

Illinois State University

ISU ReD: Research and eData

Theses and Dissertations

3-6-2023

Parenting Characteristics and the Development of Self-Compassion: a Look at Self-Warmth and Self-Coldness

Meghan Rogers

Illinois State University, meghanellenrogers@gmail.com

Follow this and additional works at: <https://ir.library.illinoisstate.edu/etd>

Recommended Citation

Rogers, Meghan, "Parenting Characteristics and the Development of Self-Compassion: a Look at Self-Warmth and Self-Coldness" (2023). *Theses and Dissertations*. 1704.

<https://ir.library.illinoisstate.edu/etd/1704>

This Thesis is brought to you for free and open access by ISU ReD: Research and eData. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of ISU ReD: Research and eData. For more information, please contact ISUREd@ilstu.edu.

PARENTING CHARACTERISTICS AND THE DEVELOPMENT OF SELF-COMPASSION:
A LOOK AT SELF-WARMTH AND SELF-COLDNESS

MEGHAN ROGERS

74 Pages

Self-compassion, which reflects a kind stance towards oneself when suffering, is related to a whole host of positive outcomes from decreased anxiety (Neff & McGehee, 2010; Raes, 2010; Temel & Atalay, 2018) and depression (Neff & McGehee, 2010; Raes, 2010; Steindl et al., 2018; Temel & Atalay, 2018) to increased happiness (Neff et al., 2007b; Wei et al., 2011). It is important, therefore, to understand how an individual develops self-compassion. Parenting characteristics have been shown to be associated with later self-compassion and may therefore be related to its development. In addition, self-compassion has recently been conceptualized as having two different dimensions – self-warmth and self-coldness. This study seeks to explore the relationship between parenting characteristics and self-warmth and –coldness. Correlations were found between parental warmth, rejection, structure, chaos, autonomy support, and coercion and self-warmth and –coldness. Additionally, correlations were compared to determine whether positive parenting characteristics correlated more strongly with self-warmth and negative characteristics with self-coldness. It was discovered that all of the parenting characteristics correlated significantly with both self-warmth and self-coldness. Parental warmth, structure, and autonomy support were positively correlated with self-warmth and negatively correlated with self-coldness while rejection, chaos, and coercion were negatively correlated with self-warmth

and positively correlated with self-coldness. It was also found that there was a significant difference in correlations with self-warmth and those with self-coldness but only in the case of negative constructs. These results can give parents a better understanding of what it takes to foster self-compassion in their children. Additionally, therapists can use these findings to incorporate warmth, structure, and autonomy support into their sessions and to process early rejection, chaos, and coercion in order to help clients to gain self-compassion as adults. Finally, this further supports the idea that self-warmth and –coldness are different dimensions and not simply poles of self-compassion.

KEYWORDS: self-compassion; self-warmth; self-coldness; parenting

PARENTING CHARACTERISTICS AND THE DEVELOPMENT OF SELF-COMPASSION:
A LOOK AT SELF-WARMTH AND SELF-COLDNESS

MEGHAN ROGERS

A Thesis Submitted in Partial
Fulfillment of the Requirements
for the Degree of

MASTER OF SCIENCE

Department of Psychology

ILLINOIS STATE UNIVERSITY

2023

© 2023 Meghan Rogers

PARENTING CHARACTERISTICS AND THE DEVELOPMENT OF SELF-COMPASSION:
A LOOK AT SELF-WARMTH AND SELF-COLDNESS

MEGHAN ROGERS

COMMITTEE MEMBERS:

Jeffrey Kahn, Chair

Dan Lannin

ACKNOWLEDGMENTS

Thank you to Jeffrey Kahn for his support and guidance throughout this entire process,

To Dan Lannin and Eric Wesselmann for their time and expertise,

And to Pete Moore for his endless patience and interest.

M.R.

CONTENTS

	Page
ACKNOWLEDGMENTS	i
TABLES	v
CHAPTER I: INTRODUCTION	1
Compassion and Self-Compassion	1
Self-Kindness vs. Self-Criticism	2
Common Humanity vs. Isolation	3
Mindfulness vs. Over-Identification	3
The Connection Between the Facets	4
Conceptually Similar Constructs	5
Self-Compassion Correlates	6
Well-Being	10
Intrapersonal and Interpersonal Relationships	11
Personal Characteristics	11
Development of Self-Compassion	12
Parenting Behaviors and Characteristics	16
Parental Transmission of Characteristics	22
IPARTheory	22
Dual Dynamics of Self-Compassion and Self-Coldness	24
Research Using Self-Warmth / Self-Coldness	30
Transmitting Self-Warmth and Self-Coldness	31
The Current Study	31

Exploratory Analysis	34
CHAPTER II: METHOD	35
Participants	35
Power Analysis	35
Measures	36
Self-Compassion Scale	36
Parents as Social Context Questionnaire (Adolescent Report)	37
Single-Item Self-Esteem Scale	38
Ten-Item Personality Inventory	38
Procedure	39
CHAPTER III: RESULTS	40
Correlations Between Self-Warmth/Self-Coldness and Parenting	42
Exploratory Analysis	44
CHAPTER IV: DISCUSSION	50
Parenting Characteristics, Self-Warmth, and Self-Coldness	50
Parental Warmth and Rejection	52
Parental Structure and Chaos	54
Autonomy Support and Coercion	55
Differences in Correlations	56
Exploratory Analysis	58
Self-Esteem	58
Personality	60
Structure and Chaos	61

Limitations	61
Ideas for Future Research	63
Conclusions	65
REFERENCES	66

TABLES

Table		Page
1	<i>Correlation Coefficients Between Self-Compassion and Related Constructs</i>	7
2	<i>Correlation Coefficients Between Self-Compassion and Developmental Constructs</i>	13
3	<i>Correlations Between Self-Compassion Dimensions and Facets and Negative and Positive Constructs</i>	28
4	<i>Means and Standard Deviations for Dimensions of Self-Compassion, Parenting, Personality, and Self-Esteem</i>	41
5	<i>Correlations between Self-Warmth, Self-Coldness and Parenting Characteristics and Differences in Correlation between Self-Warmth and Self-Coldness</i>	43
6	<i>Correlations between Self-Warmth, Self-Coldness, Self-Esteem, and Personality Factors</i>	45
7	<i>Hierarchical Regression Analysis Predicting Self-Warmth from Self-Esteem and Personality Characteristics</i>	47
8	<i>Hierarchical Regression Analysis Predicting Self-Coldness from Self-Esteem and Personality Characteristics</i>	48

CHAPTER I: INTRODUCTION

Self-compassion, which reflects a kind stance towards oneself when suffering, is related to a whole host of positive outcomes from decreased anxiety (Neff & McGehee, 2010; Raes, 2010; Temel & Atalay, 2018) and depression (Neff & McGehee, 2010; Raes, 2010; Steindl et al., 2018; Temel & Atalay, 2018) to increased optimism (Neff et al., 2007b) and happiness (Neff et al., 2007b; Wei et al., 2011). It is important, therefore, to understand how an individual develops self-compassion. Much research has been done in this area over the past 20 years, but much remains unknown. Parenting characteristics have been shown to be associated with later self-compassion and may therefore be related to its development (e.g., Pepping et al., 2015; Rohner & Lansford, 2017). There is reason, in particular, to believe that parental warmth and rejection are at play (Rohner & Lansford, 2017).

A new conceptualization has arisen of self-compassion as two distinct dimensions of self-warmth and self-coldness (Brenner et al., 2017). Very little research has been done based on this new conceptualization. It is possible that the development of self-warmth and -coldness differs from the development of self-compassion as a whole. This is, however, largely unknown. The current study examined the association between parenting characteristics and self-compassion with a focus on these dimensions.

Compassion and Self-Compassion

Compassion is an idea with which most people are familiar. It occurs when an individual sees someone suffering and wishes to reach out to them with understanding and care (Goetz et al., 2010). It has also been defined as a combination of sadness and love (e.g., Shaver et al., 1987). It is thought to aid in cooperation and in the safeguarding of those in distress (MacBeth & Gumley, 2012). In this way, it can build and protect relationships. It may be that compassion

developed as a caregiving trait that parents expressed for their children (MacBeth & Gumley, 2012). It then generalized to include care for the suffering of others beyond the family with many people expressing compassion towards complete strangers or animals. Buddhism asserts that there is a false dichotomy between self and other and that compassion should therefore be offered to the self just as readily (Barnard & Curry, 2011). Kristen Neff (2003a, 2003b) borrowed this concept from Buddhism and is responsible for popularizing the concept in Western thought.

Self-compassion is a way of relating to oneself that turns compassion inward. It entails recognizing one's own suffering and working to gently heal that pain (Neff, 2003a, 2003b). This relief does not come from avoidance but from sitting with one's pain in a nonjudgmental way, contextualizing one's failures as part of the human experience, and offering self-soothing.

Self-compassion consists of three components: (a) self-kindness, (b) common humanity, and (c) mindfulness (Neff, 2003). Each of these qualities is a positive pole that opposes a negative quality. Self-kindness is opposed by self-criticism, common humanity by isolation, and mindfulness by over-identification. These factors are all highly correlated with each other, with correlation coefficients ranging from $|.46|$ all the way to $|.91|$ (Neff, 2003a). To better understand self-compassion, we can take a look at each of these components and their opposing constructs.

Self-Kindness vs. Self-Criticism

Self-kindness is the tendency to be caring and understanding toward oneself in difficult times or experiences of failure (Neff, 2003a, 2003b). This can be achieved by recognizing one's pain and offering warmth and comfort to oneself, just as one might offer these to a friend who is suffering. Neff (2011) suggests that one route to self-kindness would be to stop and say, "This is really difficult right now. How can I care for and comfort myself in this moment?" (p. 42). Self-

criticism, on the other hand, is often the automatic response to failure or shortcomings in which the individual harshly judges any of their personal wrongs. Neff (2011) suggests that this response is a submissive behavior that arises because of the need to be accepted by others. The need for control may also play a role, she suggests, because when one criticizes—even when criticizing the self—they put themselves in a dominant position. In this way, they stand with those who would chastise them.

Common Humanity vs. Isolation

The common-humanity aspect of self-compassion entails being able to see that one's experiences and failures are universal human experiences. It is a feeling of connection to others through the knowledge that we all make mistakes and all suffer (Neff, 2003, 2011). It is also the recognition that everyone deserves compassion, including oneself (Neff, 2003). Common humanity stands in opposition to isolation (Neff, 2003). Isolation occurs during times of suffering when one becomes preoccupied with their own pain and fails to put their experiences into the context of the larger human picture. They feel alone and separate from others.

Mindfulness vs. Over-Identification

Mindfulness involves holding one's thoughts and experiences in non-judgmental awareness. It allows individuals to take in their shortcomings without becoming swept up in painful feelings (Neff, 2003a, 2003b). It is through mindfulness that one is able to sit with a difficult experience but still have the presence of mind to practice self-kindness and to see their common humanity. The opposite pole to mindfulness is over-identification. Over-identification occurs when a person's focus narrows so that it is completely filled with their own emotions. This then leads to a complete loss of perspective (Neff, 2011).

The Connection Between the Facets

While self-kindness, common humanity, and mindfulness each contribute on their own to self-compassion, they also reinforce each other. Barnard and Curry (2011) examine these connections. Self-kindness allows people to have greater feelings of common humanity. When people fall into self-criticism, they judge themselves harshly, which acts to make them feel different from others. In times of failure, it takes self-kindness to allow a person to realize that they are just as worthy as everyone else. If they feel better about themselves, they are also more likely to seek connection (Barnard & Curry, 2011). Self-kindness also allows for greater mindfulness. When a person is self-critical, they are more likely to over-identify with their problems and failures. It is easier to get swept up emotionally in the negativity. When someone has self-kindness, however, they are able to be less reactive in the moment and can hold the incident in mindful awareness. Self-criticism also leads people to dwell on their past, focusing on mistakes that they have made, whereas self-kindness can free one up to operate in the present, attending to their current feelings (Barnard & Curry, 2011).

Feelings of common humanity also lead to self-kindness and mindfulness. When one understands that their shortcomings arise from being human and that everyone has failures and flaws, it becomes easier to approach oneself with kindness (Barnard & Curry, 2011). Additionally, if someone sees themselves as part of common humanity, they may wish to treat themselves as they would treat anyone else who makes a mistake. Since we are much gentler with others than we tend to be with ourselves, this could lead to greater self-kindness as well (Barnard & Curry, 2011). When we see ourselves in this way, our failures are less isolating and threatening, which can make it easier to deal with them in a mindful way rather than over-identifying with or avoiding them (Barnard & Curry, 2011).

And finally, mindfulness can engender greater self-kindness and common humanity. When a person overidentifies with a fault and gets swept up in negative emotion, it is much more difficult to offer kindness. If they are reactive in the moment, they are more likely to beat themselves up. When they are grappling with big, painful emotions, they are also more likely to feel isolated and different from others. Mindfulness allows people the space to calmly offer themselves kindness and connect to humanity.

