others, and Receiving Compassion from Others

It was hypothesised that meditation experience (frequency and duration of session) would positively influence levels of compassion towards others. There was no significant relationship found between years of meditation experience, sessions per week, or duration of sessions and compassion for others. This finding is inconsistent with Condon and colleagues' (2013) study which found that participants who completed an 8-week meditation program were more likely to give up their seat for someone who needed it than non-meditating participants. Condon and colleagues' (2013) study utilised a behavioural measure of compassion for others, whereas the current study used a self-report measure of engagement and willingness to act. This may be a reason for inconsistencies in the results between studies. The current study also proposed the research question of whether meditation experience affects the ability to receive compassion from others. There was no significant relationship found between receiving compassion from others and years of meditation experience, sessions per week, or duration of sessions. Previous research has not indicated whether duration of meditation sessions influences levels of compassion for or from others.

4.4 Perceived Parental Warmth and Self-Compassion

It was hypothesised that greater perceived parental warmth would be positively correlated with self-compassion. The results showed a statistically significant positive relationship between perceived parental warmth and self-compassion, supporting hypothesis

3. Perceived parental warmth also remained a predictor when considering years of meditation or meditation sessions per week in regression analyses. These results are consistent with the findings of Pepping and colleagues (2015), and Temel and Atalay (2018). The findings of these studies suggest that children who experience support and overall warmth from their parents are likely to experience higher levels of self-compassion than children who do not experience a feeling of warmth from their parents.

4.5 Perceived Parental Warmth, Compassion for Others and Receiving Compassion from Others

The current study also investigated the effect of perceived parental warmth on receiving compassion from others and compassion towards others. The results suggest a new finding, reporting a statistically significant positive relationship between perceived parental warmth and receiving compassion from others. This result suggests that greater perceived parental warmth is associated with a greater ability to receive compassion from others. These findings relate to Gilbert and colleagues' (2011) theory of fear of compassion. This theory suggests that individuals may experience a fear of receiving compassion when they feel they do not deserve to be cared for by others. The findings of the current study support this theory, suggesting that people who felt cared for by their parents have a greater ability to receive compassion from others than those who did not experience warmth from their parents. People who did not experience warmth from their parents may feel they do not deserve to experience compassion or warmth from other people in their lives.

The current study did not find a relationship between perceived parental warmth and compassion for others. There is no direct evidence in the current literature to suggest there would be a relationship. However, it is theorised that individuals who do not witness or experience caring by their parents, may not develop the ability to show compassion towards others. This result may also be due to a smaller range of total scores for compassion for

others, due to compassion for others total scores appearing overall higher than scores for self-compassion and receiving compassion from others. A wider range of scores may have allowed for more accurate analyses.

4.6 Implications

There are several potential implications for the current study. As previously mentioned, Gilbert and colleagues (2011) have theorised the idea of individuals having a fear of compassion. This theory, in combination with the findings of the current study, suggests that individuals who did not experience feelings of warmth from their parents may feel they do not deserve to receive compassion from others. This may cause individuals to feel uncomfortable speaking to other people about things they are finding distressing. Therefore, in a clinical setting, clients may have difficulty accepting that the Psychologist has a genuine care for them. The results of the current study suggest a positive relationship between perceived parental warmth and ability to receive compassion from others. Consequently, recall of the warmth an individual has experienced from their parents may be an underlying issue worth exploring when administering compassion interventions to clients. Compassion interventions aim to assist individuals in learning how to cope with emotions of the self and others, and to experience compassion in a healthy way (Gilbert, 2014).

Results of the current study suggest that meditation practice can influence levels of self-compassion. Higher levels of self-compassion have been associated with lower levels of anxiety and self-criticism (MacBeth & Gumley, 2012; Neff et al., 2007; Neff, 2003a). Therefore, the results of the current study may contribute to evidence that suggests meditation practice is a sufficient intervention for people experiencing anxiety and self-criticising thoughts. The results also suggest that frequent meditation practice over a long period of time has a positive impact on levels of self-compassion. This provides evidence to suggest that

long-term, daily meditation has greater benefits than occasional, inconsistent meditation practice.

