Title

Understanding Empathy Through Lived Experiences of Autistic Women

ISBN

9798190936179

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Publication Date

2026-09-11

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA

Los Angeles

Understanding Empathy Through Lived Experiences of Autistic Women

A dissertation submitted in partial satisfaction of the

requirements for the degree Doctor of Philosophy in Education

by

Jolie Alison Straus

2026

ABSTRACT OF THE DISSERTATION

Understanding Empathy Through Lived Experiences of Autistic Women

by

Jolie Alison Straus

Doctor of Philosophy in Education

University of California, Los Angeles, 2026

Professor Jeffrey J. Wood, Chair

Background: Research on empathy in autism has historically emphasized deficits in social cognition and relied on male-dominant samples (Lemos et al., 2026; Loomes et al., 2017; Song et al., 2019). Consequently, less is known about how autistic women experience empathy, particularly in relation to masking, gendered social expectations, and communication differences.

Objective: This exploratory qualitative study examined how autistic women describe and make sense of their lived experiences of empathy, investigated contextual factors that shape how empathy is experienced and expressed, and explored what can be learned from autistic women to advance the understanding of empathy.

Methods: A participatory co-design (PCD) approach was used to center autistic perspectives throughout the study (Gomez, Kyza, & Mancevice, 2018). Three autistic women collaborated

with the researcher to co-design semi-structured interview questions (Cooper, Kumarendran, & Barona, 2024; Nicolaidis et al., 2011). Nine autistic women participated in the interviews, which were analyzed using reflexive thematic analysis with iterative inductive and deductive coding.

Results: Empathy was conceptualized as multidimensional, involving emotional identification, affective experience, perspective taking, and prosocial behavior. Participants described intense emotional experiences, difficulty identifying specific emotions, and a disconnect between internal emotional experiences and outward expression. Participants also described masking and camouflaging as effortful processes that were influenced by gendered expectations. Experiences of being misunderstood contributed to feelings of isolation and reluctance to communicate emotional needs, whereas supportive environments facilitated understanding. Participants described reciprocal communication difficulties with both autistic and non-autistic individuals, gendered expectations and masking or camouflaging, which shaped experiences of empathy and emotional expression.

Conclusions: The findings challenge previous conceptualizations of empathy in autistic women and emphasize the importance of distinguishing between expressing, and having empathy recognized by others. Centering autistic women's lived experiences provides a more nuanced understanding of empathy as heterogeneous, contextually shaped, and relational. Future research should continue incorporating autistic perspectives and examine how gender, masking, and communication influence the expression and recognition of empathy.

***Language Statement:** The language 'autistic' is used when referring to individuals on the autism spectrum to respect and utilize the language preferred by the majority of autistic individuals (Taboas et al., 2023).*

The dissertation of Jolie Alison Straus is approved.

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2026

DEDICATION

To my puppy brother, thank you for bringing the most joy to our lives. Your silly personality and gregarious, loving nature were the best to come home to. Your love of treats, car rides, finding the most comfortable pillow to lay on, and award-winning-picture poses were so special. I smile thinking about your playfulness and for reminding us that there is joy in the mundane and peace in the overwhelm. Thank you for your licks, cuddles, and empathy; you knew when each of us was sad, sick, or hurting, and you gave us your love without exception. We miss you tremendously, and hope that there are endless naps and sweet potato treats up there for you to enjoy. Mom, Dad, Steph, and I love you with all of our hearts.

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ACKNOWLEDGEMENTS

Good things take time. The road to becoming Dr. Jolie has been the most challenging, tedious, yet rewarding labor of love. Over the past seven years, I have had the opportunity to work with tremendous mentors, colleagues, patients, and participants. My life has been changed for the better throughout my doctoral journey. Despite the laborious months and years, I am incredibly grateful for each moment. These moments have included teaching undergrads, revising, editing and writing, learning from and training with incredible clinicians and psychologists, and designing research studies from beginning to end. There are endless people to thank, and I would like to express my appreciation to a few out of many. First, this work would not have been possible without the autistic women that agreed to participate in my study. I appreciate you sharing your vulnerability and lived experiences with me. I cherish our conversations; your trust, openness and insights are invaluable. With immense gratitude, thank you.

Thank you to my advisor, Dr. Jeffrey Wood, who has supported me since my acceptance to the program in 2019. I am endlessly grateful for your support, kindness, and mentorship. When deciding on whether to attend UCLA after my acceptance to the program, I remember our conversation; what was clear from the outset is how supportive you are to each of your graduate students, myself included. I appreciated you treating me as a colleague and your sound advice. Thank you for modeling how to be a genuine clinical researcher by showing your humanness every step of the way. To my dissertation committee: Dr. Cathy Lord, Dr. Kimberley Gomez, and Dr. Kate Cooper – how fitting that members of my committee are strong, brilliant women! Thank you, Dr. Lord, for your belief in me as a researcher and a clinician. I am indebted to you as you helped propel my career under your mentorship and training. I fondly remember our patients and smile when I think of them often. Thank you for your kind, maternal presence and unwavering support

as I navigated the path to clinical licensure. To Dr. Gomez, thank you for introducing me to the world of qualitative research. I am incredibly fortunate to have taken the 222-course series with you. It was clear from the beginning, that your passion for this meaningful work shone through. Your gentle kindness and belief in me mean more than you know. Thank you both Dr. Lord and Dr. Gomez for hooding me at graduation! I will cherish that wonderful and commemorative moment. Dr. Cooper, I am elated that our paths crossed at various conferences and at UCLA! I appreciated your mentorship as I learned the process of participatory co-design and admire your tenacity in all that you have achieved as a researcher and a clinician. This field is lucky to have you. Thank you to each of you, it has been an honor to learn from you.

I would be remiss not to list the many lab members who have encouraged and supported me from the day I began the program. Ginny and Amanda, thank you for paving the way and leading with grace, professionalism and thoughtfulness. I loved teaching Psych 100B and have had the privilege of working with and learning from hundreds of UCLA undergraduate students. Ingrid and Samara, thank you for inspiring me, leading by example and for your friendship. I am in awe of what you both have accomplished as graduate students and now as postdoctoral scholars. It is incredible to watch you take on every challenge, big or small, and excel without hesitation. Katherine, thank you for your compassion and empathy throughout the program. I loved our chats and shared interests (yoga, live music) to name a few. It was an honor to work with all of you.

I would also like to thank my mentors at UCLA and beyond who have supported me in honing my clinical skills and training. Thank you to Dr. Sisi Guo, Dr. Julia Cox, Dr. Danielle Cornacchio, Dr. Lindsey Bergman, and Dr. Kenneth Schuster. Your clinical expertise and mentorship have shaped me into the clinician that I am today. I am beyond grateful for your belief in me, your trust in me as I navigated challenging cases, and patience as I trained and learned new

therapeutic modalities. My most favorite memories throughout my doctoral journey have been working with wonderful patients under your mentorship and guidance. Thank you to all of the children and families that I had the privilege to work with throughout my training. You are my inspiration and the reason that I devote my life to this field.

Finally, to my family. Thank you Mom, Dad, and Steph. Your unyielding support emotionally, mentally, and physically have been my guiding light and my reason for making it through to the other side. While pursuing this degree was my own decision, it takes a village of support, and I know that all three of you have felt that you have earned the degree along with me. This degree is as much yours as it is mine. Mom and Dad, thank you for the late-night calls, proofreading each paper, your patience, generosity, and love every step of the way. You made sure that I know I made you both proud, that I had all that I needed to succeed, and that I felt your support from across the country at any given moment. Thank you for believing in me, caring for me, and loving me. I love you to the moon and back.

To my twin sister, Steph, my whole heart. Thank you for your empathy, compassion, and unending support. You reassured me that I could complete this degree when it felt too immense and overwhelming. Talk about the clinician becoming the patient! Steph, you are the greatest writer, advice-giver, and best friend I could have ever wished for. I am so lucky that you're my sister. You make me laugh in times of stress, always know what to say, are my biggest fan, and love me endlessly. Thank you for copy-editing every draft, for being my sounding board, and for reminding me that I am enough as I am. As Mom always says when we are together, "The world is back on its axis". I am excited for more moments of joy and sister adventures being back together on the same coast. And to Luke, welcome to the family! I am so excited that you're officially my brother-in-law. I love you both very much.

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INTRODUCTION

Research into empathic capacity within autistic individuals has grown significantly in recent decades (Elcheson et al., 2018; Fletcher-Watson & Bird, 2020; Hume & Burgess, 2021; Kimber et al., 2024; Taylor & DaWalt, 2020; Speyer et al., 2022). While previous quantitative self-report measures have discussed the differences in empathy between autistic and non-autistic individuals, the qualitative nuance of described lived experiences of empathy among autistic individuals affords a richer narrative compared to that of questionnaire measures (Campbell-Templeton et al., 2026; Kimber et al., 2024). The critical realism epistemological framework (Braun & Clarke, 2022) assumes that while a shared social reality exists, participants' experiences are understood through both their interpretations and the researcher's analytic lens, which have been shaped by social and cultural contexts (Levitt et al., 2018). These social and cultural contexts frame interpretative frameworks and meaning making that emerge from participants' lived experiences.

Historically, however, previous studies have focused predominantly on children and adolescents using male-dominant samples (Lemos et al., 2026; Loomes et al., 2017; Song et al., 2019). Because autism presentation exhibits high heterogeneity between males and females (Kim et al., 2019; Kuo et al., 2022; Lord, 2019), many empathy studies have linked autistic characteristics that are associated with empathy such as systematizing and challenges with cognitive and affective empathy with male phenotypes, (Howlin et al., 2015, Mandy & Lai, 2017). Furthermore, standard autism diagnostic measures were largely normed on male populations (Rosen et al., 2021), including questionnaires, which are often limited in scope through written, static self-report measures.