Conceptually Similar Constructs

Self-compassion is often seen as overlapping with similar constructs, which can create some confusion. One may wonder how it is different from self-pity, self-esteem, and self-affirmation. Self-pity is antithetical to self-compassion as it requires feelings of separation from others as well as over-identification with one's problems (Neff, 2003). Self-compassion also differs from self-esteem in that self-esteem requires the evaluation of self against others whereas self-compassion encourages one to think of the self in relation to a common humanity. Self-esteem is also contingent on being exceptional in some respect, whereas self-compassion is unconditional. It may therefore be easier to raise self-compassion than self-esteem because self-compassion does not require adherence to high standards or above-average performance (Neff, 2003). Self-affirmation has significant overlap with self-compassion in that they both can be given to the self in times when a person's conception of themselves is threatened (Harris et al., 2019). They differ, however, in that self-affirmation entails restoring this conception by bringing to mind positive qualities of the self. Self-compassion, on the other hand, does not require that a person thinks about these positive qualities – it can be given to anyone, regardless of their attributes.

Self-Compassion Correlates

Researchers have found many correlates of self-compassion. While some of these may be outcomes that arise from self-compassion, it is important to note that very little research has been done to uncover causal relationships. So it could also be the case that these characteristics actually contribute to self-compassion, rather than the other way around, or that they share a common cause. It is even possible that in some cases, they are the same construct with different labels.

See Table 1 for correlations between self-compassion and the constructs covered here. Although the research detailed here goes well beyond the current study, the purpose of this treatment is to provide as broad a context as possible.

Table 1*Correlation Coefficients Between Self-Compassion and Related Constructs*

Constructs	Source	<i>r</i>
Well-Being		
General Well-Being	Di Fabio & Saklofske	.48
	Moreira et al., 2018	.50
Life Satisfaction	Wei et al., 2011	.43
Health	Raque-Bogdan et al., 2011	.18
Psychological Well-Being		
Psychological Well-Being	Marta-Simões et al., 2018	.51
Mental Health	Raque-Bogdan et al., 2011	.55
Happiness	Neff et al., 2007b	.57
	Wei et al., 2011	.48
Positive Affect	Kelly & Dupasquier, 2015	.36
	Neff et al., 2007b	.34
	Steindl et al., 2018	.42
	Wei et al., 2011	.43
Stress	Temel & Atalay, 2018	-.49

Table Continues

Table Continued

Constructs	Source	<i>r</i>
Anxiety	Neff & McGehee, 2010, Study 1	-.73
	Neff & McGehee, 2010, Study 2	-.67
	Raes, 2010	-.75
	Temel & Atalay, 2018	-.40
Depression	Neff & McGehee, 2010, Study 1	-.60
	Neff & McGehee, 2010, Study 2	-.51
	Raes, 2010	-.55
	Steindl et al., 2018	-.36
	Temel & Atalay, 2018	-.52
Skills & Deficits		
Emotional Intelligence	Zareian et al., 2017	.33
Mindfulness	Gouveia et al., 2016	.42
Optimism	Neff et al., 2007b	.62
Self-Control	Di Fabio & Saklofske, 2021	.56
Psychological Inflexibility	Moreira & Canavarro, 2020	-.47
Emotion Regulation Difficulties	Moreira & Canavarro, 2020	-.56
Relationship to Self		
Self-Reassurance	Naismith et al., 2019	.59
Self-Criticism	Naismith et al., 2019	-.41
Self-Hatred	Naismith et al., 2019	-.40

Table Continues

Table Continued

Constructs	Source	<i>r</i>
Self-Inadequacy	Naismith et al., 2019	-.37
Shame	Naismith et al., 2019	-.37
Relationship to Others		
Antisocial Behaviors	Zareian et al., 2017	-.34
Sociability	Di Fabio & Saklofske, 2021	.32
Social Connectedness	Marta-Simões et al., 2018	.31
Compassion	Di Fabio & Saklofske, 2021	.40
	Steindl et al., 2018	.27
Mindful Parenting	Gouveia et al., 2016	.54
Parenting Stress	Gouveia et al., 2016	-.57
Personal Characteristics		
Agreeableness	Neff et al., 2007b	.35
Conscientiousness	Neff et al., 2007b	.42
Curiosity	Neff et al., 2007b	.28
Initiative	Neff et al., 2007b	.45
Wisdom		
Reflective	Neff et al., 2007b	.61
Affective	Neff et al., 2007b	.26

Well-Being

Researchers have found self-compassion to be positively related to overall well-being (Di Fabio & Saklofske, 2021; Moreira et al., 2018), life satisfaction (Wei et al., 2011), and health (Raque-Bogdan et al., 2011; Steindl et al., 2018). Self-compassion has also been linked to improved psychological well-being (Marta-Simões et al., 2018; Neff et al., 2007b; Neff & McGehee, 2010) and mental health (Raque-Bogdan et al., 2011). People who are higher in self-compassion tend to be lower in both anxiety (Neff & McGehee, 2010; Raes, 2010; Temel & Atalay, 2018) and depression (Neff & McGehee, 2010; Raes, 2010; Steindl et al., 2018; Temel & Atalay, 2018) with moderate to strong effect sizes (Neff & McGehee, 2010). They also tend to be happier (Neff et al., 2007b; Wei et al., 2011), to experience more positive affect (Kelly & Dupasquier, 2015; Neff et al., 2007b; Steindl et al., 2018; Wei et al., 2011), and to have less stress (Temel & Atalay, 2018). Self-compassion may lead to these positive outcomes because it allows for the individual to generate their own feelings of being cared for (through self-kindness) while also making them feel more connected to those around them (through common humanity) and increasing their ability to remain calm (through mindfulness) (Wei, 2011). At the same time, it helps to reduce negative feelings in general (Wei, 2011).

Several skills related to psychological health have been found to be positively correlated with self-compassion. These include emotional intelligence (Zareian et al., 2017), mindfulness (Gouveia et al., 2016), optimism (Neff et al., 2007b), and self-control (Di Fabio & Saklofske, 2021). At the same time, self-compassion is negatively correlated with several deficits, including psychological inflexibility (Moreira & Canavarro, 2020) and emotion regulation difficulties (Moreira & Canavarro, 2020). When considering which came first, it seems especially likely that

these skills and deficits led to an ability or an inability to practice self-compassion rather than the other way around.

Intrapersonal and Interpersonal Relationships

It is no surprise that self-compassion has several correlates associated with the individual's intrapersonal relationship with themselves. By definition, those with self-compassion are more generous and caring towards themselves, so it only makes sense that they are more likely to practice self-reassurance and to escape self-criticism, self-hatred, self-inadequacy, and shame (Naismith et al., 2019). Even so, people who are high in self-compassion also tend to fare better in their interactions with others. They are less likely to practice antisocial behaviors (Zareian et al., 2017), while at the same time being higher in sociability (Di Fabio & Saklofske, 2021), social connectedness (Marta-Simões et al., 2018) and, not surprisingly, compassion towards others (Di Fabio & Saklofske, 2021; Steindl et al., 2018). In terms of parenting, they are more likely to practice mindful parenting and tend to experience lower levels of parenting stress (Gouveia et al., 2016). This greater facility in interacting with others may arise from self-compassion's association with empathy and concern for others (Zareian et al., 2017). These interpersonal skills may also be made possible because a person with self-compassion is better able to connect to others through a sense of common humanity (Neff, 2003b). It is also possible that those with higher self-compassion are less caught up chasing self-esteem, which requires viewing others as lower than oneself. This zero-sum game pits self against other, possibly leading to difficulties in forming positive relationships and interactions.

Personal Characteristics

Finally, those with higher self-compassion are likely to enjoy a whole host of positive personal qualities. Neff and colleagues (2007b) ran a correlational study among 177

undergraduates self-reporting across eight measures. They found that self-compassion correlated with agreeableness, conscientiousness, curiosity, initiative, and wisdom (Neff et al., 2007b). Neff and colleagues (2007b) suggest that the link to wisdom may arise from the self-compassionate individual's ability to see the self clearly.

Development of Self-Compassion

To better understand self-compassion, it is important to look at how it might develop. This may help in knowing how to cultivate self-compassion in children and adults. In examining the development of self-compassion, most of the focus of research has been on parenting, attachment, and childhood experiences.

See Table 2 for the correlations between self-compassion and the constructs and characteristics covered here. Once again, this reviewed research extends beyond the scope of the current study but provides a broad view of the knowledge in this area.

Table 2*Correlation Coefficients Between Self-Compassion and Developmental Constructs*

Constructs	Source	<i>r</i>
Negative Parenting Behaviors & Characteristics		
Family Functioning	Neff & McGehee, 2010, Study 1	.33
	Neff & McGehee, 2010, Study 2	.32
Overprotection	Kelly & Dupasquier, 2015	-.17
	Pepping et al., 2015	-.20
	Temel & Atalay, 2018	-.11
Comparison	Temel & Atalay, 2018	-.20
Criticism		-.33
Rejection	Pepping et al., 2015	-.24
	Temel & Atalay, 2018	-.28
Positive Parenting Behaviors & Characteristics		
Maternal Support	Neff & McGehee, 2010, Study 1	.28
	Neff & McGehee, 2010, Study 2	.26
Warmth	Kelly & Dupasquier, 2015	.28
	Pepping et al., 2015	.14
	Temel & Atalay, 2018	.35
Self-Regulation	Moreira & Canavarro, 2020	.13
Maternal Responsiveness	Dakers & Guse, 2020	.18
Paternal Responsiveness	Dakers & Guse, 2020	.26

Table Continues

Table Continued

Compassion

Maternal Compassion for the Child	Moreira & Canavarro, 2020	.19
Maternal Self-Compassion	Carbonneau et al., 2020	.29

Mindfulness

Mindfulness	Moreira & Canavarro, 2020	.20
	Moreira et al., 2016	.61
Maternal Emotional Awareness of Child	Moreira & Canavarro, 2020	.14
Maternal Tendency to Listen with Full Attention	Moreira & Canavarro, 2020	.15
Maternal Nonjudgmental Acceptance of Parental Functioning	Moreira & Canavarro, 2020	.13

Attachment

Avoidant	Wei et al., 2011	.38
Anxious	Wei et al., 2011	.15
Secure	Amani & Khosroshahi, 2021	.60

Personality

Extraversion	Di Fabio & Saklofske, 2021	.26
Agreeableness	Di Fabio & Saklofske, 2021	.29
Emotional Stability	Di Fabio & Saklofske, 2021	.66
Openness	Di Fabio & Saklofske, 2021	.26
Conscientiousness	Di Fabio & Saklofske, 2021	.11

Many factors have been found to play a role in the development of self-compassion. Recollections of warmth and safeness in peer relationships, for example, were found to correlate to self-compassion (Marta-Simões et al., 2018; Steindl et al., 2018). As with any retrospective report, there is still the possibility here that current circumstances influence an individual's memories of the past. That is to say, people with lower self-compassion may recall childhood peer relationships as being less warm and safe than they actually were.

Childhood trauma has also been associated with lower levels of self-compassion (Naismith et al., 2019). Victims of childhood maltreatment may come to resist, and even fear, self-kindness and self-warmth. They may also come to see themselves as unworthy and undeserving of love and they may regard self-compassion as weakness. Compassion from themselves or others can then feel like a threat, triggering distress (Boykin et al., 2018).

Another study looked at the association between personality traits and self-compassion (Di Fabio & Saklofske, 2021). Extraversion, agreeableness, emotional stability, and openness were all positively correlated with levels of self-compassion. Conscientiousness, notably, was not. It is unclear, however, whether these traits were involved in the development of self-compassion, developed independently alongside self-compassion, or were even influenced by self-compassion themselves.

Results on self-compassion's association with sex and gender are mixed, with some studies finding no difference (e.g., Boykin et al., 2018). In a meta-analysis, self-compassion was found to be slightly higher among males than it was among females (Yarnell et al., 2015). The effect size, however, was small. One study that examined two age groups found that levels of self-compassion did not differ by sex in an adolescent sample whereas females had lower levels of self-compassion than males among college students (Neff & McGehee, 2010). This may

suggest that sex plays a role in the development of self-compassion and that these changes may be especially acute during college years. In examining the development of self-compassion, however, most of the focus of research has been on parenting, attachment, and childhood environment.