Correlation analyses reported a negative correlation between age and perceived parental warmth. Although the results of the current study suggest older people have higher levels of self-compassion, compassion for others and ability to receive compassion from others, they appear to report less parental warmth. There are many potential reasons for this result. Individuals may become more critical of their parents as they get older and gain more experiences. Additionally parenting styles may have changed significantly over time, suggesting that parents are showing more warmth than parents were years ago.

Gilbert's (2017) Self-Compassion Scale of the Compassion Engagement and Action Scale was used in conjunction with the short-form of the Self-Compassion Scale (Neff, 2003a; Raes et al., 2011) to measure levels of self-compassion. Both measures were used to investigate the convergent validity of the Self-Compassion Scale of the Compassion Engagement and Action Scale, which is a newer, less established measure. The Self-Compassion Scale of the Compassion Engagement and Action Scale was strongly correlated with the short-form Self-Compassion Scale, a highly reliable measure which has identified many potential predictors of self-compassion. This correlation supports the convergent validity for the Self Compassion Scale of the Compassion Engagement and Action Scale. There is currently minimal literature investigating the psychometric properties of the Compassion Engagement and Action Scale, which is the only current scale to measure the three levels of compassion in one scale.

4.7 Limitations and Directions for Future Research

The sample of the study raises some issues to the generalisability of the current study findings. One hundred and nineteen (81%) participants were female, and 119 (81%)

participants identified Australia as their country of origin. This therefore may be a good study for the influence of meditation experience and perceived parental warmth on levels of compassion for Australian females. However, the results may not be generalisable to other genders, or people from different countries. Similarly, 62% of meditating participants identified mindfulness meditation as the meditation they practice. Therefore, results may also not be generalisable to other forms of meditation. These issues may be resolved by using different sampling techniques to obtain an equal number of participants for each meditation type. Future research could therefore compare the influence of different types of meditation on levels of compassion. Due to the findings of the current study suggesting long-term daily meditation is needed for improvements in self-compassion, allocating participants to a short program for different meditation types would only be recommended if the program encouraged daily meditation.

Another limitation of the current study can be seen in the frequencies of meditation frequency and duration. For example, due to a small number of participants stating that they have practised meditation for more than 10 years, these participants' responses for years of meditation were categorised into the category, '6 or more years'. This may mean that the current study has been unable to investigate potential differences within this category. Participants who have practised meditation for more than 10 years could possibly have higher levels of self-compassion than participants who have practiced meditation for 6 years, if our results are consistent. However, there were not enough participants who had meditated for 10 or more years to investigate this. This limitation is also relevant to other years of meditation, sessions per week, and duration of sessions categories. Again, participant recruitment for future studies may aim to recruit participants which can represent a wider range of years of meditation, sessions per week, and duration of sessions.

A limitation in the method of the study was the use of self-report measures. There is always the challenge of whether self-report measures give an accurate representation of what is being measured. Specifically, for the current study, measuring compassion for others using a self-report measure means that the results are only reflecting an attitude of compassion for others, and not behaviour. How a participant answers questions about compassion towards others, may not be an accurate reflection of how they would behave towards others. Future research should combine self-report and observational measures to investigate levels of compassion attitudes and behaviours. This could be done using the same self-report measures of the current study, in combination with a social experiment similar to the giving a chair to a person who needs it scenario used in Condon and colleagues' (2013) study. Additionally, attitudes and behaviours of compassion for others could be compared to investigate how often people act compassionately in comparison to how often they think they would.

There was a suggested relationship between perceived parental warmth and the ability to receive compassion from others. Applying Gilbert and colleagues' (2011) theory of fear of compassion to the clinical setting, clients who scored low on receiving compassion may have difficulty trusting that a Psychologist has a genuine care for their situation. Therefore, future research should look further into the relationship of how low levels of perceived parental warmth may affect whether an individual will contact a Psychologist, and their experience with this. This may assist Psychologists and other health professionals to accommodate to people with this issue. This research may be done using the receiving compassion scale of the Compassion Engagement and Action Scale (Gilbert, 2017) and the My Memories of Upbringing Scale (Arrindell et al., 1999), in conjunction with qualitative, open ended questions on an individual's likelihood of seeing a Psychologist, and any past experiences doing so.