Current literature focusing on autistic women and empathy establishes a clear intersection between masking or camouflaging, diagnostic visibility, and the phenomenological expression of presentation of autism in females (Cargill et al., 2024; Frost et al., 2019; Lai et al., 2017; Raymaker, 2019; Mandy, 2019). Autistic females frequently demonstrate competence in social skills, motivation for interaction, and social ability while also require targeted support in navigating this domain (Cargill et al., 2024). A central component of this research is social masking, which is the intentional or subconscious camouflaging of autistic traits to conform to neurotypical social expectations (Frost et al., 2019; Raymaker, 2019). Autistic women engage in social masking at significantly higher rates than autistic men (Lai et al., 2017; Mandy, 2019). While masking temporarily reduces the outward visibility of autistic characteristics and helps individuals navigate social environments, it demands a profound cost, linked directly to exhaustion, loss of identity, anxiety, depression, and burnout (Cook et al., 2021; Evans et al., 2024; Lai et al., 2021). Furthermore, because masking can conceal autistic traits from external observers, this impacts disparity of receiving an autism diagnosis for females. Female and gender-nonconforming individuals are identified much less frequently as autistic in childhood compared with males (Halladay et al., 2015; Tien et al., 2023). Thus, women are often diagnosed later in life and understudied in autism research.

Furthermore, autistic men often display outwardly observable externalizing behaviors, which historically triggered earlier identification and shaped how autism was conceptualized across the general population. Because historical diagnostic instruments were predominantly normed using male samples (Rosen et al., 2021), recognizing autistic presentation in females has historically been less common than in males (Mandy & Lai, 2017).

Moreover, autistic characteristic for women may go unnoticed in some contexts, as they may ‘fly under the radar’ because they have acquired certain prosocial skills to help blend into social contexts. This systemic oversight causes misdiagnosis, late diagnosis, or a total lack of access to appropriate services and support systems well into adulthood (Cargill et al., 2024; Frost et al., 2019; Raymaker, 2019; Mandy, 2019). Consequently, compensating for undiagnosed social weaknesses is challenging and exhausting, which can lead to strong efforts to mask and camouflage to fit in. Understanding empathy in autistic women is inseparable from understanding the gendered expectations placed on social performance and the processes of masking. Traditional assessments misinterpret the exhaustion of masking as a natural social deficit, confirming the urgent need to re-examine how empathy is conceptualized and understood in autistic women. The goal of the proposed study is to understand the autistic women’s experiences of empathy throughout their lives. To accomplish this goal, it is critical to identify the defining components of this study to further understand these lived experiences.

Chapter 2: LITERATURE REVIEW

Defining Characteristics of Empathy

While researchers have proposed numerous definitions of empathy (Coplan, 2011; Davis, 1983; Decety & Batson, 2009), the current study defines empathy as understanding and sharing an emotional experience with another person, including awareness that the emotion belongs to the other person and an understanding of their likely ensuing thoughts (e.g., Walter, 2012; Knight et al., 2019). Four critical empathy processes are: 1) emotion identification, 2) affective experience, 3) perspective taking, and 4) prosocial behavior (Walter, 2012). These interactive processes comprise the development of empathy, which are situated within lived experiences, social interactions, and cognitive frameworks.

The first empathy process is emotion recognition (i.e., identification), which is identifying emotions that characterize another person's emotional experience. For example, a key question that defines emotion recognition is, "How does this person feel as they go through this experience?" When someone experiences sadness, another individual may recognize that person's emotional state as "feeling down" or "upset". Identification of emotions stems from understanding that another person's emotions are different than one's own emotions.

The second key empathy-related process is affective experience, defined as experiencing a response to another person's emotions. Affective experience can be characterized by the observed emotional state of another person matching one's own emotional state (i.e., affective isomorphy). For example, an individual may feel happy when others around them appear happy. Affective isomorphy and other affective reactions to others' emotions may entail an automatic or mirroring process not fully subject to conscious control or choice (e.g., Walter, 2012).

Perspective taking is defined as the ability to understand the feelings of another person at an analytic level. For example, an individual may understand that another person is angry and why they feel that way. Perspective taking does not necessarily trigger affective experience, but in practice, it may facilitate affective experience and vice versa (Walter, 2012). Perspective taking is closely associated with the concept of theory of mind (ToM), which is the ability to understand and represent the mental states of others (Premack & Woodruff, 1978). This process includes the understanding of "why" (e.g., why does one think the observed person feels a certain way).

The fourth empathy process, prosocial behavior, is defined as voluntary, intentional behavior that results in the benefit of another person (Walter, 2012). Prosocial behavior develops when individuals help others, which is linked to a concern for others and with the concept of sympathy, a related but separable construct in the literature. Previous research found that empathy mediates the relationship between mimicry and prosocial behavior, whereby prosocial behaviors are directed towards others (Stel et al., 2008). Through learned experience, helping behavior develops at a young age, as children's concern for others and desire to help progresses through developmental trajectories (Knafo et al., 2008).

Defining Characteristics of Autism

Autism is a neurodevelopmental condition that is characterized by social communication differences and restricted/repetitive behaviors (RRBs). As of 2022, prevalence has risen to approximately 3.2% of children in the United States (Shaw et al., 2025). Autistic individuals face challenges with adaptive functioning, including communication, daily living skills, motor abilities, and cognitive processing (Baio et al., 2018), as well as emotion regulation, cognitive flexibility, play, and social skills (Kanne et al., 2011; Mazefsky et al., 2020; Pugliese et al.,

2015). Additionally, research highlights challenges with perspective taking, ToM, response inhibition, and reading social cues (Conner et al., 2020), all of which are vital for fostering connections and navigating daily social encounters.

Autism and Empathy

Research demonstrates that empathy skills can be learned (Riess, 2017), while development poses challenges for non-autistic and autistic individuals alike (Elcheson et al., 2018; Hume & Burgess, 2021; Taylor & DaWalt, 2020). Autistic individuals struggle to identify and recognize emotional states—a characteristic known as alexithymia (Bird & Cook, 2013)—which causes confusion when interpreting facial expressions and emotional cues (Chaplin & Aldao, 2013; Hobson et al., 2020). Studies estimate that between 40% and 65% of autistic individuals experience alexithymia (Bird & Cook, 2013; Kinnaird et al., 2019). When asked to reflect on internal emotions, autistic individuals with alexithymia find observable features more salient than abstract feelings (Oakley et al., 2022; Reyes et al., 2020). For example, when asked how they know they are happy, an autistic individual may reply, "when I laugh" or "on my birthday" rather than using emotion-oriented terms like "joyful."

Multiple studies confirm the presence of various empathy processes (Elcheson et al., 2018; Gepner et al., 2001; Harms et al., 2010; Hume & Burgess, 2021; Taylor & DaWalt, 2020), showing that empathic responses are elicited automatically when observing pain in others (Singer et al., 2004). Cook and colleagues (2013) found that the degree of alexithymia, rather than autism severity, predicts anterior insula activity when autistic individuals observe others in pain. Furthermore, Knight and colleagues (2019) established that empathy among autistic individuals is linked to compassion and prosocial intent, such as prosocial helping behavior.

Because of alexithymia, autistic individuals exhibit strong emotional reactions to another's experience while misidentifying the specific emotion (Reyes et al., 2020). For example, sadness in another person may be perceived as anger or disgust, or vice versa. Consequently, discriminating between emotional states presents a challenge. Moreover, autistic individuals express empathy in alternative ways that diverge from non-autistic social norms and expectations (Speyer et al., 2022; Kinnaird, Stewart, & Tchanturia, 2019; Fletcher-Watson & Bird, 2020). Despite differing outward expression, consensus indicates that autistic individuals show no fundamental deficit in the affective experiences of empathy, despite outward expression differing (Song et al., 2019).

Implications of Social Cognitive Theory for Understanding Empathy

Bandura (1977) posits that behavior is learned from the environment through modeling, imitation, and observational learning. Social cognitive theory emphasizes cognition and accounts for past experiences, which shape expectations, guide behavior, and influence empathic responses.

Empathy develops through the imitation of facial expressions and the mimicry of others' experiences to simulate emotional states (McDonald & Messinger, 2011; Monk et al., 2010; Schipper & Petermann, 2013). Emotional mimicry is a foundational skill developed early in infancy (Bons et al., 2013; Neumann et al., 2015), such as an infant automatically smiling back at a caregiver. This automatic synchronization—referred to as affective behavior—does not require higher-order cognitive empathy skills like perspective taking. A growing body of research confirms that autistic individuals successfully demonstrate emotional mirroring (i.e., mimicry) and affective experiences (Gu et al., 2015; Kimber et al., 2024; Kouklari et al., 2019; Muniandy et al., 2022; Song et al., 2019). While an autistic person's behavioral or affective

response differs from non-autistic societal expectations, this divergence reflects alternative expression rather than a lack of empathic capacity.