Parenting Behaviors and Characteristics

Parenting may play a pivotal role in the development of self-compassion. In general, lower family functioning (Pepping et al., 2015) is associated with lower levels of self-compassion. Parenting behaviors associated with diminished self-compassion include invalidation (Farnsworth et al., 2016), overprotection (Kelly & Dupasquier 2015; Pepping et al., 2015; Temel & Atalay, 2018), comparison (Temel & Atalay, 2018), criticism (Potter et al., 2014), and rejection (Pepping et al., 2015; Temel & Atalay, 2018). Individuals whose parents did not offer sensitive or responsive parenting may experience a reduced capacity for self-compassion. It is believed that if children are rejected by their caregivers, they may develop self-critical or rejecting tendencies that echo the attitudes of their parents (Boykin et al., 2018). Rejecting or critical behaviors of parents or caregivers may be internalized and lead to self-criticism and poor self-evaluation (Neff & McGehee, 2010). This can then hinder the development of self-compassion (Pepping et al., 2015). Further, these negative parenting practices may lead a child to see themselves as unlovable, which could then lead to their feeling resistant to self-compassion simply because it conflicts with this perception (Boykin et al., 2018). They may also experience heightened distress, which may lead to a feeling that their suffering is more individual, rather than being common to all humans (Pepping et al., 2015). Higher levels of distress may also lead to overidentification with their troubles. In one study, the relationship between early caregiving and self-compassion was found to be mediated by emotion regulation

and shame (Dragan et al., 2021). Early caregiving, as measured through trust, communication, alienation, expressive encouragement, and care, was associated with shame and emotion regulation which, in turn, predicted self-compassion. Emotion regulation played a much larger role in the relationship, accounting for 84% of the indirect effect where shame accounted for 16%.

On the other hand, positive parenting behaviors or characteristics were associated with increased levels of self-compassion. These include maternal support (Neff & McGehee, 2010), validation (Farnsworth et al., 2016), warmth (Kelly & Dupasquier; Pepping et al., 2015; Temel & Atalay, 2018), self-regulation (Moreira & Canavarro, 2020), and responsiveness, especially paternal responsiveness (Dakers & Guse, 2020). When children are cared for in childhood, they develop positive emotional memories of receiving kindness and warmth, which then facilitates their ability to self-soothe (Boykin et al., 2018). Self-soothing can then reduce emotional distress, lending itself to greater mindfulness. Positive relationships with family may also lead to more compassionate self-talk (Neff & McGehee, 2010).

Parental Compassion Toward Others

Parents who are high on compassion toward others have been shown to raise children who also have greater levels of self-compassion (Moreira & Canavarro, 2020). People often treat themselves as their caregivers treated them in childhood (Bowlby, 1988). Neff (2003) suggests that self-compassion is related to early parenting experiences in which those with compassionate parents are able to internalize this sense of compassion towards themselves while those whose parents were cold or critical will not have internalized self-compassion. When an individual attempts to receive compassion and is successful, they will strengthen their own capacity for developing self-compassion. If they are unsuccessful, their own growth in this area may be

stunted (Pepping et al., 2015). Individuals are also more likely to be more self-compassionate if compassion has been modeled for them, particularly in their family of origin (Neff & McGehee, 2010).

Parental Self-Compassion

Lathern et al. (2020) suggest that self-compassion is continued between generations, with parents low in self-compassion engendering low self-compassion in their own children. Indeed, this has been found to be the case in studies that examine both general parental (Pepping et al., 2015) and maternal (Carbonneau et al., 2020) self-compassion. This relationship could be related to modeling—children will see their parents offering compassion to themselves and will repeat the behavior. It is also possible that parents' self-compassion reflects or engenders other parenting characteristics that impact the development of self-compassion in their children. Lathern et al. (2020) suggest that parents who are high in self-compassion will offer more supportive responses to their children's distress. This may be because they will have better emotion regulation and because they will not see the child's difficult emotions as threats to themselves as parents. They will instead see it as part of the common experience of parenting. They may also be more supportive because self-compassion entails understanding for mistakes and shortcomings which the parent is then more likely to offer to their child (Lathern et al., 2020). Their calm response to their children's difficult emotions will then model self-regulation for their children. Emotion regulation, in turn, has been found to be associated with self-compassion (Moreira & Canavarro, 2020). Children may also come to understand that their emotions are manageable and normative, which lends itself to self-kindness, mindfulness, and feelings of common humanity—the three pillars of self-compassion. Conversely, parents who

have low self-compassion are more likely to respond negatively to difficult emotions (Lathern et al., 2020).

Mindfulness

Several studies have found a positive correlation between maternal mindfulness and a child's self-compassion (Moreira & Canavarro, 2020; Moreira et al., 2018; Moreira et al., 2016). They found an association with mindful parenting in general (Moreira & Canavarro, 2020; Moreira et al., 2018; Moreira et al., 2016), as well as with a mother's emotional awareness of her child, her tendency to listen with full attention, and her nonjudgmental acceptance of her own parental functioning (Moreira & Canavarro, 2020). Again, it is possible that the connection is through modeling—a child is more likely to practice mindfulness if they have seen their mother behaving in this way. It may also be that this rich parenting experience leads children to believe that they are worthy of compassion.

Authoritarian, Authoritative, and Permissive Parenting Styles

It is notable that a handful of studies have examined the relationship between self-compassion and authoritarian, authoritative, and permissive parenting styles, but have failed to discover connections (Ahmed & Bhutto, 2016, Zareian et al., 2017). One study did find that permissive parenting was positively correlated with isolation—the aspect of self-compassion that opposes feelings of common humanity (Ahmed & Bhutto, 2016). No other correlations, however, were found. Interestingly, one study (Gouveia et al., 2016) found that *parental* self-compassion was positively associated with authoritative parenting style and negatively associated with authoritarian and permissive parenting styles. It is even more curious, then, that parenting styles are not correlated with children's self-compassion since they may act as at least a partial proxy for parental self-compassion.

Home Environment

Research has also looked at a child's home environment more broadly. Family functioning significantly predicted self-compassion (Neff & McGehee, 2010). Self-compassion was also associated with positive family communication (Berryhill et al., 2018) and with recollections of warmth and safeness (Marta-Simões et al., 2018; Naismith et al., 2019). Neff and McGehee (2010) suggest that increased oxytocin could be involved in the relationship between warm family environments and self-compassion. Home environments marked with greater levels of spirituality were also associated with higher levels of self-compassion (Farnsworth et al., 2016).

On the other hand, negative home environments seem to impact self-compassion as well. Shame—in particular the traumatic quality and centrality of shameful memories—was associated with lower self-compassion (Naismith et al., 2019). There is potential, though, that the shameful experience of these memories is caused by low self-compassion, rather than the other way around. People who have difficulty offering themselves self-kindness, who feel that they are separate from common humanity, or who lack mindfulness may be inclined to remember childhood experiences in a more negative way and to respond to those memories with shame. Stressful home environments and conflict-filled childhoods are associated with lower self-compassion (Neff & McGehee, 2010). Neff and McGehee suggest that this may be due to modeling.

Attachment

Perhaps the greatest amount of research has looked at the relationship between attachment and self-compassion. Attachment styles seem to significantly predict self-compassion with secure attachment being positively associated whereas anxious attachment was negatively

associated (Moreira et al., 2016; Neff & McGehee, 2010; Pepping et al., 2015; Raque-Bogdan et al., 2011; Wei et al., 2011). It is not surprising that secure attachment would be related to greater levels of self-compassion. Early attachment relationships may allow self-compassion to develop (Boykin et al., 2018). Feelings of security in the parental relationship may lead to feelings that one is worthy of compassion which may aid in the development of self-compassion (Pepping et al., 2015). Further, the way in which people relate to themselves may reflect the ways they were treated as children (Neff, 2007b). Self-compassion and attachment security could thus spring from the same place—a healthy parental relationship. Secure attachment styles are also associated with the ability to self-soothe, which may lend itself to self-compassion (Pepping et al., 2015).

There is robust evidence that attachment anxiety is associated with lower levels of self-compassion (Moreira et al., 2016; Neff & McGehee, 2010; Pepping et al., 2015; Raque-Bogdan et al., 2011; Wei et al., 2011). Neff and McGehee suggest that this relationship may arise because individuals with anxious attachment styles are dependent on others for feelings of self-worth and cannot generate feelings of acceptance toward themselves. Attachment anxiety is related to feelings of being unworthy, fears that others are unavailable, and high levels of distress in relationships (Raque-Bogdan et al., 2011). These can then lead to a lack of self-kindness, feelings of isolation, and decreased levels of mindfulness. People with attachment anxiety may be more likely to have low self-compassion due to their negative self-model. This self-model leads to increased self-criticism, diminished self-kindness, and a tendency towards exaggerated distress. This can lead them to feel that their negative experiences are different from those of others and can be associated with overidentification (Lathern et al., 2020; Wei et al., 2011). They

are also likely to be overwhelmed by their emotions (Wei et al., 2011) and have a diminished capacity to self-soothe (Pepping et al., 2015), which run in opposition to mindfulness.

The evidence is less clear regarding avoidant attachment style. Though many studies uncovered an association (Moreira et al., 2016; Neff & McGehee, 2010; Pepping et al., 2015; Raque-Bogdan et al., 2011; Wei et al., 2011) it was to a much lesser degree than attachment anxiety (Pepping et al., 2015; Raque-Bogdan et al., 2011). This is likely because attachment anxiety entails negative feelings about both the self and others, whereas attachment avoidance often does not entail negativity about the self (Raque-Bogdan et al., 2011).

One experiment found that using security priming to increase state attachment security was associated with an increase in state self-compassion (Pepping et al., 2015). This study lends credibility to the idea that attachment has a causal influence on self-compassion. In another study, mothers' attachment to their own mothers and self-compassion were assessed. Associations were found between mothers' maternal anxious attachment, maternal avoidant attachment, and their self-compassion (Moreira et al., 2015). These results could suggest that mothers who model secure attachments also model self-compassion.

Parental Transmission of Characteristics

IPARTheory

IPARTheory suggests that individuals' personalities are shaped in part by parental acceptance or rejection (Rohner & Lansford, 2017). The impact begins in the formative years of childhood and carries forward into adulthood (Rohner & Lansford, 2017). Acceptance and rejection (which constitute the *warmth* dimension of parenting) can be expressed through words or actions (Rohner & Lansford, 2017). Acceptance and rejection are not categorical but are considered along a continuum with children receiving more or less warmth (Rohner & Lansford,

2017). This level of warmth is best measured using the child's perception, rather than objective measures, as this is a better predictor of outcomes. Kagan (1978) says, "parental rejection is not a specific set of actions by parents but a belief held by the child" (p. 61).

IPARTheory holds that parental acceptance and rejection are the most influential factor in children's developing personality (Rohner & Lansford, 2017). Those children who have experienced the necessary warmth from their parents tend to be independent, not having the need to seek out approval from others (Rohner & Lansford, 2017). This independence may help foster self-compassion as it allows individuals to look to the self for worth and comfort, rather than needing these to come from outside sources. Conversely, those who have felt rejected by parents often crave support and reassurance from others and so may struggle to look for these in themselves (Rohner & Lansford, 2017). Rejection from parents can also lead to impaired self-esteem and feelings of inadequacy, which may make it difficult for individuals to believe that they are worthy of self-compassion (Rohner & Lansford, 2017). It can also lead to emotional instability and challenges with emotion regulation, which can create an obstacle to mindfulness as it can more easily lead to overidentification with negative emotions (Rohner & Lansford, 2017).

According to IPARTheory, these personality characteristics are transmitted to children because individuals see themselves as they believe significant others see them (Rohner & Lansford, 2017). They create a mental representation of self that is influenced by the ways in which their parents seem to perceive them. Rejection by parents, then, leads individuals to believe that significant others see them in a negative light and so they come to adopt these negative beliefs about themselves. If they believe that their parents do not love them, they will come to see themselves as unlovable (Rohner & Lansford, 2017). This could create a barrier to

self-compassion by making it more difficult to lend oneself kindness. It is even possible that, in this same way, if parents do not treat children with compassion, these individuals could come to see themselves as unworthy of compassion and may therefore struggle to give it to themselves.

Dual Dynamics of Self-Compassion and Self-Coldness

Since Kristen Neff first began publishing on self-compassion in 2003, hundreds of studies have examined this construct. Almost all of these studies employ the Self-Compassion Scale (SCS) and use the total score to indicate overall self-compassion. Across these hundreds of studies, constructs have been examined in terms of their correlation to this overall self-compassion score. More recently, Brenner et al. (2017) have suggested that a two-factor structure—using “self-compassion” and “self-coldness”—may be more appropriate. They examined the SCS and came to the conclusion that this two-factor model was a better fit than a single-factor model. As it was used originally, the SCS was thought to provide – in addition to scores for the six factors of self-compassion– a composite self-compassion score using all of the items in the scale. Brenner et al. suggest that self-compassion is better indicated using only the self-kindness, common humanity, and mindfulness items of the scale. The self-criticism, isolation, and over-identification subscales can then be totaled to find a new construct: self-coldness. In other words, positive items are related to self-compassion while negative items are related to self-coldness.