The current study did not find a relationship between compassion for others and meditation experience or perceived parental warmth. Further potential predictors of compassion for others should be investigated. Social media has been found to influence many aspects of an individual's life including social self-esteem and overall wellbeing (Valkenburg, Peter, & Schouten, 2006). Consequently, future research may focus on the effects of social media on compassion for others, as well as receiving compassion and compassion for the self.

4.8 Conclusion

The current study expanded on previous research to investigate how perceived parental warmth may also be associated with compassion to others and receiving compassion from others, in addition to self-compassion. The results of the current study provided further evidence to suggest a positive relationship between perceived parental warmth and levels of self-compassion. Additionally, the results of the current study also provide evidence to suggest a positive relationship between perceived parental warmth and the ability to receive compassion from others. Although the current study did not find perceived parental warmth to be significantly correlated with compassion for others, further research should be conducted with different samples, and a combination of self-report and behavioural measures of compassion for others.

Results of the current study also expanded on evidence to suggest meditation experience influences levels of self-compassion. Specifically, the results of the current study suggest long-term, daily meditation practice is associated with greater increases in levels of self-compassion. Although the results of the current study do not suggest a relationship between meditation experience and compassion for others or receiving compassion from others, again, further research should be conducted using self-report and behavioural

measures. Future research should also aim to obtain a sample which has a better representation of different types of meditation than the current study.

Future research should continue to test the reliability of the Compassion Engagement and Action Scale, investigating different predictors of self-compassion, compassion for others and receiving compassion from others.

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APPENDICES

Appendix A

Demographic Measures

Please answer the following questions by clicking a box or typing text.

1. What is your age in years? _____ years

2. What is your gender?

Male ☐ Female ☐ Other ☐

Prefer not to say ☐

3. What language is spoken at home?

___ English ___ Other (please specify) _____

4. What is your country of birth? (Please specify) _____

5. What is your country of residence? (Please specify) _____

6. What is the *highest* level of education you have completed?

___ Primary school

___ High school. Please specify number of years _____

___ Graduated from high school (Year 12 or 13)

___ TAFE or other technical diploma

____Undergraduate degree

___ Postgraduate degree

___ Other (please specify)

Appendix B

Meditation Experience Questions

1. Have you had any experience with formal meditation practice? Yes ☐ No ☐

2. How long have you practised meditation?

Never ☐

Less than 1 year ☐

1 – 5 years ☐

6 – 10 years ☐

More than 10 years ☐

3. How often on average do you practise meditation?

Never ☐

If *less than* 1 time per month, how many times per year? _____

If *less than* 1 time per week, how many times per month? _____

If *at least* 1 time per week, how many times per week? _____

4. When you practise meditation, how long is a typical meditation session?

I don't practise meditation ☐

If you do practise meditation, *how many minutes* do you spend in a meditation session on average?

_____ minutes

5. If you do you practise meditation, *what type* of meditation do you typically practise?

Mindfulness meditation ☐

(Involves acknowledgement and non-judgmental observation of thoughts, feelings and sensations in order to gain awareness and insight)

Concentrative meditation ☐

(Involves predominantly single-pointed concentration on thought, objects, sounds or entities, including use of mantras; e.g. Transcendental meditation)

Centering prayer ☐

(Method of meditation used by Christians with strong emphasis on interior silence)

Other Christian meditation ☐

(including Lectio Divina, the Jesus Prayer, Spiritual Exercises of St Ignatius of Loyola, and concentrative 'Christian Meditation' in the John Main tradition)

Please specify _____

Other meditation approach ☐

Please specify _____

Appendix C

My Memories of Upbringing Scale (S-EMBU)

INSTRUCTIONS: Read through each question carefully and consider which one of the possible answers applies to you.