Re-Evaluating Empathy: Moving Beyond Antiquated Narratives

Previous empirical studies prove that assumptions regarding a generalized empathy deficit in autistic individuals are inaccurate and overly blunt. While older research concluded that individuals struggling with cognitive empathy lacked overall empathic ability, emerging findings demonstrate that empathy skills are fully present in autistic women and are simply expressed differently. When both cognitive and affective components of empathy are examined, studies reveal a clear division: results indicate reduced cognitive empathy skills (Baron-Cohen, 1995; Conner et al., 2020; Eisenberg et al., 2009; Mazefsky et al., 2014; Speyer et al., 2022), while establishing that affective empathy remains fully intact (Cook et al., 2013; Gepner et al., 2001; Gillespie-Lynch et al., 2017; Harms et al., 2010; Kimber et al., 2024; Russell et al., 2019). Furthermore, recent studies confirm that autistic individuals experience hyperempathy—an intense emotional response to others' experiences that complicates emotional regulation (Cheang et al., 2025; Kimber et al., 2024; Markram & Markram, 2010). The representation of these findings across all populations within the broader autism community remains unmapped; current evidence establishes that empathy is multifaceted rather than defined by traditional deficit models.

Existing literature relies heavily on measurement tools that exclude insights directly from autistic individuals. Current research asserts the necessity of centering autistic voices (Cargill et al., 2024; Gillespie-Lynch et al., 2017; Raymaker et al., 2020). While a growing movement explores the lived experiences of autistic adults (Kimber et al., 2024), greater attention to these perspectives is paramount. The current study investigates how lived experiences of autistic

women shape empathy-related skills. To capture these experiences, the study utilizes participatory co-design (PCD) as a guiding framework (Gomez, Kyza, & Mancevice, 2018), drawing directly on the expertise of autistic stakeholders. Qualitative interviews will illuminate perceptions of empathy, with the researcher and autistic stakeholders (i.e., co-design team members) co-developing specific interview questions. This collaboration balances power, creates a safe space for co-design team members to share perspectives, and fosters a symbiotic relationship (Cooper, Kumarendran, & Barona, 2024; Gomez, Kyza, & Mancevice, 2018; Nicolaidis et al., 2011).

This exploratory study focuses on co-designing empathy questions for live interviews to highlight the lived experiences of autistic women. It builds on previous work, such as the study by Kimber and colleagues (2024), who interviewed autistic adults using open-ended online surveys and identified four key themes: the heterogeneity of empathy experiences, empathy as an effortful process, conditional empathy, and challenges to the empathy deficit narrative. Participants in this study reported diverse expressions of empathy—ranging from hyperempathy to processing challenges—and noted that interactions are easier with other autistic individuals (Gillespie-Lynch et al., 2017; Kimber et al., 2024). Unlike static online surveys, this study, with its live semi-structured interviews enable dynamic, open-ended conversations about lived experiences.

Current Study

Given the dearth of research studies with autistic adult women, there is a critical need for research examining the lived experiences of empathy for autistic women. Moreover, there is a growing call for research centering autistic voices (Benevides et al., 2020; Chown et al., 2017; Hens et al., 2018). Through an exploratory, participatory co-design approach, the current study

focused on autistic women's lived experiences with empathy. The researcher gathered a team of autistic women to collaborate on co-designing empathy interview questions. Then, the researcher recruited autistic women to participate in the qualitative interviews and coded their responses to the questions that were co-developed with the co-design team. The responses to the interview questions were analyzed through thematic analysis (Braun and Clarke, 2022). This study included: two parts: Part I (co-development of interview questions) and Part II (conducting qualitative interviews). Part I included the formulation of the co-design team of autistic women and meetings with the co-design team to create the interview questions. Part II included recruitment of nine autistic women to participate in the co-designed interviews.

Research Questions

Research Question 1: How do autistic women describe and make sense of their lived experiences of empathy?

Research Question 2: What contextual factors shape how they express or experience empathy?

> Research Question 2a: How do autistic women perceive and navigate societal misconceptions about empathy, including experiences of masking/camouflaging and gender identity?

Research Question 3: What can be learned from autistic women that contributes to the understanding of empathy?

Author's Positionality

My approach to conducting this study is through the lens of a perpetual learner. I listened and built trusting relationships with both the co-design team and the interviewees to create a calm, welcoming environment. Throughout the design process, my goals were to listen and learn from the co-design team members and participants and thus intertwine the insights of their lived

experiences into the design. By fostering an ongoing conversation with autistic women, we used open communication to create interview questions for autistic participants. Through the collaboration and partnership, I checked my biases and privilege as a White, nonautistic person before entering the design and qualitative data collection phases, to carry this through the data analysis and thematic formulation within the rich interview transcripts. Throughout the course of the study, my positionality changed and evolved as I learned from the insights and lived experiences participants shared. I utilized a growth-mindset to expand any preconceived limitations that I held as a clinical researcher and academic scholar. In my own work as a clinician, listening and, building rapport are paramount to every one of my interactions by constructing a safe, welcoming, and trusting environment. I have worked for many years with autistic individuals as a teacher, researcher, therapist, and co-creator. I believe my experiences improved both the interviews and participants' comfort levels with me through shared knowledge of the participants' lived experiences.

Chapter 3: METHODS

Participants

For Part I of the study, three women (M_{age} = 22, ages 19-24) and the researcher formed the co-design team. In Part II, ten autistic women were interviewed (M_{age} = 30.11, ages 20-49). One participant completed the interview, but withdrew from the study. The participant requested to retract information she shared during the interview in her request to not have any personal anecdotes and narratives shared or published within the study. The researcher deleted the participant's data (e.g., Google survey responses, transcript and audio-recording of the interview).

Nine interview transcripts were included in the study. The age range was intentionally left as broad (18-50 years) to ensure that women who were diagnosed both early on in their lives (i.e., at a young age) and as adults were included in the study. Individuals included in Parts I and II highlighted the lived experiences of women as exploration into the influence of societal and gender expectations, their autistic identity, and experiences with empathy pre- and post-diagnosis. As such, these categories and themes will be discussed further in Chapter 4.

Individuals were recruited through social media, autistic-led community groups, email distribution listservs, and by word of mouth through personal networks. All recruitment emails were sent through a study-specific email address, which included information such as IRB-approved flyers and consent information documents. If individuals expressed interest in learning more about the study, they were encouraged to contact the study email address listed on the recruitment flyer, or scan the QR code which directed them to additional study information. Once individuals reached out to express their interest , the researcher responded through the study email confirming receipt of their interest, as well as sharing a link to a Google survey to

determine study fit. The Google survey included study eligibility questions such as asking participants to share their gender identity, diagnosis (self-identified or formally diagnosed), describe empathy in their own words, and their willingness to either attend virtual meetings with other autistic women to co-design interview questions (Part I), or their willingness to complete a virtual interview (Part II). Individuals were considered eligible if they identified as autistic women (i.e., through self-identification or a formal autism diagnosis), between the ages of 18-50, and were conversationally fluent. The co-design team members (Part I) and participants' demographic information (Part II) can be found in **Tables 1 and 2** respectively.

Table 1. *Co-design Pseudonyms and Demographic Information*

ID	Pseudonym	Gender	Age	Education Level	Race/Ethnicity	Primary Language	Diagnosis
CD1	Amanda	Female	24	Bachelor's degree	Asian	English	Autism
CD2	Diana	Female	23	Master's degree	Latinx, White	English	Autism
CD3	Megan	Female	19	High School	White	English	Autism
CD4*	Bianca	Female	31	High School	Latinx	English	Autism
CD5*	Samantha	Female	32	Bachelor's degree	White	English	Autism

Note: CD4 and CD5 participated in the trial and testing phases of the interviews to assist in finalizing the interview with the co-design team.

Table 2. *Interview Participant Pseudonyms and Demographic Information*

ID	Pseudonym	Gender	Age	Education Level	Race/Ethnicity	Primary Language	Diagnosis
P01	Claire	Female	49	Bachelor's degree	White	English	Autism
P02	Gabrielle	Female	29	Bachelor's degree	West Asian, Iranian	English, Farsi	Self-identify
P03	Sarah	Female	33	High School	White	English	Autism
P04	Danielle	Female	20	Bachelor's degree	German, White	German, English	Autism
P05	Kaitlyn	Female	23	Bachelor's degree	White	English	Autism
P06	Christina	Female	26	Master's degree	Latinx	Spanish	Autism
P07	Nina	Female	23	Bachelor's degree	Middle Eastern	English	Autism
P08	Anna	Female	24	Bachelor's degree	White	English	Autism
P09	Emma	Female	44	Bachelor's degree	White	English	Autism

Sample Size

Sample size was contingent on the notion of information power. Information power indicates that fewer participants are needed the more information that the sample holds and through the contribution of new knowledge (Malterud et al., 2016; Malterud et al., 2021). Moreover, sufficient information power is dependent on 1) the aim of the study, 2) a diverse sample through unique experiences, 3) use of established theory, 4) quality of the interview dialogue, and 5) strategy of analysis (Malterud et al., 2016; Malterud et al., 2021).

This study adhered to the guidelines of information power. First, the ideas that were conveyed by the participants addressed the research questions, one of Malterud's key theoretical guidelines of aligning sample size with sufficient information power. Secondly, the specified sample included participants who exhibited a heterogeneity of experiences such as type of autism diagnosis (i.e., self-identified or formal diagnosis), age of diagnosis (i.e., as a young child or as an adult) and varying experiences with empathy-related processes. Third, the use of participatory co-design (PCD) guided the methodological design and theoretical underpinnings of the study (Cooper, Kumarendran, & Barona, 2024; Gomez, Kyza, & Mancevice, 2018; Nicolaidis et al., 2011), which are described in further detail in the Procedures section. As Malterud conceptualizes information power as an aspect of internal validity, the quality of the interview dialogue was embedded within strong and clear communication between the researcher and participants. Lastly, this exploratory study aimed to uncover patterns that were relevant to the study aims and research questions through reflexive thematic analysis. By adhering to guidelines of information power, the study maintained a stepwise process that was revisited throughout the procedures and methodology, while also contributing to new knowledge from the data analysis.