While the positive scales are collectively often referred to as “self-compassion” in this model, some researchers (Brophy et al., 2020) refer to this construct as “self-warmth.” As this naming convention helps to avoid the confusion of using the same term with multiple meanings, I will adopt this language here. Brenner et al. (2017) saw hints in the original validation of the SCS that a two-factor analysis may be a better fit than a single-factor analysis. First, they felt that

the comparative fit index (CFI) and non-normed fit index (NNFI) values of .90 were too low and did not confirm the proposed model. Additionally, there were moderate to strong correlations between the six subscales with the weakest correlation being $|.46|$ and the strongest being $|.91|$ (Neff, 2003a). This indicated that these subscales were likely measuring a larger overarching factor. They examined fit indices for several different models. The “single-factor model,” which would indicate the scale’s ability to deliver a single self-compassion measurement, fell below cutoff values and so seems to be unacceptable. The best fitting indices were those that specified all six factors (self-kindness, self-criticism, common humanity, isolation, mindfulness, and overidentification) and all six factors with two bifactors (self-warmth and self-coldness). These were also shown to provide better fits than all nested and non-nested models. The model that included the bifactors was the best fit, exhibiting a higher Akaike information criterion (AIC) value than the model with just the six factors ($\Delta 66.56$). A model containing just self-warmth and self-coldness was also a good fit, with a CFI of .955 and an NNFI of .939. Thus, it may be more appropriate to think about self-compassion as two distinct factors - self-warmth and self-coldness.

Theoretical support for these two factors comes from Gilbert’s (2005) theory of social mentalities. This theory puts forth the idea that people use two different processing systems: the threat-defense system and the safeness system. People engage different systems based on the level of threat in the environment. If they feel threatened, they will engage the threat-defense system which activates the sympathetic nervous system. Alternatively, if the environment is safe, people will engage the safeness system, which is connected to the parasympathetic system. When this system is online, individuals are able to remain calm and to engage in behaviors that foster well-being. While these systems contribute to overt behavior, they may influence covert

behavior as well, including the way we interact with ourselves. Brenner et al. (2017) posit that the safety system is related to self-warmth and that the threat-defense system is related to self-coldness.

It is worth noting that there is a possible alternative explanation for the better-fitting two-factor model. Studies that have examined the possibility of two underlying factors of other measures have often found that this may simply be an artifact of positively and negatively phrased items (Lindwall et al., 2012). In one study (Lindwall et al., 2012), individuals with higher depression and lower life satisfaction were found to more frequently endorse items that were phrased negatively. It could be the case, then, that the fit for the self-warmth/self-coldness model is merely an artifact of individuals tending towards the endorsement of positive or negative items.

Several studies show that negative constructs correlate more strongly with negative facets of self-compassion (i.e., self-coldness, self-criticism, isolation, and overidentification) while positive constructs correlate more strongly with positive facets (i.e., self-warmth, self-kindness, common humanity, and mindfulness). See Table 3 for correlations. Gilbert and colleagues (2011) found that self-coldness better correlated with negative psychological outcomes than did self-compassion. Depression was only weakly correlated with self-compassion while it was moderately correlated with self-coldness. Anxiety and stress also showed stronger correlations for self-coldness than for self-compassion. The results of a meta-analysis by Muris and Petrocchi (2016) also support this theory. When looking at the relationship between facets of self-compassion and psychopathology, they found greater effect sizes for self-judgment, over-identification, and isolation versus their positive counterparts. They also found greater effect

sizes for total negative indicators versus total positive indicators. A meta-analysis from Chio et. al (2021) found a similar pattern for well-being and distress.

Table 3

Correlations Between Self-Compassion Dimensions and Facets and Negative and Positive Constructs

Constructs	Source	<i>r</i>	
		<i>Self-Warmth</i>	<i>Self-Coldness</i>
<u>Negative</u>			
Academic Difficulties	Lahtinen et al., 2020	-.10	.22
Anxiety	Brenner et al., 2018	-.24	.45
	Gilbert, 2005	-.25	.37
Attachment Anxiety	Brophy et al., 2020	-.09	.47
Attachment Avoidance	Brophy et al., 2020	-.18	.40
Depression	Brenner et al., 2018	-.38	.56
	Brophy et al., 2020	-.06	.41
	Gilbert, 2005	-.27	.52
	Lahtinen et al., 2020	-.32	.53
Distress	Brenner et al., 2018, Study 1	-.38	.64
	Brenner et al., 2018, Study 2	-.41	.59
Negative Affect	Brenner et al., 2018	-.34	.41
	Brenner et al., 2018	-.33	.53
Stress	Brenner et al., 2018	-.35	.58
	Gilbert, 2005	-.29	.55
Victimization	Lahtinen et al., 2020	-.02	.17

Table Continues

Table Continued

Positive

Life Satisfaction	Brenner et al., 2018	.39	-.45
	Brenner et al., 2018	.46	-.49
Positive Affect	Brenner et al., 2018	.41	-.34
	Brenner et al., 2018	.54	-.341
Psychological Flourishing	Brenner et al., 2018	.47	-.46
	Brenner et al., 2018	.50	-.48
Quality of Life	Brophy et al., 2020	.02	-.27
		<i>Self-Kindness</i>	<i>Self-Judgment</i>
Distress	Chio, et al., 2021	-.29	.44
Psychopathology	Muris & Petrocchi, 2016	-.34	.47
Well-Being	Chio, et al., 2021	.39	-.29
		<i>Mindfulness</i>	<i>Over-Identification</i>
Distress	Chio, et al., 2021	-.28	.45
Psychopathology	Muris & Petrocchi, 2016	-.33	.48
Well-Being	Chio, et al., 2021	.39	-.32
		<i>Common Humanity</i>	<i>Isolation</i>
Distress	Chio, et al., 2021	-.17	.45
Psychopathology	Muris & Petrocchi, 2016	-.31	.48
Well-Being	Chio, et al., 2021	.29	-.36

Neff (2016) responded to early challenges to the psychometric validity of the SCS that “the lack of self-compassion is as important to the definition of the trait as the presence of it” (p. 265). She contends that higher levels of self-criticism, isolation, and overidentification are already captured as a lack of self-compassion and reflected in lower self-compassion scores.

Research Using Self-Warmth / Self-Coldness

Few studies have utilized this two-factor model. One study (Brenner et al., 2018) found that, among both college student and community adult samples, self-warmth correlated more strongly than self-coldness with psychological flourishing and positive affect while self-coldness correlated more strongly than self-warmth with negative affect, nonspecific distress, and depression. They also measured anxiety and stress among their community adult sample and found that self-coldness correlated more strongly with both than did self-warmth. Many times, the difference was substantial. Interestingly, life satisfaction correlated more strongly with self-coldness than with self-warmth in both of these samples. Further findings in this study were that self-warmth did not uniquely predict distress and that self-warmth mitigated the effects of self-coldness on well-being. It seems that self-warmth is more correlated with positive or desirable constructs whereas self-coldness is more correlated with negative or undesirable constructs.

Other studies also examined self-coldness and self-warmth. One such study (Lahtinen et al., 2020) among teenagers found a greater link between self-coldness and depression, victimization, and academic difficulties than between self-warmth and these constructs. Another (Brophy, 2020) found that attachment anxiety and avoidance were both much more strongly correlated with self-coldness than with self-warmth. This study also found that self-coldness mediated the relationship between attachment and both quality of life and depression. The authors suggest that this may be the case because childhood attachment experiences that hinder

the development of a self-soothing system may also lead to the development of self-coldness. Apart from this examination of the relationship between attachment and self-warmth and -coldness, there have yet to be studies that look at how parenting characteristics relate to these two dimensions. This study sought to expand the knowledge in this area by exploring the relationship between parental warmth, rejection, structure, chaos, autonomy support, and coercion and these dimensions.

Transmitting Self-Warmth and Self-Coldness

There is currently very little theory regarding the transmission of self-warmth and -coldness from parents to children. Brophy et al. (2020) offer the idea that negative attachment experiences can result in children failing to develop an adequate soothing system, which would impact self-warmth. It can also lead to a heightened threat system, which would be related to self-coldness. In this way, parents can be seen to influence children's development of self-warmth and -coldness. There have yet to be studies that examine how different parenting characteristics may influence the development of these two dimensions of self-compassion.

The Current Study

The current study sought to examine the role of parenting characteristics in the development of self-warmth and self-coldness. While much research has been done on the relationship between parenting and self-compassion, there has been little exploration using this newer model. Research shows again and again that parenting characteristics matter in the development of self-compassion, yet no study has yet looked at the relationship between parenting characteristics and self-warmth and -coldness. Looking at these dimensions separately may add to a richer understanding of the ways in which self-compassion develops.

There are many parenting constructs that could have been examined here. This study examined parental warmth and rejection because of their clear conceptual connection to self-warmth and -coldness. As research in this area is in its early stages, it makes sense to “begin at the beginning,” looking at correlations among constructs that appear to be most closely related.

Previous research already shows that there is a connection between self-compassion and parental warmth and rejection. Warmth has been shown to be positively associated with self-compassion (Kelly & Dupasquier, 2015; Pepping et al., 2015; Temel & Atalay, 2018) while rejection has been shown to be negatively associated with self-compassion (Pepping et al., 2015; Temel & Atalay, 2018). It is likely, then, that there would be correlations between these constructs and self-warmth and -coldness.

Hypothesis 1: Parental warmth will be positively correlated with self-warmth and negatively correlated with self-coldness, and the correlation with self-warmth will be stronger than the correlation with self-coldness.

Hypothesis 2: Parental rejection will be positively correlated with self-coldness and negatively correlated with self-warmth, and the correlation with self-coldness will be stronger than the correlation with self-warmth.

The current study also examines the relationship between self-warmth and -coldness and structure, chaos, autonomy support, and coercion. The research literature shows support for a connection between each of these and self-compassion as well. Neff and McGee (2010) have shown an association between stressful home environments and self-compassion, suggesting the

possibility that structure and chaos could play a role in its development. Several studies (Kelly & Dupasquier, 2015; Pepping et al., 2015; Temel & Atalay, 2018) show a correlation between self-compassion and overprotection, suggesting that autonomy support and coercion could be related to self-compassion. Further, maternal support has been shown to correlate to self-compassion (Neff & McGehee, 2010). Though there is little theoretical support for these connections, the current study examines them for exploratory purposes.

Hypothesis 3: Parental structure will be positively correlated with self-warmth and negatively correlated with self-coldness, and the correlation with self-warmth will be stronger than the correlation with self-coldness.

Hypothesis 4: Parental chaos will be positively correlated with self-coldness and negatively correlated with self-warmth, and the correlation with self-coldness will be stronger than the correlation with self-warmth.

Hypothesis 5: Parental autonomy support will be positively correlated with self-warmth and negatively correlated with self-coldness, and the correlation with self-warmth will be stronger than the correlation with self-coldness.

Hypothesis 6: Parental coercion will be positively correlated with self-coldness and negatively correlated with self-warmth, and the correlation with self-coldness will be stronger than the correlation with self-warmth.

Exploratory Analysis

In addition to testing the main hypotheses, this study also involved an exploratory analysis. This analysis was performed in order to ascertain whether there was any variance there was any variance in self-compassion that was not explained by either self-esteem or personality traits. This was to rule out the possibility that I was actually just measuring self-esteem or personality when I thought I was measuring self-compassion.

CHAPTER II: METHOD

Participants

Participants for the current study were college students from Illinois State University. College students are an appropriate population as they are generally young enough to still be connected with their parents and old enough that their self-compassion should be better developed. Additionally, much of the literature on self-compassion is based on studies using college students so this study would draw from the same population.

There were 247 total participants. After removing those who failed the attention check, 238 remained. Of these, 200 identified as women, 28 as men, and 8 as nonbinary, with 2 participants remaining. Of these, one preferred not to disclose their gender and one chose to self-describe as “she/they.” In terms of race, there were 199 participants who identified as white, 21 as Black or African American, 7 as biracial or multiracial, 4 as Asian or Pacific Islander, and 1 as American Indian or Indigenous person with 6 remaining participants. Of these, 3 chose not to disclose their race, one self-identified as “Mexican,” and 2 self-identified as “Latina.” When asked whether they identified as Latina/o/x or Hispanic, 214 replied that they did not and 24 replied that they did. Of the participants, 110 reported that they were freshmen, 39 sophomores, 46 juniors, 41 seniors, and 2 grad students. The mean age of the sample was 19.

Power Analysis

The work of Hittner et al. (2003) suggests that to compare dependent correlations for this study the minimum number of participants needed would be 100. This is based on a correlation between self-warmth and self-kindness of .55 (Brenner et al., 2018). The calculation also uses Brophy et al.’s (2020) examination of self-warmth/self-coldness and attachment which produced an average effect size of .3. Because attachment relates closely to parenting, this may be the best

predictor of effect size in the current study. Taking these figures into consideration, Hittner et al. suggest that 100 participants can be expected to reach an alpha of .05 when using Williams' standard t (Williams, 1959) to compare correlations. The power estimate for 100 participants at .3 correlation and .3 effect size is .95. Thus, the sample size of 238 should have provided more than sufficient statistical power.

Measures

Self-Compassion Scale

The Self-Compassion Scale (SCS; Neff, 2003) is a 26-item measure that is used to assess levels of self-compassion in individuals. Each facet of self-compassion—self-kindness, self-judgment, common humanity, isolation, mindfulness, and overidentification—is measured using approximately one-sixth of the questions.