	No, never	Yes, but seldom	Yes, often	Yes, most of the time
1. My parents got angry with me without letting me know the reason.	1	2	3	4
2. My parents praised me.	1	2	3	4
3. I wished my parents would worry less about what I was doing.	1	2	3	4
4. My parents used physical punishment to discipline me.	1	2	3	4
5. When I came home, I had to account for what I had been doing to my parents.	1	2	3	4
6. My parents tried to make my adolescence stimulating, interesting and instructive (ex. giving me good books, arranging for me to go to camps, taking me to sports/club activities).	1	2	3	4
7. My parents criticised me and told me how lazy and useless I was in front of others.	1	2	3	4
8. My parents forbade me to do things other adolescents were allowed to do because they were afraid that something might happen to me.	1	2	3	4
9. My parents tried to encourage me to become the best.	1	2	3	4
10. When I behaved badly, my parents tried to make me feel guilty (for instance by looking sad).	1	2	3	4
11. My parents got overly anxious that something might happen to me.	1	2	3	4

12. My parents tried to comfort and encourage me if things went badly for me.	1	2	3	4
13. I was treated as the 'black sheep' or 'scapegoat' of the family.	1	2	3	4
14. My parents used words and gestures to show that they liked me.	1	2	3	4
15. My parents liked my brother(s) and/or sister(s) more than they liked me.	1	2	3	4
16. My parents treated me in such a way that I felt ashamed.	1	2	3	4
17. I was allowed to go wherever I liked without my parents caring too much.	1	2	3	4
	No, never	**Yes, but seldom**	**Yes, often**	**Yes, most of the time**
18. My parents interfered with everything I did.	1	2	3	4
19. Warmth and tenderness existed between my parents and me.	1	2	3	4
20. My parents put strict limits for what I was and was not allowed to do, to which they then adhered rigorously.	1	2	3	4
21. My parents punished me hard, even for small offenses.	1	2	3	4
22. My parents wanted to decide how I should dress or how I should look.	1	2	3	4
23. My parents were proud when I succeeded in something I had undertaken.	1	2	3	4

Appendix D

Compassion Engagement and Action Scales

Self-Compassion

When things go wrong for us and we become distressed by setbacks, failures, disappointments or losses, we may cope with these in different ways. We are interested in the degree to which people can be compassionate with themselves. We define compassion as "a sensitivity to suffering in self and others with a commitment to try to alleviate and prevent it." This means there are two aspects to compassion. The first is the ability to be motivated to engage with things/feelings that are difficult as opposed to trying to avoid or supress them. The second aspect of compassion is the ability to focus on what is helpful to us. Just like a doctor with his/her patient. The first is to be motivated and able to pay attention to the pain and (learn how to) make sense of it. The second is to be able to take the action that will be helpful. Below is a series of questions that ask you about these two aspects of compassion. Therefore read each statement carefully and think about how it applies to you if you become distressed. Please rate the items using the following rating scale:

Never Always

1 2 3 4 5 6 7 8 9 10

Section 1 – These are questions that ask you about how motivated you are, and able to engage with distress when you experience it. So: When I am upset or distressed by things...

_____ 1. I am motivated to engage and work with my distress when it arises. (1)

_____ 2. I notice, and am sensitive to my distressed feelings when they arise in me. (2)

_____ 3. I avoid thinking about my distress and try to distract myself and put it out of my mind. (3)

_____ 4. I am emotionally moved by my distressed feelings or situations. (4)

_____ 5. I tolerate the various feelings that are part of my distress. (5)

_____ 6. I reflect on and make sense of my feelings of distress. (6)

_____ 7. I do not tolerate being distressed. (7)

_____ 8. I am accepting, non-critical and non-judgemental of my feelings of distress. (8)

Section 2 – These questions relate to how you actively cope in compassionate ways with emotions, thoughts and situations that distress you. So: When I'm distressed or upset by things…