Moreover, a sample of nine participants was selected according to principles for reflexive thematic analysis grounded within a *Critical Realist* epistemological framework. Braun and Clarke (2021) assert that sample adequacy is assessed through richness and analytical depth rather than sample size alone (Braun & Clarke, 2022; Levitt et al., 2018).

Research Design Rationale

A qualitative research design was selected as this approach is best suited to explore complex, meaning making, which may not be understood through quantitative or experimental approaches (Bernard, 2018; Creswell & Creswell, 2018). As the goal of the study is to understand how autistic individuals construct, interpret, and narrate their own experiences with empathy, qualitative design is an appropriate methodological choice for this study. It is also well-suited for studies in which the researcher centers participant perspectives across semi-structured interviews. Semi-structured interviews allow for addressing the research questions, while also allowing for flexibility for participants to elaborate and share their experiences that may have not been anticipated in advance (Bernard, 2018).

Additionally, critical realism, directly shaped the construction of the interview guide, interview protocol, and thematic analysis. Question stems and probes were included in the interview guide to explore the participants' significance of their experiences through elaboration, and by avoiding imposition of predetermined analytic categories (Creswell & Creswell, 2018). The interview protocol was developed to be open-ended, minimally biased, and intentionally allowed space for responses that diverged from the participant's own experiences of empathy and instead to challenges with having others empathize with them.

Procedure

Co-design Meetings

In gathering the co-design team, a purposeful sampling strategy was utilized to ensure that the team represented a diverse makeup of ethnicity, race and diagnostic history. The co-design team was comprised of autistic women who had not typically voiced their opinions or been given an opportunity to share their thoughts, instead of highlighting autistic women who already have a prominent voice in the research community. Upon expressing interest in the co-design team, prospective team members were sent further information about the study via the study information sheet, along with a demographic questionnaire. After reviewing the study information sheet, co-design team members were asked to indicate if they needed any accessibility accommodations. Along with the researcher, three co-design team members attended three virtual meetings to co-design the interview questions. The researcher sent the meeting agenda ahead of each meeting to the team members and supported the use of the chat function and turning cameras off during the meetings. The members voiced their opinions verbally during the meetings and shared their insights during interview development.

Development of Interview

The co-design team met online over Zoom to increase accessibility and decrease in-person barriers. The team met for three, 1-hour sessions across the span of a few weeks. During the first meeting, the researcher began with reviewing the purpose of the study, answering any questions from the co-design team members, sharing about herself and inviting the co-design team members to share depending on their comfort level. The team then reviewed and revised the interview guide questions synchronously. The interview guide can be found in the **Appendix**. Between each meeting, the researcher amended, revised, and deleted interview questions after each co-design collaboration meeting. The researcher also tested the interviews individually with two autistic women in between meetings. After each trial, the researcher

brought the information back to the co-design team and necessary refinements were made together. All co-design team members and the participants who completed the trial-run interviews were compensated for their time through a $50 online gift card.

Interview Procedures

Once the team established the final version of the interview questions, the researcher formalized the interview guide. The researcher conducted the virtual interviews via a private room or with headphones to assure data security, participant privacy, and confidentiality. These sessions were recorded using Zoom's audio recording feature to ensure accuracy in data capture. The interviews lasted between 45-minutes to 1-hour, with interview length determined by how much the participant wished to discuss and share. All interview questions were open-ended and allowed for the participant to elaborate on their personal narratives. The researcher asked follow-up questions (when appropriate) to further probe, clarify, and continue the conversation. The interview template can be found in the **Appendix**.

Participant Rights and Consent

Before beginning the interview, participants were asked to review the consent form. The researcher offered to send the interview questions ahead of time per the participant's preference. Some participants requested to view the questions ahead of time and the researcher emailed the questions ahead of the scheduled interview. Before the recording began during each interview, the researcher made time to address any questions or concerns participants had about the interview, review the consent form, and to explain the purpose of the study. Participants were also asked about their comfort level with being audio recorded and provided their verbal consent before proceeding with the interview and the recording. Each participant was told that they could stop the interview at any time, take breaks, or turn off their cameras if they felt overwhelmed or

uncomfortable. Participants were informed of the right to withdraw their interview or edit their transcripts at any time, with no consequence. The researcher recruited 10 autistic women to complete the interviews with. Participant information and pseudonyms can be found in Tables 1 and 2. This study was approved by the University of California, Los Angeles North Campus General Institutional Review Board (IRB).

Data Security

Recordings and transcripts of the interviews were stored on a secure, password-protected online server. Access to this server was restricted to researcher who had been approved by the IRB. Transcripts were de-identified by the researcher prior to data analysis. Pseudonyms were assigned for all participants. Upon completion of the interviews, the researcher identified themes highlighted across the interviews through reflexive thematic analysis.

Data Analysis

To support the research questions, reflexive thematic analysis was used to identify and analyze patterns within the interview responses based on the data collected (Braun & Clarke, 2020; Braun et al., 2022). An iterative blend of inductive and deductive thematic analysis was used to code the data and identify common themes connected to empathy-related skills. Through collection of the interview transcript datasets, the emerging themes were subsumed into overarching categories throughout the coding process. The iterative coding process included multiple read throughs of the transcripts, line-coding, and a reflexive journal. These processes allowed for reflection of themes over time, refinement of initial construction of codes, and alignment with the research questions.

Interviews were recorded and anonymous auto-generated transcripts from Zoom were used. The researcher compared the written transcripts to the audio recording for editing.

Transcripts were reviewed and edited for incorrect transcriptions, anonymized so no names or identifying information were included, and condensed so that participants speaking between questions were on one line. Transcripts were uploaded onto qualitative data analysis software Dedoose (Version 10.1.5) and stored in an encrypted folder. All transcripts were analyzed which resulted in the creation of themes and codes.

The blended inductive and deductive analytic approach occurred over three coding rounds. First, the researcher utilized the process of inductive line coding by reading through the transcripts, completing a first pass of coding by identifying phrases, sentences or paragraphs that held meaning when examining the research questions. Inductive codes were generated from the accounts and excerpts that the participants conveyed in the interviews. Following the initial read-through, line coding was completed sequentially through all the transcripts to establish initial descriptive codes and patterns. Then, the researcher re-read each individual transcript to review which codes had similar meanings, were repetitive, or only came up in a single transcript. The secondary coding process involved a secondary coder examining the initial inductive themes and transcripts, as well as deductively collapsing codes to develop overarching themes that were most salient to the research question. Throughout the second and third rounds, the researcher and the secondary coder met to discuss themes and iteratively reached consensus on both how individual passages were coded, as well as how the codes were collapsed into themes. During this deductive theme generation, examples such as "*vulnerability*", "*emotional attunement*", and "*isolation/feeling misunderstood*" were reclassified into an overarching theme of "Desire to be Understood and Receive Empathy from Others". Further, the researcher converged codes with similar meanings and used a reflexive diary to support recategorization and organization of codes into fewer themes. Recategorization allowed for collapsing 40 inductive codes into 14 deductive

themes and subthemes that aligned with the research questions. The specific codes for the analytic coding process can be found in the **Appendix**.

Moreover, the researcher employed measures of rigor to ensure reliability throughout the coding process through 1) the use of a secondary coder through collaborative coding and 2) trustworthiness. Instead of using inter-rater reliability (IRR) to establish reliability, the researcher reviewed the codes with a secondary coder to independently check and review the interview transcripts. Along with providing reliability and consensus within coding, the secondary coder also brought her perspectives as an autistic woman of color to provide additional meaning. This process further extended the co-production process into the analytical procedures, as the findings were co-produced by both autistic and non-autistic individuals. The coder and the researcher discussed the establishment and creation of codes to ensure that codes would be checked and reviewed through co-production. They discussed whether excerpts from the transcript fit into codes, and amended what did not align through a reflective, iterative process. As the coding process required flexibility over each iteration of coding, the researcher chose not to utilize inter-rater reliability, according to reflexive thematic analysis by Braun & Clarke (2022). Braun & Clarke (2022) argue that codes are the building blocks for themes within reflexive thematic analysis and patterns of shared meaning, indicating that codes are conceptualized as analytic outputs, which have been created from the codes and through the researcher's engagement with the transcripts (Braun & Clarke, 2022). These tenets provide a strong rationale for establishing reliability through a secondary coder, as the researcher and the coder independently engaged with the data and discussed discrepancies and alignment, which prioritized meaning-making of the data, instead of ascertaining numerical reliability through IRR.

Additionally, another indicator of quality in qualitative research is the notion of trustworthiness (Adler, 2022; Levitt et al., 2018). Adler (2022) argues that the most important aspect to assessing qualitative research is transparency in establishing trustworthiness within research. As reflexive thematic analysis highlights the importance of meaning-making through patterns across the data (Braun & Clarke, 2022), transparency contributes to study rigor and meaning-making through the justification of the methodology used, sampling procedures, and reflexivity or positionality of the researcher (Adler 2022; Ahmed 2024). Another pillar of trustworthiness is confirmability, or engaging with colleagues to review interpretations within the datasets (Ahmed, 2024). As such, the researcher utilized narratives from her clinical training and collaboration with the secondary coder to increase confirmation of the findings. Finally, the researcher kept a reflexive journal to document in-the-moment thoughts, reflections and commonalities across the datasets. These analytic processed allowed for a cohesive narrative that was reflected within the interview transcript datasets. During the interviews, the researcher jotted down notes in a reflexive diary to notice what participants desired to discuss and share, which allowed for a chance to adapt the questions during the interviews and ask specific questions around themes that came up in real- time during the interview itself.