For each item, individuals rate how often they participate in the behavior, on a scale from 1 (*Almost never*) to 5 (*Almost always*). To obtain a total self-compassion score, the ratings are then tallied, using reverse-scoring for negative items. The facets may also be tallied using a scoring key. To obtain the self-warmth score, the subscales for self-kindness, common humanity, and mindfulness are totaled. Similarly, to obtain the self-coldness score, the subscales for self-judgment, isolation, and overidentification are totaled.

Brenner and colleagues did not report alpha levels for the SCS as it measures self-warmth and -coldness. It has, however, been shown to be a valid measure of self-compassion (see Table 3). The current data shows a high reliability for both self-warmth ($\alpha = .91$) and self-coldness ($\alpha = .92$).

Parents as Social Context Questionnaire (Adolescent Report)

The Parents as Social Context Questionnaire (Adolescent Report) (Skinner et al., 2005) is a 24-item instrument used to measure current parenting behaviors across six dimensions.

The dimensions include warmth, rejection, structure, chaos, autonomy support, and coercion. *Warmth* entails feelings of love and affection as well as generally enjoying the child and being emotionally available. *Rejection*, on the other hand, involves a dislike of the child, irritability towards them, and harshness. *Structure* includes giving firm limits to the child as well as clear pathways to success and being consistent. *Chaos* involves being unpredictable and undependable. *Autonomy Support* entails encouraging the child to be themselves and allowing them space to act on their own. Finally, *Coercion* involves demanding strict obedience and being generally overcontrolling.

Each dimension is measured using 4 questions. Although the dimensions are in opposing pairs, factor analysis suggests that they should be considered unipolar factors, rather than bipolar. Correlations for the dimensions ranged from $|.07|$ to $|.64|$. Correlations for the opposing pairs range from $-.15$ (autonomy support / coercion) to $-.53$ (warmth / rejection).

Items ask individuals to rate present-tense statements from 1 (*not at all true*) to 4 (*very true*). Each section of 8 questions is then totaled to give a score for the corresponding dimension. The measure is not used to produce a meaningful total score.

Skinner et al. (2005) reported acceptable internal reliability with α 's ranging from .78 to .88. The current study finds somewhat higher figures: parental warmth ($\alpha = .87$), rejection ($\alpha = .88$), structure ($\alpha = .86$), chaos ($\alpha = .83$), autonomy support ($\alpha = .84$), and coercion ($\alpha = .85$). Skinner et al. suggested that validity is indicated by the fact that positive parenting features correlated positively with desirable academic outcomes and negatively with substance use and

problem behaviors. The reverse was also true, with negative parenting features correlating positively with substance use and problem behaviors and negatively with desirable academic outcomes.

Single-Item Self-Esteem Scale

The Single-Item Self-Esteem Scale (SISE; Robins et al., 2001) measures self-esteem using a single self-report item. Individuals rate the item from 1 (*not very true of me*) to 5 (*very true of me*). The mean reliability estimate for this measure was .75 which was used as a proxy for internal consistency reliability. The mean across-time reliability was $r = .69$. The convergent correlations between the SISE and the Rosenberg Self-Esteem Scale (RSE) were between .89 and .94 with a median correlation of .93.

Ten-Item Personality Inventory

The Ten-Item Personality Inventory (TIPI; Gosling et al., 2005) measures the Big Five personality traits: extraversion, agreeableness, conscientiousness, emotional stability, and openness to experience. Each trait is measured using 2 items, with 1 of the 2 being reverse-scored. Each item is a pair of characteristics and individuals rate whether they see themselves in these qualities from 1 (*Disagree strongly*) through the neutral midpoint, 4 (*Neither agree nor disagree*), on to 7 (*Agree strongly*).

Convergent correlations between the TIPI and the Big-Five Inventory (BFI) ranged from $r = .65$ for openness to experience to $r = .87$ for extraversion with a mean of $r = .77$. Several other measures were compared for divergent validity with no discriminant correlations found to be above .36. Test-retest correlations had a mean of $r = .72$. The current study found reliability to be rather low, with alphas of .74 for extraversion, .18 for agreeableness, .52 for conscientiousness, .64 for stability, and .38 for openness to experience.

Procedure

Participants were solicited through the Department of Psychology research participant pool. They were largely incentivized for participating with extra credit for psychology courses. They were given informed consent and then completed a survey online through Qualtrics. This survey collected demographic information and measured self-compassion and current parenting characteristics of their parents as well as self-esteem and personality characteristics. There was an attention check included that simply asked participants to “Please answer ‘Fairly Often’ to this statement.” Nine participants failed this attention check and were removed from the study. After completing the study, participants were linked to a debriefing page that explained the purpose of the study.

CHAPTER III: RESULTS

First, means and standard deviations were found for all dimensions measured (see Table 4). It may be noted that participants scored higher on self-coldness than on self-warmth and that scores for positive parenting characteristics (i.e., parental warmth, structure, and autonomy) were higher than those for negative characteristics (i.e., rejection, chaos, and coercion).

Table 4

Means and Standard Deviations for Dimensions of Self-Compassion, Parenting, Personality, and Self-Esteem

		<i>M</i>	<i>SD</i>
Self-Compassion	Self-Warmth	2.90	0.76
(Range of 1-5)			
	Self-Coldness	3.32	0.87
Parenting	Parental Warmth	3.65	0.50
(Range of 1-4)			
	Rejection	1.54	0.71
	Structure	3.20	0.71
	Chaos	1.90	0.78
	Autonomy	3.49	0.59
	Coercion	1.95	0.75
Personality	Extraversion	4.23	1.55
(Range of 1-7)			
	Agreeableness	4.88	0.94
	Conscientiousness	5.56	1.12

Table Continues

Table Continued

	Stability	3.67	1.32
	Openness	5.30	1.09
Self-Esteem	Self-Esteem	3.18	1.07

(Range of 1-5)

Correlations Between Self-Warmth/Self-Coldness and Parenting

The first aspect of each hypothesis related to correlations between parenting characteristics and self-warmth and -coldness. Hypotheses 1, 3, and 5 suggest that the positive parenting characteristics (i.e., parental warmth, structure, and autonomy support) would be positively correlated with self-warmth and negatively correlated with self-coldness. Hypotheses 2, 4, and 6 suggest that negative parenting characteristics (i.e., parental rejection, chaos, and coercion) would be positively correlated with self-coldness and negatively correlated with self-warmth. To determine whether these hypotheses were supported, correlations were calculated between each of the parenting dimensions and self-warmth as well as self-coldness (see Table 5). It was found that the positive parenting characteristics were positively correlated with self-warmth and negatively correlated with self-coldness whereas the negative parenting characteristics were all positively correlated with self-coldness and negatively correlated with self-warmth. All of these correlations were strong and significant ($p < .001$). This aspect of hypotheses 1 through 6 was therefore fully supported. Additionally, the correlation between self-warmth and -coldness was found to be $-.47$.

Table 5

Correlations between Self-Warmth, Self-Coldness and Parenting Characteristics and Differences in Correlation between Self-Warmth and Self-Coldness

	Self-Warmth	Self-Coldness	<i>t</i>
Self-Warmth	-	-.47**	-
Self-Coldness	-.47**	-	-
Parental Warmth	.34**	-.30**	0.56
Rejection	-.25**	.39**	2.32*
Structure	.38**	-.31**	1.07
Chaos	-.27**	.44**	2.82**
Autonomy Support	.35**	-.31**	0.10
Coercion	-.23**	.39**	2.59*

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

The second aspect of each hypothesis dealt with the comparison of the correlations with self-warmth and -coldness for each parenting dimension. Hypotheses 1, 3, and 5 suggested that the correlations of the positive parenting characteristics would be stronger for self-warmth than they would be for self-coldness. Hypotheses 2, 4, and 6 suggested that the correlations of the negative characteristics would be stronger for self-coldness than they would be for self-warmth. For each parenting dimension, therefore, the correlation with self-warmth was compared to the

correlation with self-coldness using Williams' standard t equation (see Table 5; Williams, 1959). For this test, absolute values of the correlations were used. This equation is similar to a t -test but rather than examining the difference between the means of two groups, it examines the difference between correlations. If t were found to be significant, it would indicate that the correlations were significantly different from each other. In this way, it was possible to see whether positive constructs were more highly correlated with self-warmth than with self-coldness and whether negative constructs were more highly correlated with self-coldness than with self-warmth, as was hypothesized.

The correlations for self-warmth and -coldness were significantly different for rejection, chaos, and coercion but not for parental warmth, structure, or autonomy support. Therefore, Hypotheses 1, 3, and 5 were rejected, whereas Hypotheses 2, 4, and 6 were supported. It is worth noting that all of the dimensions that had significantly different correlations are negative in nature. In other words, the correlations for self-coldness were significantly stronger than were those for self-warmth when looking at rejection, chaos, and coercion, as had been hypothesized. I did not, however see stronger correlations for self-warmth than for self-coldness when it came to parental warmth, structure, and autonomy support. This second outcome was counter to the hypotheses.

Exploratory Analysis

An exploratory analysis was then performed to determine whether the variance in self-warmth and -coldness could be attributed to self-esteem or personality. This would determine whether I was simply measuring these constructs when I thought I was measuring self-warmth and -coldness. First, correlations were computed between self-warmth and -coldness and each of the constructs (see Table 6). All correlations were found to be significant. It is notable that

self-esteem has a very high correlation with self-warmth and –coldness and that it appears that the correlation is equally strong each of these dimensions. The correlations between self-warmth and –coldness and emotional stability also stand out. Curiously, the correlation between emotional stability and self-coldness appears to be much higher than that of self-warmth.

Table 6

Correlations between Self-Warmth, Self-Coldness, Self-Esteem, and Personality Factors

	Self-Warmth	Self-Coldness
Self-Esteem	.48**	-.48**
Extraversion	.22 **	-.23**
Agreeableness	.21 **	-.23**
Emotional Stability	.47**	-.64**
Openness	.20**	-.20**
Conscientiousness	.33**	-.27**

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

For the exploratory analysis, a hierarchical regression was performed for both self-warmth and -coldness (see Tables 7 and 8). For each, self-esteem and the five personality characteristics were entered in the first step, and parenting characteristics were entered in the second. It was found that 33% percent of the variance in self-warmth was explained by self-esteem and personality characteristics, $F(6, 230) = 19.27, p < .001$. Parenting characteristics,

however, accounted for a significant increase in variance above and beyond self-esteem and personality, $\Delta R^2 = .06$, $F(6, 224)$, $p = .003$. When combined, self-esteem, personality, and parenting characteristics predicted 39% of the variance in self-warmth, $R^2 = .39$, $F(12, 224) = 11.92$, $p < .001$. It is also notable that self-esteem, conscientiousness, and emotional stability were all significant predictors of self-warmth and that this significance persisted even after parenting characteristics were added to the model. Structure also significantly predicted self-warmth. It is notable that structure was a significant predictor of self-warmth, even after accounting for self-esteem and personality, yet other parenting characteristics were not.

Table 7

Hierarchical Regression Analysis Predicting Self-Warmth from Self-Esteem and Personality Characteristics

Predictor	<i>B</i>	<i>SE B</i>	β	R^2	ΔR^2
Step 1				.34	.34
Self-Esteem	.19	.05	.26**		
Extraversion	.03	.03	.05		
Agreeableness	.05	.05	.07		
Conscientiousness	.09	.04	.14*		
Stability	.15	.04	.26**		
Openness	.06	.04	.09		
Step 2				.39	.06
Self-Esteem	.14	.05	.20*		
Extraversion	.03	.03	.06		
Agreeableness	.03	.05	.04		
Conscientiousness	.09	.04	.13*		
Stability	.16	.04	.28**		
Openness	.06	.04	.08		
Parental Warmth	.16	.15	.10		
Rejection	.10	.12	.09		
Structure	.22	.09	.21*		
Chaos	.02	.10	.02		
Autonomy	.08	.15	.06		
Coercion	.10	.10	.09		

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

Table 8

Hierarchical Regression Analysis Predicting Self-Coldness from Self-Esteem and Personality Characteristics

Predictor	<i>B</i>	<i>SE B</i>	β	R^2	ΔR^2
Step 1				.46	.46
Self-Esteem	-.14	.05	-.17*		
Extraversion	-.04	.03	-.07		
Agreeableness	-.03	.05	-.03		
Conscientiousness	-.01	.04	-.02		
Stability	-.34	.04	-.52**		
Openness	-.07	.04	-.09		
Step 2				.53	.07
Self-Esteem	-.09	.05	-.11		
Extraversion	-.03	.03	-.06		
Agreeableness	-.01	.05	-.01		
Conscientiousness	.02	.04	.02		
Stability	-.33	.04	-.49**		
Openness	-.11	.04	-.14*		
Parental Warmth	.04	.15	.01		
Rejection	.17	.12	.13		

Table Continues

Table Continued

Structure	.01	.09	.01
Chaos	.32	.10	.29*
Autonomy	.17	.15	.12
Coercion	-.03	.10	-.02

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

Similarly, 46% of the variance in self-coldness was explained by self-esteem and personality characteristics, $F(6, 230) = 32.21, p < .001$, with parenting still significantly predicting self-coldness above and beyond these, $\Delta R^2 = .07, F(6, 224) = 5.84, p < .001$. When combined, self-esteem, personality, and parenting characteristics predicted 53% of the variance in self-coldness, $F(12, 224) = 21.06, p < .001$. Again, self-esteem and emotional stability were shown to be significant predictors. Whereas conscientiousness significantly predicted self-warmth, it did not for self-coldness. It is notable that openness was not a significant predictor in the first step but emerged as one in the second step. It is also notable that chaos was also a significant predictor of self-coldness, even after accounting for self-esteem and personality, while other parenting characteristics were not significant predictors. This follows the same pattern that was seen with parental warmth and structure. As chaos and structure are opposites, it makes sense that these results would mirror each other.