_____ 1. I direct my attention to what is likely to be helpful to me. (1)

_____ 2. I think about and come up with helpful ways to cope with my distress. (2)

_____ 3. I don't know how to help myself. (3)

_____ 4. I take the actions and do the things that will be helpful to me. (4)

_____ 5. I create inner feelings of support, helpfulness and encouragement. (5)

Compassion to Others

When things go wrong for other people and they become distressed by setbacks, failures, disappointments or losses, we may cope with their distress in different ways. We are interested in the degree to which people can be compassionate to others. We define compassion as "a sensitivity to suffering in self and others with a commitment to try to alleviate and prevent it." This means there are two aspects to compassion. The first is the ability to be motivated to engage with things/feelings that are difficult as opposed to trying to avoid or supress them. The second aspect of compassion is the ability to focus on what is helpful. Just like a doctor with his/her patient. The first is to be motivated and able to pay attention to the pain and (learn how to) make sense of it. The second is to be able to take the action that will be helpful. Below is a series of questions that ask you about these two aspects of compassion. Therefore read each statement carefully and think about how it applies to you

when people in your life become distressed. Please rate the items using the following rating scale:

Never **Always**

1 2 3 4 5 6 7 8 9 10

Q17 Section 1 – These are questions that ask you about how motivated you are, and able to engage with other people's distress when they are experiencing it. So: When others are distressed or upset by things…

_____ 1. I am motivated to engage and work with other peoples' distress when it arises. (1)

_____ 2. I notice and am sensitive to distress in others when it arises. (2)

_____ 3. I avoid thinking about other peoples' distress, try to distract myself and put it out of my mind. (3)

_____ 4. I am emotionally moved by expressions of distress in others. (4)

_____ 5. I tolerate the various feelings that are part of other people's distress. (5)

_____ 6. I reflect on and make sense of other people's distress. (6)

_____ 7. I do not tolerate other peoples' distress. (7)

_____ 8. I am accepting, non-critical and non-judgemental of others people's distress. (8)

Q18 Section 2 – These questions relate to how you actively respond in compassionate ways when other people are distressed. So: When others are distressed or upset by things…

_____ 1. I direct attention to what is likely to be helpful to others. (1)

_____ 2. I think about and come up with helpful ways for them to cope with their distress. (2) _____ 3. I don't know how to help other people when they are distressed. (3)

_____ 4. I take the actions and do the things that will be helpful to others. (4)

_____ 5. I express feelings of support, helpfulness and encouragement to others. (5)

Compassion from Others

When things go wrong for us and we become distressed by setbacks, failures, disappointments or losses, others may cope with our distress in different ways. We are interested in the degree to which you feel that important people in your life can be compassionate to your distress. We define compassion as "a sensitivity to suffering in self and others with a commitment to try to alleviate and prevent it." This means there are two aspects to compassion. The first is the ability to be motivated to engage with things/feelings that are difficult as opposed to trying to avoid or supress them. The second aspect of compassion is the ability to focus on what is helpful to us or others. Just like a doctor with his/her patient. The first is to be motivated and able to pay attention to the pain and (learn how to) make sense of it. The second is to be able to take the action that will be helpful. Below is a series of questions that ask you about these two aspects of compassion. Therefore read each statement carefully and think about how it applies to the important people in your life when you become distressed. Please rate the items using the following rating scale:

Never **Always**

1 2 3 4 5 6 7 8 9 10

Section 1 – These are questions that ask you about how motivated you think others are, and how much they engage with your distress when you experience it. So: When I'm distressed or upset by things…

_____ 1. Other people are actively motivated to engage and work with my distress when it arises. (1)

_____ 2. Others notice and are sensitive to my distressed feelings when they arise in me. (2)

_____ 3. Others avoid thinking about my distress, try to distract themselves and put it out of their mind. (3)

_____ 4. Others are emotionally moved by my distressed feelings. (4)

_____ 5. Others tolerate my various feelings that are part of my distress. (5)

_____ 6. Others reflect on and make sense of my feelings of distress. (6)

_____ 7. Others do not tolerate my distress. (7)

_____ 8. Others are accepting, non-critical and non-judgemental of my feelings of distress. (8)

Q21 Section 2 – These questions relate to how others actively cope in compassionate ways with emotions and situations that distress you. So: When I'm distressed or upset by things…