Chapter 4: RESULTS

Data analysis of this exploratory study yielded overarching themes, which are explained through interview excerpts and specific subthemes in detail below. The nature of the study was to explore the understanding of empathy from a semi-structured and open-ended interview format, which allowed for the exploration of themes in answering the research questions. In choosing the selected excerpts, the researcher referred back to a reflexive diary to ensure that interviewer bias was minimized. Participants' experiences were paramount in supporting the themes with detailed examples, especially with the distinctions between feeling empathy, expressing empathy, and having empathy recognized by others. Importantly, as participants described their experiences with empathy, they shared their desire to receive empathy from others and understand their emotional experiences.

While the initial study proposed an investigation into how autistic women experience and express empathy for others and how they gained empathy skills over time, the challenges these autistic women face with having others empathize with them warrant discussion. All participants described scenarios in which they wished others would have expressed empathy or concern for their needs, illustrating the importance of this facet.

Additionally, overarching themes stemmed from the four empathy-related processes: emotion identification, affective experience, perspective taking, and prosocial behavior, along with experiencing emotionally overwhelming situations, feeling misunderstood and unsupported, and societal expectations related to participants' autistic and gender identities.

Conceptualizing Empathy Through Participant Lenses

For the purpose of the study, empathy is defined as understanding and sharing an emotional experience with another person, including awareness that the emotion belongs to the

other person and an understanding of their likely ensuing thoughts. With multidimensional components included in the definition (i.e., affective experience, perspective taking, and emotion recognition), the question becomes, "How does this person feel as they navigate through this experience?". Emotion recognition stems from understanding that another person's emotions are different than one's own emotions.

Conceptualization of Empathy

In describing their lived experiences with empathy, participants expressed what empathy meant to each of them. Emma described the sensation of feeling an emotion another person feels: "*Even if I do not necessarily get their [affective] experience, I'm still feeling the sensation of the specific emotion behind what the other person is feeling."* Further, participants shared their perceptions of empathy in their own words:

> *"It's the capacity for someone's mindfulness, concern for others, and their ability to connect what others experience to their own understanding in some way. It has been, at times, a cause for joy and delight and at others, for defeat and hopelessness. It has helped me come to bear others in mind as a practice. I find it necessary for the survival of all things beautiful in life."* (Gabrielle)

> *"It's hard to distinguish between just feeling compassionate for someone else or concern for someone else because some people say empathy is actually feeling the feelings of another person. For me, it's a bit of both."* (Anna)

When another participant, Danielle, described empathy, she echoed other responses in emphasizing the emotional connection with another person: "*When I think of empathy as a concept, I'd say it means feeling an echo of somebody or something else, it's an emotional connection that you get; a feel for what that person is feeling opposite you*." Additionally, Nina conceptualized empathy as:

> *"It is the ability to understand another person's needs and feelings and occasionally, participate in those feelings as a means of validation and social connection. Empathy means that even if you have never experienced those same feelings or been in a similar situation, you still care because you care about and want to help the other person specifically.*"

Nina described caring for another person, even if she has not experienced the situation before. Many participants mentioned facets of the four empathy-related processes: emotion identification, affective experience, perspective taking, and prosocial behavior in their conceptualizations of empathy. Their descriptions underscore the ways in which some autistic women feel and experience empathy through a shared feeling and emotional connection, while also noting the connection they have to another person.

Empathic Concern for Others

Many participants reported feeling empathic concern for others, which is experiencing a shared response to another person's emotions (i.e., affective experience). They shared matching their emotions to another person's may be dependent upon the connection they have to that person. Participants also suggested that emotional empathy may depend upon the intensity of an experience and prior exposure to that experience. Nina explained:

"I don't have an issue logically understanding why someone might feel hurt or upset, but I struggle to emotionally feel empathy for someone if it's not a situation that I have personally experienced. I am very good at giving advice and asking questions to help solve problems, or at the very least hopefully illuminate some other truth or perspective, but that shared heart of it doesn't really come naturally to me–unless it's about a situation as dire as someone losing their family or facing serious medical issues, which makes me feel so upset."

This description highlights two components of a shared affective experience: 1) the intensity of the person's experience and 2) previous exposure to that experience. When thinking about the severity or intensity of a person's experience, Nina shared that she feels the "shared heart" of the emotion that person feels in more serious situations (e.g., losing a family member or serious medical challenges) while also expressing that emotional empathy comes more naturally to her in those situations. This may point to the idea that the severity or intensity of the emotion a person experiences plays an important factor in feeling empathy towards that person. Her description also highlights challenges with perspective taking as she may not have experienced what the other person is experiencing and found it challenging to feel a similar emotion to that person.

Emotional Mirroring

An additional component of affective experience is characterized by affective isomorphy, or matching one's own emotional state to that of another person. For example, an individual may feel sad when others around them appear sad. Affective isomorphy and may entail an automatic or mirroring process not fully subject to conscious control or choice. For example, Emma shared:

"Even when I witness or hear another person's experience that may not exactly mirror my own, there are still themes associated with those experiences (i.e. sadness, anger, joy, relief, fear, pain, etc.) that I seem to pick up on involuntarily where it almost feels like I'm living inside that person's body at that moment."

Danielle expressed seeing another person's experiences from their perspective rather than imposing her own understanding onto that person: "*When someone is willing to see other people's experiences through their eyes and not necessarily superimpose their own understanding onto other people, that is integral to humanity*." Christina added to these sentiments:

"I associate empathy with the idea of being able to relate and feel someone's emotions, including situations you may or may not have experienced before. Something like shedding tears for a movie character, or hearing about someone else's emotional story. I've often heard it describe as being able to imagine the exact feelings and physically feel them throughout your body."

These accounts suggest that some autistic women may experience synonymous or shared affective responses under particular conditions, such as personal familiarity with an experience or situations of objectively high emotional severity. Empathic capacity may vary according to context and the relationship between cognitive understanding and affective experience. There may also be a lack of recognition or challenge with experiencing specific emotions that others exhibit.

Difficulty Communicating Emotions

While participants described recognizing others' emotions, they also experienced difficulty translating that awareness into a response. Danielle explained:

"People assume that having autism means that you're not really sensitive to emotional nuances in other people, but that is not necessarily true. If I, and other autistic people, do not entirely understand what someone is feeling or thinking, but the person gives off 'a vibe' that I can sense on an intuitive level, then the purpose becomes translating that intuition into a concrete question of, 'What do I do about this and how do I react to it?'"

Danielle described sensing a "feeling or vibe" from another person without necessarily being able to identify the specific emotion. Some autistic women may recognize when something is wrong or when another person is distressed even when they cannot explicitly label the emotion. Rather than indicating an absence of emotional awareness, the challenge may be in translating that awareness into an appropriate response. This example may indicate that some autistic women recognize another person's emotion enough to know to that something is off or someone is upset, even if they do not understand it exactly. Danielle continued:

"*I think that's what a lot of autistic people trip over. Intuitively, they do understand how the other person is feeling, but then they try to say something comforting or apologize, and it comes out wrong, in a way that the other person doesn't really want to hear it."*

Additionally, participants detailed the difficulty with communicating their own emotions through outward expression. Danielle described the challenge for some autistic people may be that their output when expressing emotion toward another person or helping that person, comes out in the "wrong way". Other participants shared this sentiment by illustrating the challenge in communicating their emotions through external or outward expression, as well as difficulty with taking the perspective of others in emotion scenarios.

Confusion with Perspective Taking

Perspective taking is the ability to understand the feelings of another person. Many autistic participants expressed challenges with perspective taking, while some described understanding and taking the perspective of another person. Across the interview transcripts, empathy emerged not only as a relational and learned process, but also through taking the perspective of others. Kaitlyn described: "*I am very well equipped to take on other people's perspectives and figure out, manipulate like clay, the ideas about how other people might be feeling.*" Despite Kaitlyn's account, several participants shared that they had difficulty with perspective taking. For example, Christina described:

> *"I have to really force myself to imagine other's feelings in different scenarios. I can hear about a situation from someone's life and can label it as a sad, angry, or scary experience, but I cannot feel that emotion for them. Sometimes, there are situations where I can see how or why someone is feeling a certain way about a situation, but I am unable to understand it entirely. I can tell myself 'that makes sense from their perspective', but at the same time I struggle to understand it. Sometimes, people need to explain it to me, or I have to ask them because there are times when I can't perspective take. It is a constant effort for me, and I often feel like I need to be better at it because it is expected from me as a female presenting person."*

Kaitlyn also described that autistic people she knows find it challenging to perspective-take:

> "*The other autistic people I've met have had trouble with perspective taking on some level. So, perhaps the moral of that is there's a lot of diversity in how autistic people understand the minds of others. Because the autistic people I know who have a hard time with perspective taking, it's not that they don't understand that other people have feelings*

and how other people feel. I think it's more of an emotional language barrier than anything else."

Consistent with the literature, participants described their confusion with perspective taking. As a core empathy construct, this is an important area for exploration. While perspective taking can be challenging or confusing for some of these women, there were not many examples in the transcripts that directly targeted their experiences with perspective taking. Despite this, women discussed their experiences with helping behavior (i.e., prosocial behavior).