CHAPTER IV: DISCUSSION

The purpose of this study was to explore the connection between parenting characteristics and self-compassion. In this way, we can begin to think about how parents can cultivate (or crush) self-compassion. We can also better understand how those with poor self-compassion have arrived where they are. In addition, these findings may give hints as to how we might best help individuals to develop self-compassion later in life through the same means that would have originally fostered it in childhood. A further purpose of this study was to explore how self-warmth and -coldness develop and whether self-warmth was more sensitive to positive factors and self-coldness more sensitive to negative.

It was found that self-warmth and -coldness were, in fact, linked to parenting characteristics. Higher parental warmth, structure, and autonomy support were all associated with increased self-warmth and decreased self-coldness. On the flip side, higher parental rejection, chaos, and coercion were associated with increased self-coldness and decreased self-warmth. It was further found that the correlations between negative parenting characteristics and self-coldness were greater (in absolute value) than were the correlations between these parenting characteristics and self-warmth. It was not found, however, that correlations between positive parenting characteristics and self-warmth were greater than were the correlations between these characteristics and self-coldness.

Parenting Characteristics, Self-Warmth, and Self-Coldness

The hypotheses, taken as a whole, predicted that parenting characteristics would be related to self-warmth and -coldness, which was borne out. Self-warmth and -coldness were each significantly correlated with each of the six characteristics measured. These results may relate back to IPARTheory, which suggests that children will come to see themselves in the same way

that they feel their parents saw them (Rohner & Lansford, 2017). When parents' behaviors indicate to a child that they see them as loveable and capable and worthy of care, the child may come to see themselves in the same light and may therefore be better able to offer themselves self-compassion. If, on the other hand, parents' behaviors indicate that a child is not loveable or capable or worthy of care, then the child might come to believe the same of themselves, and it may be difficult to offer themselves self-kindness or believe that they deserve self-compassion. It may also be, more directly, that the parenting characteristics suggest to the child that the parent sees them as worthy of compassion or not, leading to the child believing that they are worthy of compassion or not. This may occur if characteristics such as parental warmth and autonomy support contain some elements of compassion such as kindness and understanding and if rejection and coercion entail a failure to offer compassion.

These results could also be related to the soothing and threat systems (Boykin et al., 2018; Brophy et al., 2020). Based on parenting characteristics, a child could develop a strong soothing system or a strong threat system, which could then impact their ability to offer self-compassion. Boykin et al. (2018) suggest that when children are soothed by their parents, they will then have positive emotional memories of comforting that they can draw on when they are in need of self-soothing. Parental warmth, in particular, may contribute to these memories. If, on the other hand, parents maltreat their children, these interactions can be felt as threat, which would then be activated in times of distress (Boykin et al., 2018) It is possible that the soothing system is especially tied to self-kindness versus self-criticism and that the threat system could be particularly tied to mindfulness versus overidentification.

Parental Warmth and Rejection

Hypotheses 1 and 2, in part, predicted that parental warmth would be positively correlated with self-warmth and negatively correlated with self-coldness and that parental rejection would be positively correlated with self-coldness and negatively correlated with self-warmth, which was all found to be the case. These results were supported by numerous studies and are the most widely researched parenting characteristics of those measured (Kelly & Dupasquier, 2015; Marta-Simões et al., 2018; Naismith et al., 2019; Pepping et al., 2015; Temel & Atalay, 2018). They are the main focus of IPARTheory, which suggests that they influence children's perceptions of how their parents see them and thus impact how children see themselves.

Another possibility is that warmth and rejection impact a person's feelings of connectedness. One study (Kelly & Dupasquier, 2015) showed that the relationship between parental warmth and self-compassion was mediated by feelings of social safeness. It could be the case that the connection that individuals feel with their parents sets the scene for how connected they feel to others. Parental warmth may lead them to form relationships, leading them to reach out to others and therefore develop stronger connections. The reverse may also be the case – that the more an individual feels rejection from their parents, the more they expect it from others, leading them to withdraw and tend more towards isolation. In addition, feelings of social safeness may impact how capable a person is of receiving compassion from others, which may in turn affect their ability to offer self-compassion (Kelly & Dupasquier, 2015). It could also be that being rejected by parents leads to an underdeveloped soothing system, which would make it harder to feel safely connected to others.

Another study (Pepping et al., 2015) found that the connection between parental warmth and self-compassion was mediated by attachment anxiety. They further found that increasing state attachment security leads to increases in state self-compassion, suggesting a possible causal relationship. It could be that attachment anxiety, like social safeness, relates to the ability to connect with others, thus aiding or hindering the ability to connect to a common humanity. It could also be that being securely attached fosters feelings of being worthy of kindness, which would then lead to greater self-kindness. On the other hand, if parents are rejecting, it may lead to anxious attachment and the attendant feelings of unworthiness that might lead one to increased self-criticism.

There are other possibilities for the connection between parental warmth and rejection and self-compassion. Many scholars suggest that having a parent who is warm will lead to an internalized kind voice, whereas having a rejecting parent will lead to an internalized critical voice (Boykin et al., 2018; Neff & McGehee, 2010; Pepping et al., 2015). This kind or critical voice then makes self-compassion either more or less achievable (Pepping et al., 2015). This theory ties into the idea that people will behave towards themselves as parents have behaved towards them (Bowlby, 1988). It may be the case that parents are modeling a certain type of behavior that children then continue forward themselves (Neff & McGehee, 2010). In addition, it is possible that oxytocin is, at least in part, responsible for the connection between warm family environments and self-compassion (Neff & McGehee, 2010). Children who have warm relationships with their parents may have a rich supply of oxytocin, which would then aid in self-compassion by making it easier to express kindness and connection.

Parental Structure and Chaos

Hypotheses 3 and 4, in part, predicted that parental structure would be positively associated with self-warmth and negatively associated with self-coldness and that parental chaos, on the flip side, would be positively associated with self-coldness and negatively associated with self-warmth. These predictions were all borne out. These results are supported by one study (Neff & McGhee, 2010) that found a connection between stressful home environments and self-compassion. There is, however, considerably less research in this area than can be found on parental warmth and kindness. Structure, as measured through the PASQ, entails giving firm limits, offering clear pathways to success, and being consistent (Skinner et al., 2005). Chaos, on the other hand, entails being unpredictable and undependable. One could look again to IPARTheory to understand the connection between these qualities and self-compassion. It could be that when parents offer structure, children interpret this as their parents believing that they are worthy of care. When they are unpredictable and undependable, children may believe that their parents see them as being unworthy of care. Children would then come to see themselves as unworthy of care and would have a more difficult time offering themselves self-kindness.

Another possibility is that structure and chaos impact self-compassion by way of emotion regulation. Parental structure versus chaos could impact children's ability to regulate emotions. Stressful environments in childhood lead to changes in the brain that impact executive functioning and emotion regulation (Blair, 2010). In one study (Dragan et al., 2021), the relationship between early caregiving and self-compassion was found to be largely mediated by emotion regulation. It may be the case that chaotic environments lead to reduced emotion regulation which then leads to greater self-coldness. In the same way, parental structure may lead to increased emotion regulation which then leads to increased self-warmth. Dragan et al.'s study

measured, in particular, trust, communication, alienation, expressive encouragement, and care as elements of early caregiving. It is easy to see how trust, communication, and expressive encouragement might map on to autonomy support versus coercion and how alienation and care might map on to parental warmth versus rejection.

Autonomy Support and Coercion

Hypotheses 5 and 6 predicted, in part, that autonomy support would be positively correlated with self-warmth and negatively correlated with self-coldness and that coercion would be positively correlated with self-coldness and negatively correlated with self-warmth. These predictions were all found to be the case. These results are supported by one study (Pepping et al., 2015) that found that overprotection is correlated with decreased self-compassion. The authors suggest that this may be because these children have more limited opportunities to practice self-compassion, perhaps because of reduced hardships. If children are not allowed to fail, then they would, of course, have much less practice at failure.

It is again possible to look at these results through the lens of IPARTheory as well. Autonomy support, according to the PASQ, involves encouraging children to be themselves (Skinner et al., 2005). It may be that this sends the message to children that they are accepted by their parents which could translate to their appraisal of themselves as being worthy of acceptance. It also involves allowing them space to act on their own (Skinner, et al., 2005). This may send children the message that they are capable. In moments when they have made mistakes or face hardships, they may then believe that they are up to challenge, which would diminish overidentification and allow for more positive messages of self-kindness. Coercion, on the other hand, involves demanding strict obedience and being generally overcontrolling (Skinner, et al., 2005). Children whose parents act in this way may believe that it is because their parents see

them as incapable and they may come to see themselves in that light, having a negative impact on self-compassion.

There are other possible explanations, as well. The first would be modeling: when children's parents treat them with support, they are more likely to treat themselves with support as well (Bowlby, 1988). If, on the other hand, parents carry strict expectations and reject any behavior that falls short of the bars they set, children may come to relate to themselves in the same way. Another possibility would be that autonomy support and coercion impact self-compassion through emotion regulation (Dragan et al., 2021). When children's failures are met with support, they may find it easier to fail without becoming overly emotional. If their failures are met with anger or disappointment, however, they may develop a tendency to become quite upset in the face of hardships or setbacks. It may also be that self-criticism, as suggested by John Bowlby (1980), arises in situations in which it is not safe to direct anger towards a parent, leading the child to turn this anger inward. It not only stands to reason that more anger might arise towards a strict and exacting parent than towards a supportive parent, but that this anger would also feel more difficult to express. These circumstances would then lead to greater amounts of self-criticism, contributing to greater self-coldness.

Differences in Correlations

Hypotheses 1 through 6 also predicted, in part, that positive parenting characteristics would have higher correlations with self-warmth than with self-coldness and that negative characteristics would have higher correlations with self-coldness than with self-warmth (in absolute values). Curiously, these results were divided. When it came to positive parenting characteristics, no significant differences were found, but when it came to negative parenting, correlations were found to be significantly different from each other. The fact that there was no

significant difference for positive constructs contradict the findings of at least one study, which found that there was greater correlation between self-warmth and psychological flourishing as well as positive affect than between these and self-coldness (Brenner et al., 2018). There was, however, far more evidence that there would be a significant difference when it came to negative constructs (Brenner et al., 2018; Brophy, 2020; Lahtinen et al., 2020; Muris & Petrocchi, 2016).

It has been suggested that the differences in these correlations could be related to the theory of social mentalities (Gilbert, 2005). This theory suggests that individuals have two different process systems: the safeness system and the threat-defense system. When there are low levels of threat in the environment, people engage the safeness system. When threats increase, they are more likely to engage the threat-defense system. So why would there be a difference in correlations for negative constructs but not positive? It is possible that the threat-defense system is simply more sensitive to influences such as parenting characteristics than the safeness system. After all, it is — at least in evolutionary terms — much more important to survive than to thrive. Self-criticism, in some ways, can feel like safety. It allows people to feel a sense of control (Gilbert & Woodyatt, 2017; Neff, 2011). Self-blame and its resultant forgiveness seeking can also help to fend off anger and rejection, which can both be threats to survival (Gilbert & Woodyatt, 2017).

Another possibility comes, again, from the relationship between self-regulation and self-compassion. Dragan et al. (2021) found that the relationship between early caregiving and self-compassion was highly mediated by emotion regulation, which accounted for 84% of the indirect effect, versus shame, which only accounted for 16%. It may be that this relationship gives a clue as to why there was a greater difference in correlations for negative parenting characteristics than for positive characteristics. Whereas a person who develops strong emotion regulation through

positive parenting can either develop self-compassion or not, low emotion regulation through negative parenting all but precludes the development of self-compassion. In other words, positive parenting opens the door for developing self-compassion, and one might develop it or might not; negative parenting means one more definitively will not develop self-compassion. It does this by making mindfulness particularly difficult to achieve and over-identification all too easy. As detailed by Bernard and Curry (2011), the connections between the facets makes it likely that reduced mindfulness would also contribute to reduced self-kindness and common humanity. Correlations for negative characteristics would then have greater stratification than those for positive characteristics.

Exploratory Analysis

While some of the variance in self-warmth and –coldness was accounted for by self-esteem and personality, parenting characteristics nevertheless accounted for a significant increase above and beyond this amount. This indicates that self-compassion is a fundamentally different construct from these and that parenting affects these constructs differently.