_____ 1. Others are able to direct their attention to what is likely to be helpful to me. (1)

_____ 2. Others are able to think about and come up with helpful ways for me to cope with my distress. (2)

_____ 3. Others don’t know how to help me when I am distressed (3)

_____ 4. Others are able to take the actions and do the things that will be helpful to me. (4)

_____ 5. Others are able to treat me with feelings of support, helpfulness and encouragement. (5)

Appendix E

Self-Compassion Scale (Short-Form)

	Please respond to each item by marking one box per row	Never	Rarely	Sometimes	Often	Always
1	When I fail at something important to me I become consumed by feelings of inadequacy. (R)	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
2	I try to be understanding and patient towards those aspects of my personality I don't like.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
3	When something painful happens I try to take a balanced view of the situation.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
4	When I'm feeling down, I tend to feel like most other people are probably happier than I am. (R)	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
5	I try to see my failings as part of the human condition.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
6	When I'm going through a very hard time, I give myself the caring and tenderness I need.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
7	When something upsets me I try to keep my emotions in balance.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
8	When I fail at something that's important to me, I tend to feel alone in my failure(R)	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
9	When I'm feeling down I tend to obsess and fixate on everything that's wrong. (R)	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
10	When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
11	I'm disapproving and judgmental about my own flaws and inadequacies. (R)	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
12	I'm intolerant and impatient towards those aspects of my personality I don't like. (R)	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1

Appendix F

Plain Language Statement

Dear Participant,

My name is Kira Orsini and I am a Psychology Honours student at the University of Adelaide. I am conducting a study to investigate the influence of meditation experience and perceived parenting in childhood and adolescence on compassion for others and for oneself. The study aims to add to benefit our knowledge of compassion by investigating both the effectiveness of an intervention such as meditation, and predetermining factors such as perceived parental warmth on development and maintenance of compassion for others and oneself. It would be appreciated it if you could take the time to contribute to the study by completing the online survey.

The study will first ask for some general information about you, followed by questions about meditation experience, your perceptions of parenting you received, and then questions about how you feel towards yourself and others. The study should take approximately 20 minutes to complete.

Your results will not be identifiable and will be used only for this study, which may be published in the future. You have the right to withdraw at any time prior to submitting the surveys. In accordance with the University policy, all data collected will be securely stored on University grounds for up to five years.

If you have any queries or wish to further discuss aspects of the research, please contact either myself, at [redacted]

The Influence of Meditation and Perceived Parental Warmth on Compassion

For any ethical concerns regarding this study, please contact the convener of the subcommittee for Human Research in the School of Psychology, [redacted]

If you feel distressed as a result of participating in this study, please do not hesitate to contact the Adelaide University Counselling Service, ph. (08) 8303 5663, your General Practitioner (GP), or other mental health resources such as BeyondBlue, ph. 1300 224636 (https://www.beyondblue.org.au/) or Lifeline, ph. 13 11 14 (https://www.lifeline.org.au).

Thank you for your participation.

Kind Regards,

Kira Orsini

Appendix G

Information Sheet

Compassion, Meditation and Perceived Parental Warmth

THE UNIVERSITY of ADELAIDE

Are you over 18?

You are being invited to participate in a study investigating the influence of meditation experience and perceived parental warmth on the three levels of compassion.

The study has been approved by the Human Ethics Subcommittee of the School of Psychology of the University of Adelaide.

All information provided by participants will be unidentifiable, and all participants may withdraw from the study prior to submitting the survey.

If would like to participate in this study, please complete the survey by clicking the following link: *insert Survey Monkey link here*

If you have any questions, please contact any of the following researchers via email:

[redacted]

A summary of general findings will be available after completion of the study to participants who email the researchers.