Prosocial Motivation and Behavior in Response to Other's Affect

In every interview, each participant described their own experiences with helping other people: strangers, family members, friends, or colleagues. Prosocial behavior is defined as voluntary helping behavior that results in the benefit of another person and is strongly associated with empathic concern for others. Regarding empathic concern, Nina shared: "*It's really core to the way that we as people in a social world bond and form deeper relationships. It's the way that we start to become more vulnerable and honest with each other.*"

Anna described empathic concern and prosocial behavior: "*I feel like it's hard to have that kind of genuine care if you don't also feel like you have an idea of what's going on with that person."* And Danielle added: *"So that's why I usually try to think if it was me, 'What would be most helpful in this situation?' And then depending on the signals I get, I decide to go further down that direction."*

Furthermore, Emma shared that she attended an autism conference a few years ago and supported a conference attendee:

"*I was part of the team that was providing support to attendees and stuff like that. And there was one autistic attendee who got very distressed because they attended a session*

and there was something the presenter said that triggered them, so they had to leave. I was checking in with them and tried to provide sort of a calm space, sitting there and being present with them, in a non-judgmental way of trying to get onto their wavelength…not to make them feel more distressed, but more how to help provide a space where people can feel comfortable around me."

Relatedly, Nina described helping her friend:

"*I don't have a lot of romantic relationship experience, so if a friend comes up to me and says, 'I've been having trouble in my relationship and I don't know if we should break up', I can still give them some practical advice or help them make a timeline of what this situation looks like over time. But I can't comfort them or wrap my arm around them because I don't know exactly what they're going through. So, I feel like that's where I struggle."*

Nina shared how she offered support to her friend despite not having experienced the situation herself. Moreover, several of the connecting threads described in these excerpts point to the participants' emotional attunement to the needs of others, their physical presence in supporting others, and helping to alleviate the other person's distress. The women shared their experiences with helping others, despite often overwhelming emotional situations.

Experiencing Emotional Overwhelm

Many of the women described their experiences in feeling emotionally overwhelmed. Anna described feeling intense, overwhelming empathy: *I feel everything very strongly, so empathy can be very overwhelming for me.* Emma shared: "*Throughout my life, empathy has been a sensation that is very difficult for me to ignore or 'shut off', even though I wish I could because it can become so intense and overwhelming to experience."* The women also described

various scenarios in which they felt the intensity of their emotions internally versus outwardly, specifically those beyond empathy-related situations.

Emotional Experiences Beyond Empathy-Related Situations

The women also described various scenarios in which they felt the intensity of their emotions internally versus outwardly, specifically those beyond empathy-related situations. For example, Emma described her experience:

> "*But I think I'm gonna continue to hammer the point that, we can feel really intense emotions, even if it does not look like it at all. Chances are we're definitely feeling them internally, and I am very sensitive and aware to when others get overwhelmed by people [emotionally] dumping things on them or projecting their emotions onto others. I have always tried very hard not to do that with other people, especially people who have nothing to do with the specific issue, the specific experience, or memory that I am experiencing."*

Claire described a similar experience following a breakup:

> "*He has no idea how I feel, as far as he knows, I took it fine because I acted fine when he told me. And I was like, 'oh, okay, that's fine, let's be friends'. I didn't show any problem with that situation, but in reality, the real truth, is I was really, really upset about it. He doesn't know, because I didn't show it emotionally, and I didn't use words to say, 'I'm sad about this or I feel so devastated'…no words about how I was feeling, and I also showed no outward emotions. I didn't cry, I didn't yell. Sometimes being autistic, you come across very matter of fact and robotic, like, you're not showing any emotions or any giveaways to your feelings, but that doesn't mean the feelings aren't there. They're just not coming out, you know, not being shown.*"

Claire's account illustrated the disconnect between intense internal emotional experience and outward expression. She described both withholding verbal descriptions of her emotions and not displaying expected emotional behaviors such as crying or yelling. Participants repeatedly emphasized that an absence of outward expression should not be interpreted as an absence of feeling. Claire also shared about the death of her cat and the difficulty she experienced expressing her grief outwardly:

> *"I was actually so incredibly sad that I didn't have any outward expression of my sadness, and I couldn't understand it myself. I couldn't understand why I wasn't crying. I had a very, like, flat facial expression. It was ironic, it looked like I wasn't caring and wasn't sad, but it was actually that it was at such a high level that no crying was happening. Of course, I cried later when I was in private at home. Maybe I was in shock or something. It was so bad that I couldn't even deal with the emotions."* (Claire)

Although Claire may have appeared emotionally flat to others, she experienced profound sadness that she later expressed privately. Participants echoed Claire's experience and discussed the mismatch between inward and outward expression of emotion.

Disconnection Between Internal and External Emotional Experiences

Many participants used words to describe this mismatch between internal and external expression such as: "*It was not matching what I was giving off*", "*I wasn't super vocal when I was having a bad day or needed something*", and "*I've been very good at inwardly feeling stuff and presenting a polished exterior.*" Others shared, however, that it is dependent on a specific emotion as to whether they feel a disconnect between internal and external emotional expression. For example, Nina described:

"*It depends on the feeling. Anxiety is something that I physically feeling my chest or in my stomach, and it's clear just from looking at me that is the way that I am feeling. Then other things, like sadness, for example, feels like a tightness or a low feeling in my body. But then in my face and in my voice, I have to manually inject the sadness so that people recognize 'You are sad, thus I am sad, too'. There is a mismatch when it comes to sadness and I have to put in the extra effort to make sure that I am also coming off as sad."*

Nina shared that her expression of emotions is dependent upon which emotion she feels. Other agreed with this sentiment and shared that their family members, partners, friends, or coworkers did not understand if they were feeling an emotion (i.e., such as sadness), unless they showed it externally through their facial expressions such as furrowed brows or frowning, tone of voice, and volume of their voice (i.e., speaking softly). The majority of the participants shared that they gravitate toward internal expression of their emotions, instead of external expression. Kaitlyn read Young Adult novels out loud in the mirror to practice how to say the lines aloud when she was younger. She described: "*I think I'm sometimes a very expressive talker, but I also am not necessarily by nature a very expressive facial expression maker when I talk"*.

Many women also described feeling and processing their emotions after the experience occurred, or through writing or art. Gabrielle shared when several loved ones passed away in a short time, she used art to move through grief:

"Artful depictions of grief hit me with a lot of clarity. I bought an art print recently that was this tree that looks very mournful and next to it is the stump of another tree. And I thought, 'That's such a beautiful depiction of grief, I love that". I think grief is always part of me. I'm grateful that someone else can comprehend the feeling and so I feel very

connected to portraits of grief or sadness because I have been through so much. There is a certain connection and understanding that someone else has been through that as well and they know how to write or share about it in some way. It all comes back to this feeling of being connected to another human, and knowing that they understand the thing that I also understand, this is part of the human experience. I love that people can share and bond even over things that hurt."

In her depiction of this experience, Gabrielle described emotional processing that can occur through creative expression and connection with others rather than through immediate outward communication. She also highlighted the importance of feeling connection, support, and understanding from others.

Desire to be Understood and Receive Empathy from Others

A consistent theme across the interviews was participants' desire to be understood by others. Repeated experiences of being misunderstood sometimes led participants to "take up less space" by withholding thoughts and emotions. Anna expressed:

"I would be kind of nervous or hesitant to share a lot. I had been misunderstood so much by mental health professionals, doctors, my own family, teachers, and other peers., You just kind of get that messaging of, 'Okay, I don't need to share about me too much'."

Anna described the way in which she withheld her thoughts and feelings after repeatedly feeling dismissed or misunderstood. This messaging points to the challenges some autistic women face when being misunderstood by others. Furthermore, Emma highlighted the challenges she faced with family members who failed to recognize the severity of her mental health struggles:

"Maybe I wasn't explicit enough or sometimes, I'm not good at conveying the emotion that I might be feeling because it's difficult for me to ask for things, to confront people. When I have been in a really deep depression or when I was in a serious crisis, people did not pick up on that at all. I mean, the most some people might have been able to pick up was that I was experiencing some anxiety, but the deeper, long-term things that were going on with the anxiety, no one picked that up. No one had a clue."

Additionally, Sarah described a scenario in which she wished others would have expressed empathy or concern to her needs:

"One summer during camp, I became very overstimulated and had frequent long meltdowns. I was not shown empathy or understanding…what I really needed was compassion and support, but I often felt misunderstood. I wish the staff would have been more empathetic and helpful. One time when I communicated that I needed a break, the staff looked at me and said, 'You don't look like you need a break'. I just wish they would have seen my shoes and my side of the story, versus telling me how I must have been feeling. It came across as they didn't care."

Sarah expressed that these experiences taught her the importance of perspective taking and recognizing that outward appearance may not accurately represent internal experience. Her account demonstrates that participants not only experienced empathy toward others but also had a strong desire for empathic concern to be extended toward them.

Feeling Misunderstood by Others

Participants further endorsed feeling misunderstood by others, such as family members, friends, coworkers, and peers. Several women described their experiences spending time with friends and being labelled as "overly sensitive", "too expressive", or "too much". Many women

wished that their family, coworkers, or friends understood their emotional expression. Christina shared that it was related to cultural expectations from her family members: "*You're supposed to keep to yourself, but also be graceful and show your emotions, but in a nice way, and I feel like I just don't fit into that."* Others shared that friends felt differently or held contradicting opinions on how to handle prosocial situations which lead to a growing feeling of disconnection. For example, Gabrielle shared that when she was younger, she was at her friend's house swimming in the pool. Her friend's dog found a frog in the pool and began chasing it. Gabrielle shared:

> *"So, I scooped the frog out to be free from the confines of the pool and the dog started attacking the frog. My friend and her family were all laughing at the frog, as it was losing a leg and trying to hop away. It really upset me. So, I got out of the pool and tried to help the frog get away from their dog and they just kept laughing. I started crying and it didn't make sense to me why no one else would care. I just felt so disconnected from everyone else in that moment. And I think what hit the most was just how isolated I felt from everyone else."*

The isolation and disconnection in feeling sadness and empathy towards the frog in this instance echoes across other participants' narratives. Furthermore, Gabrielle explained:

> "*I think that's the other thing with empathy, it's like when you feel it in a way that's really powerful, or connected to care and concern that other people don't seem to experience at all. It's super isolating; you wonder about your ability to even connect with those people the same way again because it's like if you don't feel moved at all in this moment, I don't understand how you can actually care about other people?*."