Self-Esteem

It makes sense that self-esteem and self-warmth and -coldness would share some variance but not all as self-esteem overlaps with self-compassion but also has unique qualities (Neff, 2003). Like self-compassion, self-esteem involves positive feelings toward the self. It is likely that children gain at least some of these positive feelings from the same source. If one looks to IPARTheory (Rohner & Lansford, 2017), it could be that children believe that parents see them as worthwhile and take on this estimation themselves. They would then find it easier to have high self-esteem and to offer themselves self-kindness. If one looks to modeling, it could be that parents treat their children as loveable, capable, and so forth, and that children then treat

themselves in the same way, leading to increased self-esteem and self-kindness. It could also be the case that the same forces that shape an individual's critical inner voice impact both self-esteem and self-kindness.

Self-esteem and self-compassion, however, are still different constructs, which accounts for the fact that parenting skills predicted self-compassion uniquely, above and beyond self-esteem. Coopersmith (1967) offered the classic definition of self-esteem as being an estimation of the self that "indicates the extent to which an individual believes himself [sic] to be capable, significant, successful, and worthy." (pp. 4-5). Neff (2003) suggests that a person reaches these estimations through evaluations of the self and that comparison to others is inherent in these evaluations. For example, for one to have high self-esteem in regards to their intelligence, they generally must view themselves as being at least as intelligent as the average person, if not more intelligent. One difference, then, is that self-esteem requires the individual to view themselves as being above-average in some way where self-compassion does not (Neff, 2003). So, where self-compassion requires a feeling of connection to common humanity, self-esteem requires the opposite: a feeling that one rises above others in one way or another. Additionally, while there is much overlap between self-esteem and self-compassion, it is easy enough to imagine a person having very little kindness toward themselves but nevertheless viewing themselves as better than others. An example of this might be one who feels that failure is not acceptable. In this case, they would have high self-esteem while maintaining low self-compassion. When looking to IPARTheory, it is easy to see that a parent could pass on to their child the belief, "I am worthwhile when....," for example, "I am worthwhile when I'm good at school." This would be very different from passing on the belief, "I am worthwhile." It is a very different thing for a parent to communicate to a child they are worthwhile regardless of what is going on than that

they are worthwhile only when they have earned it. Another difference is that self-esteem does not share a need for mindfulness.

Personality

Results indicated that parenting characteristics uniquely predicted self-warmth and –coldness above and beyond personality. This research is supported by a previous study that suggested that self-compassion and personality are unique traits. Neff et al. (2007) showed that self-compassion predicted positive functioning over and above the five factors of personality. As in Neff's (2007) study, our results showed that neuroticism (the reverse of stability) was a significant predictor of self-warmth and –coldness after the second step, meaning that it contributed more to the variance than did other traits. The causal direction of this relationship (if it is causal) is unclear. It could be that neuroticism makes it difficult to practice self-compassion by interfering with mindfulness or because of attendant feelings of worthlessness that get in the way of self-kindness. It could be that self-coldness - perhaps self-criticism in particular - contributes to neuroticism by engendering negative feelings towards the self. Or it could be that they share other factors, such as isolation versus connection. Conscientiousness also remained significant after adding parenting to the model, although only in the case of self-warmth. This connection is curious as a previous study (Di Fabio & Saklofske, 2021) found that all five personality traits were significantly correlated with self-compassion *except* for conscientiousness.

The correlations between stability and self-warmth and –coldness was also notable. It appears to be much higher than that for the other characteristics. This may be because self-compassion contributes to emotional stability, because emotional stability contributes to self-compassion – perhaps by-way-of emotion regulation – or because they both arise from a third

factor. Additionally, the correlation with self-coldness appears to be higher than that with self-warmth. This could be because emotional stability is more sensitive to negative inputs than positive, because neuroticism is just better fuel for self-coldness than stability is for self-warmth, or it could be that a shared third factor (e.g. emotional regulation) leads to the development of both self-compassion and stability but impacts self-coldness more than self-warmth.

Structure and Chaos

Structure and chaos stood out as significant predictor variables in the regression model – structure in the case of self-warmth and chaos in the case of self-coldness. This would mean that these variables contribute more to the variance in self-warmth and -coldness than do the other parenting characteristics. This runs counter to intuition as parental warmth and rejection seem to map more closely to self-compassion. It could be that emotion regulation plays a larger role in the connection between parenting characteristics and self-compassion and that it is especially impacted by an ordered versus chaotic environment. These results may also indicate that there is a relatively smaller overlap between chaos/structure and self-esteem and personality than there is for other parenting characteristics. It could be that different children will elicit different responses from parents based on their own characteristics (Ge et al., 1996) – in this case, self-esteem and personality. This phenomenon would likely have more impact on parental warmth, rejection, autonomy, and coercion than on chaos and structure as the former involve interactions with the child whereas the latter are more circumstances of the environment.

Limitations

This study has several limitations. The first is its dependence on self-report to measure parental characteristics. A person's current level of self-compassion could impact how they think of their parents, in which case there could be a mismatch between parents' actual and perceived

characteristics. This could be the case if a person who is more critical of themselves would find more to disapprove of in the job their parents did. It could also be that people who are self-critical look for someone else to blame for their shortcomings, with parents being an obvious choice. In addition, it could be the case that an outcome of poor self-compassion, such as depression, would cause a person to respond more negatively in general. Additionally, while the PASQ asks for parent's current behavior, it is possible that memory is still at play in participants' responses as they are likely to consider their parent's past actions as they rate their current behaviors.

As the study was cross-sectional – as opposed to longitudinal – and had no experimental manipulation, it was unable to establish a causal effect. While it is easy to assume that parental characteristics cause self-compassion, this is not a certainty. As stated previously, children's behaviors can elicit parents' behaviors. It could be, for example, that a child who is more self-critical would elicit less autonomy support from a parent who may believe their child's statements of inadequacy. It could be that a child who is low in mindfulness and easily swept away by their emotions elicits a more chaotic environment. It could also be that outcomes of low self-compassion in a child elicit differing levels of parental characteristics. A child, for example, who has low self-compassion and thereby develops depression may draw out much less parental warmth. A child who develops anxiety may draw out much more parental rejection.

The measures used for the exploratory analysis are an additional limitation. The Single-Item Self-Esteem Scale (SISE; Robins et al., 2001) is only a single self-report item. Its cross-time reliability was shown to be only $r = .69$, which is somewhat questionable (Robins et al., 2001). The Ten-Item Personality Inventory (TIPI; Gosling et al., 2005) measures each of the Big five personality traits using only 2 items. Its reliability was poor, with alphas found in the current

study as low as .18. It is difficult to trust results based on these measures if they are not approximating true levels of self-esteem and personality traits.

Another limitation is that because of the demographics of participants, it is difficult to generalize these results. The study was completed by overwhelmingly white, women, and non-Latina/o/x or Hispanic participants. They were also all college students and – because the participants were solicited through the Department of Psychology – likely disproportionately psychology students. Participants were also largely from western cultures, which may have had a great impact on their relationship to self-compassion. It is possible, in fact, that self-compassion is a phenomenon that is unique to western societies. In American culture, there is an emphasis on independence, the self as unique to the individual, and qualities that make a person different from others (Markus & Kitayama, 1991). In some Asian cultures, there is a greater focus on the interdependence, taking others into consideration, and fitting in (Markus & Kitayama, 1991). According to Markus and Kitayama (1991), westerners tend to view the self as “an independent, self-contained, autonomous entity” (p. 224). It makes sense, then, that Americans could conceptualize self-compassion as being offered by the individual to the individual self. In many non-western cultures, the self is viewed as being fundamentally interdependent, with the individual being inseparable from those around them (Markus & Kitayama, 1991). In this context, it would not make sense to encourage the individual to connect to common humanity, since the self is already fundamentally connected.

Ideas for Future Research

One area that is lacking are studies that could more clearly demonstrate causality. This would be very difficult to accomplish, however. Longitudinal studies generally are better sources of causality. A longitudinal study would be difficult since they would require some kind of

change in parenting to be followed by change in self-compassion but parenting characteristics may be more constant over time. Another option would be to do an experimental manipulation, such as educating half of the parents in the study about parenting skills and then seeing if their children's self-compassion improves. This may again be a challenge, though, if self-compassion develops slowly, since the change may not be detectable for months or years.

Another area that would be interesting would be to experimentally induce state self-compassion before asking participants to complete self-reports on parenting characteristics to explore how higher levels of self-compassion impact individuals' estimation of their parents. It is easy to assume that self-reported parenting characteristics lead to self-compassion and not the other way around. This exploration would shed some light on the issue of causality, although it would, of course, not be conclusive.

Future research could also continue to explore the differences in correlations between self-warmth and self-coldness. The fact that there was only a significant difference when it came to negative constructs is a novel result and deserves further exploration. It would be interesting to see whether this phenomenon holds true for other constructs and with larger numbers of participants.

It would be interesting, as well, to see whether self-regulation mediates the relationship between each of these parenting characteristics and self-warmth and –coldness. In this way, researchers could possibly enhance our understanding of why structure and chaos stand out in the regression analysis.

Finally, it would be valuable to continue these studies with different populations. It would be important to see how self-compassion develops among men and other genders, among different racial populations, and outside of college students. Results in divergent groups may be

surprisingly different. It would be especially interesting to see what could be learned from non-western cultures in which the self is viewed as interdependent and self-compassion may be very different, perhaps to the point where it would not exist in the sense it is spoken of here.

Conclusions

This study has implications for future research and theory. First, it suggests that self-warmth and self-coldness are indeed separate factors, rather than simply being two poles of self-compassion. The fact that there were significant differences between the correlations for self-warmth and –coldness lend more evidence to this argument. It also suggests that self-warmth and –coldness develop differently since the same parenting characteristics are associated with significantly different levels of self-warmth and self-coldness. The fact that negative constructs produced greater differences in correlations could also be seen as support for the Gilbert's (2005) theory of social mentalities that suggests that people use two different processing systems: the threat-defense system and the safeness system.

This study may also lend itself to better therapeutic practice. First, it would underscore the importance of helping individuals become better parents, with their children's higher levels self-compassion being yet another positive outcome. Additionally, therapists could use these results to inform their practice. They may be better aware of what individuals with high self-coldness were lacking in their childhood and could help them process through these difficulties and interrogate beliefs that may have developed based on their parents' rejection, chaos, and coercion. They may also be able to stand in as a proxy for individual's parents and offer them the kind of interactions that foster self-warmth.

REFERENCES

- Ahmed, N. & Bhutto, Z. H. (2016). Relationship between parenting styles and self compassion in young adults. *Pakistan Journal of Psychological Research*, 31(2), 441-451.
- Amani, R. & Khosroshahi, A. S. (2021) The structural model of marital quality based on secure attachment style through the mediating role of self-compassion, resilience, and perspective-taking. *The American Journal of Family Therapy*, 49(1), 16-36.
<https://doi.org/10.1080/01926187.2020.1813653>
- Barnard, L. K. & Curry, J. F. (2011). Self-compassion: Conceptualizations, correlates, & interventions. *Review of General Psychology*, 15(4), 1-15.
<https://doi.org/10.1037/a0025754>
- Berryhill, M. B., Harless, C., & Kean, P. (2018). College student cohesive-flexible family functioning and mental health: Examining gender differences and the mediation effects of positive family communication and self-compassion. *The Family Journal: Counseling and Therapy for Couples and Families*, 26(4), 422-432.
<https://doi.org/10.1177/1066480718807411>
- Blair, C. (2010). Stress and the development of self-regulation in context. *Child Development Perspectives*, 4(3), 181-188.
- Bowlby, J. (1980). *Attachment and Loss*. Basic Books.
- Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. Basic Books.

- Boykin, D. M., Himmerich, S. J., Pinciotti, C. M., Miller, L. M., Miron, L. R., & Orcutt, H. K. (2018). Barriers to self-compassion for female survivors of childhood maltreatment: The roles of fear of self-compassion and psychological inflexibility. *Child Abuse & Neglect*, 76, 216-224. <https://doi.org/10.1016/j.chiabu.2017.11.003>
- Brenner, R. E., Heath, P. J., Vogel, D. L., & Credé, M. (2017). Two is more valid than one: Examining the factor structure of the Self-Compassion Scale (SCS). *Journal of Counseling Psychology*, 64(6), 696-707. <https://doi.org/10.1037/cou0000211>
- Brenner, R. E., Vogle, D. L., Lannin, D.G., Engel, K. E., Seidman, A. J., & Heath, P. J. (2018). Do self-compassion and self-coldness distinctly relate to distress and well-being? A theoretical model of self-relating. *Journal of Psychology*, 65(3), 346-357. <https://doi.org/10.1037/cou0000257>
- Brophy, K., B, Brähler, E., Hinz, A., Schmidt, S., Körner, A. (2020). The role of self-compassion in the relationship between attachment, depression, and quality of life. *Journal of Affective Disorders*, 260, 45-52. <https://doi.org/10.1016/j.jad.2019.08.066>
- Carbonneau, N., Goodman, L. C., Roberts, L. T., Bégin, C., Lussier, Y., & Musher-Eizenman, D. M. (2020). A look at the intergenerational associations between self-compassion, body esteem, and emotional eating within dyads of mothers and their adult daughters. *Body Image* 33, 106 - 114. <https://doi.org/10.1016/j.bodyim.2020.02.007>
- Chio, F. H. N., Mak, W. W. S., Yu, B. C. L. (2021). Meta-analytic review on the differential effects of self-compassion components on well-being and psychological distress: The moderating role of dialecticism on self-compassion. *Clinical Psychology Review*, 85, 1-29. <https://doi.org/10.1016/j.cpr.2021.101986>
- Coopersmith, S. (1967). *The antecedents of self-esteem*. Freeman.