If you experience any distress as a result of participating in the study, please contact:
BeyondBlue, ph. 1300 224636 (https://www.beyondblue.org.au/)
LifeLine, ph. 13 11 14 (https://www.lifeline.org.au)

Appendix H

Social Media Post

As part of my honours research I am conducting a survey investigating the influence of meditation experience and perceived parental warmth on compassion for others and oneself. This research has been approved by the Human Ethics Subcommittee of the School of Psychology of the University of Adelaide.

It would be greatly appreciated if you could assist me in my research by taking approximately 20 minutes to complete the survey. It would also be helpful to the research if you could share this post for more people to see.

There is also the opportunity for participants who complete the entire survey to win one of two $50 vouchers.

Thankyou in advance.

[redacted]

Appendix I

Participant Feedback

Dear participant,

Thank you for completing the survey "Meditation Experience and Perceived Parental Warmth on Compassion".

Your participation was essential to the completion of my study. At completion of the survey you indicated that you would be interested in the findings of the study. Please find attached an overview of the results.

If you would like to know more about the study, please don't hesitate to respond to this email.

Kind Regards,

Kira Orsini

The study aimed to investigate the influence of meditation experience and perceived parental warmth (an individual's perception of how they were/are treated by their parents) on levels of compassion. Previous research has suggested meditation experience to be associated with higher levels of self-compassion and compassion for others (Condon et al., 2013; Luberto, et al., 2017), and high perceived parental warmth to be associated with higher levels of self-compassion (Temel & Atalay, 2018). Little research has been conducted into how meditation experience may also impact receiving compassion from others, or how perceived parental warmth may also impact compassion for others and receiving compassion from others. The current study therefore aimed to fill this gap in the literature.

Participants (N = 147) were recruited from Facebook (N = 80) and The University of Adelaide participation system (N = 67). Participants completed the online survey consisting of questions on meditation experience, and pre-existing measures of perceived parental warmth, self-compassion, compassion for others, and receiving compassion from others.

Our first hypothesis predicted that meditation experience would positively influence levels of self-compassion. This was partially supported. Participants with 6 or more years of meditation experience had higher levels of self-compassion than participants with no meditation experience. Participants who practiced daily had higher levels of self-compassion than participants who meditate less than daily. However, there were no significant results to suggest that duration of meditation sessions has an impact on levels of self-compassion.

Our second hypothesis predicted that meditation experience would positively influence levels of compassion towards others. This was not supported. There were no significant results to suggest that years of meditation, meditation sessions per week or duration of sessions would have any impact on levels of compassion towards others. There was also no significant relationship between meditation experience and receiving compassion from others.

Our third hypothesis predicted that greater perceived parental warmth by parents in childhood and adolescence would be positively correlated with self-compassion. This was supported. Results suggested that higher levels of perceived parental warmth are associated with higher levels of self-compassion.

The study also investigated the effect of perceived parental warmth on compassion from others and compassion towards others. The results suggest that higher levels of perceived parental warmth are associated with a greater ability to receive compassion from others. However, there was no significant relationship found between perceived parental warmth and compassion for others.

Appendix J

Education ANOVA Output

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
SelfCompassion_TotalScores	Between Groups	3.411	5	.682	1.970	.087
	Within Groups	48.839	141	.346		
	Total	52.250	146			
CEASSelfCompassion_Total	Between Groups	639.498	5	127.900	.742	.593
	Within Groups	24288.760	141	172.261		
	Total	24928.259	146			
CEAStoOthers_Total	Between Groups	688.533	5	137.707	.821	.537
	Within Groups	23646.501	141	167.706		
	Total	24335.034	146			
CEASReceiving_Total	Between Groups	2624.196	5	524.839	2.130	.065
	Within Groups	34735.654	141	246.352		
	Total	37359.850	146			
ParentalWarmth_Total	Between Groups	139.432	5	27.886	.488	.785
	Within Groups	8053.888	141	57.120		
	Total	8193.320	146			