The isolation and frustration expressed in this scenario further illustrates the division in feeling one way, while someone else is feeling a completely different emotion. Echoing the frustration, Christina shared a time when she felt misunderstood by others:

> *"I feel like what often happens is, I'll say something and then people extrapolate meaning from it. They'll come out with something different from what I said even though, in my opinion, I feel like I'm being very plain and direct. And those moments are also very frustrating and very upsetting. There would be times when I'd get really sad because I was like, "Why does no one, understand me?."*

The lack of feeling understood by others as well as the isolation further propels frustration and disconnection. Moreover, participants described times when miscommunication also drove the feelings of isolation, frustration, and distress.

Many of the women indicated that even when they communicated directly with others, the miscommunications and misunderstandings prevailed. Christina described her perception of being blunt or direct with others:

> "*I'm a very direct person and I've been told that I'm very blunt. That's just how I communicate, and I think because I am a woman, or present as a woman in the world, people don't respond to that well. I feel like I could say things word for word the same way a man would say it, but I'm labeled as 'a bitch'. So, I've had to learn to really be mindful of the language I use and try to think about the other person when I communicate.*"

In another example, Anna shared a similar anecdote: "*You don't need to interpret it differently than the way I am telling you: whatever I am saying is literally what I mean. You don't need to look for a deeper meaning*." Much of what was also shared throughout the

interviews related to ignorance, lack of curiosity, and lack of empathic response which could lead to miscommunication.

In a different vein, Sarah shared an experience when her colleagues demonstrated understanding, care and empathy when she pushed herself to complete her work assignments:

> *"I was trying really hard to just keep going and not take a break, and just get to the end. And then, at the end, I realized I needed to take a break. I told someone in the office, 'I need a break' and I started crying and being very overwhelmed. My colleagues were there to help me get the weighted lap pad, to help me put my backpack on top of me for the weight, to help me get my headphones and even did not judge when I got frustrated. I'm literally lying on the floor, and they're not judging me. Shortly after, I'm talking about, 'Are we going to happy hour?' And we just moved on.*"

Sarah described the empathy and concern demonstrated by her coworkers as uncommon compared with her experiences in other workplaces. Her colleagues supported her sensory regulation by helping her obtain headphones and weighted items, and accepting her need to lie on the floor without judgment. Their established relationships appeared to contribute to the understanding of her needs, which may have contribute to a decrease in feelings of frustration and isolation when feeling understood by others.

Double Empathy Framework

Participants described their own miscommunication experiences within the double empathy framework, particularly when interacting with non-autistic individuals. Many participants reported that spending time with other autistic peers, friends, or family members required less cognitive effort and facilitated greater mutual understanding.

Christina described the challenge in finding words to communicate: "*To find the words in the first place is hard, and now I have to find the words in a different way so it's more palatable to people, which is very stressful. Sometimes it even discourages me for wanting to talk about a situation if I am direct and someone doesn't perceive it correctly.*"

Others also echo the sentiment that miscommunication is common among peers, coworkers, and friends who are non-autistic, aligning with the double empathy framework. All of the participants endorsed experiencing double empathy in some capacity. Kaitlyn described empathy as a "*translational challenge*" when discussing being with non-autistic people. She continued:

> "*It's not that [autistic people] don't have a conduit for understanding emotions in themselves and others. I think it's more that there are some spots in translation that are difficult to navigate. And I mean, I think that in the times when I am standing in a group of people, and I'm like, 'Oh my god, I have no idea what anyone is thinking. I have no idea what anyone is feeling. I have no clue how to read this.' It's very unsettling. And in those moments it does feel very much like a translation challenge.*"

These differences in communication styles and emotional expressions may create misunderstandings between non-autistic and autistic individuals through the double empathy framework.

In contrast, however, participants also emphasized, that communicating and interacting with another autistic individual does not automatically guarantee understanding and that the double empathy framework should not be generalized to all autistic people. For example, Emma shared:

"*I never really have felt like I could relate to other autistic women. And vice versa. I think many of these women don't feel like they can relate to me. Even within the autistic community and among autistic women, I still feel out of place. It's weird, because I know there's some common things that are shared or supported through research and even in conversations with other autistic women about the shared experience of camouflaging and masking that we all experience. I don't know if it's because I just have masked or camouflaged myself to the point where I'm not relatable to other autistic people. That's one thing that has floated through my mind.*"

These differences in communication styles and emotional expression may create misunderstandings, feelings of disconnection between both autistic and non-autistic individuals, or may perpetuate feelings of isolation. Emma also emphasized that there can be misconceptions between autistic people and autistic-non-autistic people as well. She shared:

"*I also think that autistic people can really also misread each other. You know, there's plenty of people I've talked to or read personal stories where I hear a lot about the ability to relate to one another, the ability to read each other's emotions, or pick up and just understand what emotions others are feeling. But there's also a misconception because the opposite can happen too, where there is misinterpretation through a lot of missed signals. So, this might be a little controversial I think that not all autistic people have intense empathy. I think there's some that don't have as much empathy as others, or don't experience the empathy as intensely as others.*"

It is important to highlight that some autistic people may feel intense empathy, while others may not. As Emma mentions, there is not a prescribed or generalizable way in which to indicate all autistic women have these shared experiences. The art of qualitatively examining and

understanding nine women's lived experiences with empathy is the shared meaning the evolves, including difference in opinion. Kaitlyn echoes Emma's sentiment:

> "*So yeah, I've definitely experienced double empathy and like the beautiful synergy of being in a very neurodivergent space and working with other neurodivergent people. But it is also not foolproof. It definitely has its hiccups. I want to mention that because I think there are definitely situations where double empathy kind of falls apart.*"

Identity and Societal Expectations

Autistic Identity

Participants shared similar narratives about their own autistic identities and how it has shaped their own experiences with empathy. Kaitlyn described when she was diagnosed as autistic:

> *"I hit a wall in college and I had always performed really well academically, so I kind of just flew under the radar for a while. I think there's so much less judgment among people who are constantly trying to translate the world around them. They are so much more accepting of whatever it is that you do or say, and sometimes they're not. But, in general, I think there's more of a willingness to make your own rules. I think what's cool about the idea of neuroqueer identity is both of those communities are communities where people really are much more open to 'Well, this is how I do it'. And they're like, 'All right, cool. Can you explain that to me in extensive detail?'."*

The constructs of openness and understanding expressed within Kaitlyn's narrative shone through many additional anecdotes. For example, Emma expressed the importance of experiencing empathy:

"*I think it's really important when you interact with other autistic people to always presume that. Including people with higher support needs, people who may not communicate the way you and I are communicating. You know, we always want to presume that autistic people, even if they don't have social filters others may have, that it doesn't mean that they do not have experiences where they're feeling things intensely*."

In a similar vein, Sarah shared misconceptions with autism and empathy:

"*I would say that body language or tone of voice may look different, but just because someone doesn't want to change their routine to do something differently, that doesn't mean they don't care. It just means that they're stuck in their way of doing things, which reflects their disability, but that doesn't mean they don't have empathy. I find that autistic people, we tend to not have to explain ourselves as much and we just naturally understand each other we're with, like, some of my non-autistic colleagues."*

Gabrielle conceptualized how empathy is understood and expressed in autistic individuals:

"I think autistic people can be the blueprint for how empathy works. Not always, as I mentioned, I have that friend that struggles with empathy, but I think, looking to autistic people's swiftness to connect to things and to feel things very strongly as a blueprint for how empathy works. Sometimes you see externally that they're doing a lot of thinking and working to survive and operate in the same situations that maybe neurotypical people can do with less effort or thinking, and if you look at the people that have to work harder, it will help you understand that not everything is easy, you know?"

Gabrielle's depiction of empathy supports the argument that empathy for some autistic women can be expressed in a less visible, obvious manner. Encouraging non-autistic people to express curiosity about the cognitive effort it takes for some autistic people to operate and

survive in a neurotypical world is a core component of this work. Gabrielle shared, "*I think autistic people do that a lot anyway because they have to. It's integral to their operating through the world when they're constantly trying to understand what's going on around them. So, if you embrace willingness to understand them, it can help inform your own empathy even further."*

Gender and Cultural Identity

In addition to autistic identity, participants described navigating gender identity and societal expectations surrounding emotional expression. Many participants endorsed pressure to regulate their emotions and present themselves in socially acceptable ways, including familial and cultural expectations. Specifically, Christina shared: "*With being Hispanic, people sometimes perceive my emotions in a different way and I get labeled as 'angry' even though I'm not angry. I'm explaining that I didn't like this and I often get labeled as 'angry or crazy'. I think it's partly being a Hispanic woman, people are more ready to label me as that than they would for others*." She continued:

> *"Especially because I come from a Hispanic background, I feel like there's this idea that women are supposed to carry themselves, to be very delicate, well-spoken or soft-spoken. Almost to keep to yourself in a way, but also at the same time, we are expected to show emotion. It feels contradicting. For example, I feel like as a woman, I'm expected to be a lot more empathetic than a man is. I'm supposed to know how to comfort people or say the right words. I think it's important when you communicate to be tactful and respectful of people's emotions, but sometimes it means that I can't be as direct as I'd want to be, and it often feels like because I'm a woman, it's perceived not in a great way. Whereas if a man does it, it's like, "Oh, he's so cool, and he's a boss."*

As Christina described, the other participants agreed by sharing their exhaustion, effortful cognitive load in navigating cultural and societal expectations of showing emotions as women, but not showing "too much" emotion. She also noted that there is pressure to regulate her emotions with friends, peers, colleagues, or family members in addition to "acceptable and unacceptable" emotions that she is allowed to express. Claire added:

> *"There's an expectation that women are supposed to be happy and friendly all the time. When you are mad about something or if you have to be assertive and resolve a problem in a matter-of-fact kind of way, I feel like you're not fitting society's expectations. If a man says, 'Hey, we need this project to be completed by Thursday', it goes over better than a woman. A woman is expected to phrase things more politely and softly than men. And I express myself more directly, but I feel like I ruffled feathers, even though I never did anything rude. I was just communicating clearly and firmly."*

Navigating stigma and societal expectations may lead to burnout and exhaustion among autistic women. Consequently, many women mask or camouflage their autistic traits to assimilate into social situations.