- Dakers, J. & Guse, T. (2020). Can dimensions of parenting style contribute to self-compassion among South African Adolescents? *Journal of Family Studies*, 28(4), 1566-1579.
<https://doi.org/10.1080/13229400.2020.1852951>
- Di Fabio, A., & Saklofske, D. H. (2021). The relationship of compassion and self-compassion with personality and emotional intelligence. *Personality and Individual Differences*, 169.
<https://doi.org/10.1016/j.paid.2020.110109>
- Dragan, N., Kamptner, L., & Riggs, M. (2021). The impact of the early caregiving environment on self-compassion: The mediating effects of emotion regulation and shame. *Mindfulness*, 12, 1708–1718. <https://doi.org/10.1007/s12671-021-01634-4>
- Farnsworth, J. K., Mannon, K. A., Sewell, K. W., Connally, M. L., Murrell, A. R. (2016). Exploration of caregiver behavior on fear of emotion, spirituality, and self-compassion. *Journal of Contextual Behavioral Science*, 5(3), 16-168.
<https://doi.org/10.1016/j.jcbs.2016.07.004>
- Ferrari, M., Hunt, C., Harrysunker, A., Abbott, M. J., Beath, A. P., & Einstein, D. A. (2019). Self-compassion interventions and psychosocial outcomes: A meta-analysis of RCTs. *Mindfulness*, 10, 1455-1473. <https://doi.org/10.1007/s12671-019-01134-6>
- Ge, X., Conger, R. D., Cadoret, R. J., Neiderhiser, J. M., Yages, W. T., Edward, S., & Mark, A. (1996). The developmental interface between nature and nurture: A mutual influence model of child antisocial behavior and parent behaviors. *Developmental Psychology*, 32(4), 574-589.
- Gilbert, P. (2005). *Compassion: Conceptualisations, Research and Use in Psychotherapy*. Routledge.

- Gilbert, P., & Woodyatt, L. (2017). An evolutionary approach to shame-based self-criticism, self-forgiveness and compassion. In L. Woodyatt, E. L. Worthington, Jr., M. Wenzel, & B. J. Griffin (Eds), *Handbook of the psychology of self-forgiveness* (pp. 29-41). Springer.
- Goetz, J. L., Keltner, D., & Simon-Thomas, E. Compassion: An evolutionary analysis and empirical review. *Psychological Bulletin*, *136*(3), 351–374.
<https://doi.org/10.1037/a0018807>
- Gouveia, M. J., Carona, C., Canavarro, M. C., & Moreira, H. (2016). Self-compassion and dispositional mindfulness are associated with parenting styles and parenting stress: The mediating role of mindful parenting. *Mindfulness*, *7*, 700–712. DOI 10.1007/s12671-016-0507-y
- Gosling, S. D., Rentfrow, P. J., & Swann Jr., W. B. A very brief measure of the Big-Five personality domains. *Journal of Research in Personality*, *37*(6), 504-528.
[https://doi.org/10.1016/S0092-6566\(03\)00046-1](https://doi.org/10.1016/S0092-6566(03)00046-1)
- Harris, P. R., Griffin, D. W., Napper, L. E., Bond, R., Schüz, B., Stride, C., & Brearley, I. (2019). Individual differences in self-affirmation: Distinguishing self-affirmation from positive self-regard. *Self and Identity*, *18*(6), 589-630.
<https://doi.org/10.1080/15298868.2018.1504819>
- Hittner, J. B., May, K., & Silver, N. C. (2003) A Monte Carlo evaluation of tests for comparing dependent correlations. *The Journal of General Psychology*, *130*(2), 149-168.
- Kagan, J. (1978). The parental love trap. *Psychology Today*, *12*, 54–61.

- Kelly, A. C., & Dupasquier, J. (2016). Social safeness mediates the relationship between recalled parental warmth and the capacity for self-compassion and receiving compassion. *Personality and Individual Differences, 89*, 157-161.
<https://doi.org/10.1016/j.paid.2015.10.017>
- Lahtinen, O., Järvinen, E., Kumlander, S., & Salmivalli, C. (2020). Does self-compassion protect adolescents who are victimized or suffer from academic difficulties from depression? *European Journal of Developmental Psychology, 17*(3), 432-446.
<https://doi.org/10.1080/17405629.2019.1662290>
- Lathern, C., Bluth, K., & Zvara, Bharath. (2020). Parent self-compassion and supportive responses to child difficult emotion: An intergenerational theoretical model rooted in attachment. *Journal of Family Theory & Review, 12*, 368–381.
<https://doi.org/10.1111/jftr.12388>
- Lindwall, M., Barkoukis, V., Grano, C., Lucidi, F., Raudsepp, L., Liukkonen, Jr., & Thøgersen-Ntoumani, C. (2012). Method effects: The problem with negatively versus positively keyed items. *Journal of Personality Assessment, 94*(2), 196–204.
<https://doi.org/10.1080/00223891.2011.645936>
- MacBeth, A., & Gumley, A. (2012). Exploring compassion: A meta-analysis of the association between self-compassion and psychopathology. *Clinical Psychology Review, 32*(6), 545–552. <https://doi.org/10.1016/j.cpr.2012.06.003>
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98*(2), 224-253.

- Marta-Simões, J., Ferreira, C., & Mendes, A. L. (2018). Self-compassion: An adaptive link between early memories and women's quality of life. *Journal of Health Psychology, 23*(7), 929–938. <https://doi.org/10.1177/1359105316656771>
- Moreira, H., & Canavarro, M. C. (2020). Mindful parenting is associated with adolescents difficulties in emotion regulation through adolescents psychological inflexibility and self-compassion. *Journal of Youth and Adolescence, 49*, 192–211. <https://doi.org/10.1007/s10964-019-01133-9>
- Moreira, H., Carona, C., Silva, N., Nunes, J., & Canavarro, M. C. (2016). Exploring the link between maternal attachment-related anxiety and avoidance and mindful parenting: The mediating role of self-compassion. *Psychology and Psychotherapy: Theory, Research and Practice, 89*, 369-384. <https://doi.org/10.1111/papt.12082>
- Moreira, H. & Canavarro, M. C. (2020). Mindful parenting is associated with adolescents difficulties in emotion regulation through adolescents psychological inflexibility and self-compassion. *Journal of Youth and Adolescence, 49*, 192-211. <https://doi.org/10.1007/s10964-019-01133-9>
- Moreira, H., Gouveia, M., & Canavarro, M.(2018). Is mindful parenting associated with adolescents' well-being in early and middle/late adolescence? The mediating role of adolescents' attachment representations, self-compassion and mindfulness. *Journal of Youth and Adolescence, 47*,1771–1788. <https://doi.org/10.1007/s10964-018-0808-7>
- Muris, P. & Petrocchi, N. (2016). Protection or vulnerability? A meta-analysis of the relations between the positive and negative components of self-compassion and psychopathology. *Clinical Psychology and Psychotherapy, 24*(2), 373-383. <https://doi.org/10.1002/cpp.2005>

- Naismith, I., Guerrero, S. Z., & Feigenbaum, J. (2019). Abuse, invalidation, and lack of early warmth show distinct relationships with self-criticism, self-compassion, and fear of self-compassion in personality disorder. *Clinical Psychology and Psychotherapy*, 26, 350-361. <https://doi.org/10.1002/cpp.2357>
- Neff, K. D. (2003a). Development and validation of a scale to measure self-compassion. *Self and Identity*, 2(3), 223–250. <https://doi.org/10.1080/15298860309027>
- Neff, K. (2003b). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, 2, 85-101. <https://doi.org/10.1080/15298860390129863>
- Neff, K. (2011). *Self-compassion*. William Morrow.
- Neff, K.D. (2016) The Self-Compassion Scale is a valid and theoretically coherent measure of self-compassion. *Mindfulness* 7, 264–274. <https://doi.org/10.1007/s12671-015-0479-3>
- Neff, K. D., Kirkpatrick, K. L., & Rude, S. S. (2007a). Self-compassion and adaptive psychological functioning. *Journal of Research in Personality*, 41, 139-154. <https://doi.org/10.1016/j.jrp.2006.03.004>
- Neff, K. D., Rude, S. S., & Kirkpatrick, K. L. (2007b). An examination of self-compassion in relation to positive psychological functioning and personality traits. *Journal of Research in Personality*, 41, 908-916. <https://doi.org/10.1016/j.jrp.2006.08.002>
- Neff, K. D., & McGehee, P. (2010). Self-compassion and psychological resilience among adolescents and young adults. *Self and Identity*, 9, 225–240. <https://doi.org/10.1080/15298860902979307>
- Pepping, C. A., Davis, P. J., O'Donovan, A., & Pal, J. (2015). Individual differences in self-compassion: The role of attachment and experiences of parenting in childhood. *Self & Identity*, 14(1), 104-117. <https://doi.org/10.1080/15298868.2014.955050>

- Proeve, M., Anton, R., & Kenny, M. Effects of mindfulness-based cognitive therapy on shame, self-compassion and psychological distress in anxious and depressed patients: A pilot study. (2018) *Psychology and Psychotherapy: Theory, Research and Practice*, 91, 434-449. <https://doi.org/10.1111/papt.12170434>
- Potter, R. F., Yar, K., Francis, A. J., & Schuster, S. (2014). Self-compassion mediates the relationship between parental criticism and social anxiety. *International Journal of Psychology and Psychological Therapy*, 14(1), 33-43.
- Raes, F. (2010). Rumination and worry as mediators of the relationship between self-compassion and depression and anxiety. *Personality and Individual Differences*, 48, 757–761.
- Raque-Bogdan, T. L., Ericson, S. K., Jackson, J., Martin, H. M., & Bryan, N. A. Attachment and mental and physical health: Self-compassion and mattering as mediators. *Journal of Counseling Psychology*, 58(2), 272-278. <https://doi.org/10.1037/a0023041272>
- Robins, R. W., Hendin, H. M., & Trzesniewski, K. H. (2001). Measuring global self-esteem: Construct validation of a single-item measure and the Rosenberg Self-Esteem Scale. *Personality and Social Psychology Bulletin*, 27(2), 151-161.
- Rohner, R. P. & Lansford, J. E. (2017). Deep structure of the human affectional system: Introduction to interpersonal acceptance–rejection theory. *Journal of Family Theory and Review*, 9 (December 2017): 426–440. DOI:10.1111/jftr.12219
- Shaver P. R., Schwartz J, Kirson D., O'Connor C. (1987) Emotion knowledge: Further exploration of a prototype approach. *Journal of Personality and Social Psychology*, 52. 1061–1086.

- Skinner, E., Johnson, S., & Snyder, T. (2005). Six dimensions of parenting: A motivational model. *Parenting: Science and Practice, 5*(2), 175-235.
https://doi.org/10.1207/s15327922par0502_3
- Steindl, S. R., Matos, M., & Creed, A. K. (2018). Early shame and safeness memories, and later depressive symptoms and safe affect: The mediating role of self-compassion. *Current Psychology, 40*, 761-771. <https://doi.org/10.1007/s12144-018-9990-8>
- Temel, M., & Atalay, A. A. (2018). The relationship between perceived maternal parenting and psychological distress: Mediator role of self-compassion. *Current Psychology*.
<https://doi.org/10.1007/s12144-018-9904-9>
- Wei, M., Liao, K. Y., Ku, T., & Shaffer, P. A. (2011). Attachment, Self-compassion, empathy, and subjective well-being among college students and community adults. *Journal of Personality, 79*(1), 191-221.
- Williams, E. J. (1959). The comparison of regression variables. *Journal of the Royal Statistical Society, Series B, 21*, 245-251.
- Wilson, A. C., Mackintosh, K., Power, K., Chan, S. W. Y. (2019). Effectiveness of Self-compassion related therapies: A systematic review and meta-analysis. *Mindfulness, 10*, 979-995. <https://doi.org/10.1007/s12671-018-1037-6>
- Yarnell, L. M., Stafford, R. E., Neff, K. D., Reilly, E. D., Knox, M. C., & Mullarkey, M. (2015). Meta-analysis of gender differences in self-compassion. *Self and Identity, 14*(5), 499-520.
<https://doi.org/10.1080/15298868.2015.1029966>
- Zareian, A., Tajikzadeh, F., & Sarafraz, M. R. (2017). Relationship between parenting styles, self-compassion and emotional intelligence and antisocial behaviors in students. *International Journal of School Health, 4*(4), 1-5.