Masking and Camouflaging

Participants shared expectations for masking and camouflaging in order to "fit in" and suppress their autistic traits. Camouflaging, or masking, refers to employing specific behavior and cognitive strategies for autistic people to adapt within a non-autistic social world. Women described the substantial cognitive load, exhaustion, and burnout they experienced when "*pretending to be someone I am not*" and filtering their thoughts. Others expressed diluting or toning down their emotions for fear of being perceived "*too heightened, too much, or too sensitive*". They also attempted to make themselves less noticeable by masking their autistic

symptoms. Emma shared: *"As an autistic person, sometimes people cannot detect my empathic responses because I try to camouflage so as not to overwhelm other people or myself."* Often, participants masked with colleagues or in the workplace. Anna described:

> *"When I was going through the process of getting evaluated, I thought 'Okay, once I know what this is, I can just stop masking. I can just move on and live how I really am'. But then there's these realizations, 'I have to go to work, I have a job where I have to be in-person, face to face with people", so there's certain things I have to do there. I feel like that's always been a thing for me, and especially going undiagnosed for so long."*

Notably, however, there were a few mentions of un-masking or allowing themselves to feel comfortable. For example, Sarah shared that due to the support from her colleagues, she was able to calm her nervous system with headphones and a weighted lap pad. Similarly, Claire shared that she allowed herself to unmask post-diagnosis:

> "*Before my autism diagnosis, I would really push myself to act a certain way, like society's standards for women, which would be…making eye contact, saying hello, making small talk with people. These expectations of being this beautiful, friendly creature to everybody. I used to act like that most of my life, but it's draining. . So, I allowed myself to do the bare minimum, to not be rude, but I don't push myself to be extra friendly or have small talk with every stranger that I don't want to have. That actually gives me more energy for me. I'm putting myself as a higher priority than being friendly to everyone that I pass by all day long."*

Therefore, un-masking may create greater capacity for self-regulation and well-being. Claire's description of "taking up space" and prioritizing her own needs reflects a broader theme throughout the interviews: participants desired environments in which they could express

themselves without constantly monitoring whether their behavior or emotions were deemed "acceptable", adhering to gender or cultural expectations or societal norms.

Chapter 5: DISCUSSION

The purpose of this exploratory qualitative study was to examine how autistic women understand and experience empathy. Across participants' narratives, empathy emerged as an interrelated, multidimensional process involving emotion identification, affective experience, perspective taking, and prosocial behavior. Rather than describing an absence of empathy, participants consistently described feeling emotions deeply, sensing the emotional states of others, caring about others' experiences, and engaging in helping behaviors. At the same time, participants expressed difficulty communicating or externally expressing internal experiences in ways that were recognized by others, as well as confusion with perspective taking. Therefore, an important distinction between feeling empathy, expressing empathy, and having empathy recognized by others was highlighted throughout the findings.

Participants also described the effects of emotional overwhelm, masking and camouflaging, gendered expectations, communication differences, and repeated experiences of being misunderstood. Taken together, these findings support approaches that center autistic voices when examining social and emotional experiences (Fletcher-Watson & Bird, 2020; Gillespie-Lynch et al., 2017; Kimber et al., 2024; Speyer et al., 2022).

Empathy as a Reciprocal Process

One major finding was the reciprocal nature of interpersonal understanding and challenges that autistic women described. Participants described difficulties both in communicating their own emotional experiences and in translating their perceptions of others' emotions into socially expected responses. They also described interactions with non-autistic people as sometimes requiring additional translation. Kaitlyn described this as a "translation challenge," while Christina described having to find different words to make her communication

more "palatable." Others described being highly direct and literal in communication, while some described intuitively sensing another person's emotional state without knowing how to translate that perception into an exact response. These experiences align to some extent with the Double Empathy Framework, which conceptualizes misunderstanding as potentially reciprocal rather than originating solely within the autistic individual (Milton 2012, Milton et al., 2018; Gillespie-Lynch et al., 2017).

Participants often described greater ease and mutual understanding with other autistic people, consistent with research suggesting that autistic-to-autistic interactions may facilitate social connection (Gillespie-Lynch et al., 2017; Kimber et al., 2024). Importantly, however, participants did not view this framework as universal. Emma and Kaitlyn emphasized that autistic people might misunderstand one another and that shared autistic identity does not guarantee mutual understanding. This reinforces the heterogeneity of autistic experiences and suggests that empathy and communication depend on the individuals, their communication styles, and the context of interaction. Another notion is that challenges with empathizing and feeling empathy from others may stem from both autism-related emotion interpretation challenges (of others' emotion) and varying forms of emotional expression that are associated with autism.

The reciprocal nature of empathy was particularly evident in participants' repeated desire to receive empathy from others. Participants described being misunderstood by family members, professionals, teachers, coworkers, and friends, sometimes leading them to withhold emotions or "take up less space." Sarah's experience of being told that she did not "look like" she needed a break illustrates the consequences of judging internal experiences through outward presentation.

This finding expands the study of empathy from questioning whether autistic women are understood, supported, and empathized with by others.

Understanding Empathy as a Multidimensional Experience

Participants described different combinations of affective experience, emotion recognition, perspective taking, and prosocial behavior, which are consistent with multidimensional conceptualizations of empathy (Walter, 2012). For example, some participants described intuitively sensing or sharing another person's emotions, while others described understanding another person's perspective without experiencing the same emotion. Some recognized that something was wrong but struggled to identify the specific emotion or determine how to communicate an appropriate response.

Participants' accounts of affective experience provide important evidence against a generalized empathy-deficit account in autism. One participant described empathy as a sensation that could be difficult to "shut off," while another described experiencing empathy as intense and overwhelming. These examples are consistent with research demonstrating affective responses among autistic individuals (Cook et al., 2013; Gepner et al., 2001; Harms et al., 2010; Kimber et al., 2024; Song et al., 2019) as well as personal distress stemming from empathic reactions (Mazefsky & White, 2014). At the same time, participants distinguished emotional resonance from emotion identification. One participant described sensing another person's "vibe" without necessarily knowing which emotion was being experienced. This suggests that emotional awareness and the ability to label or communicate an emotion may not always occur together, consistent with research examining the role of alexithymia in emotional processing (Bird & Cook, 2013; Kinnaird et al., 2019).

Some participants described perspective taking as a skill they use, while others described it as requiring conscious effort or additional explanation. For example, one participant explained that she could recognize that another person's response made sense from their perspective while still struggling to understand it fully, while another characterized it as an "emotional language barrier." These examples align with research identifying differences in cognitive empathy (Conner et al., 2020; Speyer et al., 2022).

Furthermore, anecdotes of prosocial behavior provided additional examples of empathic concern. Every participant described helping others, such as providing practical advice, remaining present with someone in distress, creating calm environments, and determining what would be most helpful. For example, one participant described supporting a friend through relationship difficulties despite not having experienced the same situation herself. These accounts support the conceptualization of empathy-in-autism as involving multiple processes and are consistent with previous studies linking empathy, compassion, and prosocial intent among autistic individuals (Knight et al., 2019; Walter, 2012).

Overall, participants' narratives suggest that empathy among autistic women may involve different combinations of emotional resonance, emotion recognition, perspective taking, and prosocial action. These processes may occur independently or together, with some processes requiring greater effort than others, which is consistent with Kimber et al. (2024).

The Contextual and Relational Factors of Empathy

Participants described empathy as influenced by emotional intensity, interpersonal relationships, communication expectations, and environmental and societal demands. For example, one participant described greater emotional resonance when an experience was personally familiar or particularly serious to her, such as bereavement or significant medical

circumstances (Knafo et al., 2008; Stel et al., 2008). These examples suggest that differences in empathy across situations among autistic women may reflect differences in the strength or intensity of the emotion and the relationship to the other person.

Relationships and environmental context were revealed as important findings. For example, one participant's experience with supportive coworkers illustrated how acceptance and concrete accommodations allowed her to regulate during sensory overwhelm and remain connected with others. Participants' accounts therefore suggest that empathy is relational: opportunities for mutual understanding, trust, and communication can shape how empathy is experienced and expressed.

A consistent finding was the distinction between internal emotional experience and outward emotional expression. One participant described profound sadness following the death of a pet despite appearing emotionally flat, while another explained that some emotions, such as sadness, required deliberate effort to communicate through facial expression and vocal tone. Participants repeatedly emphasized that an absence of visible emotional behavior did not indicate an absence of feeling. This finding is consistent with research suggesting that autistic people may express emotion, and empathy specifically, differently from neurotypical expectations (Fletcher-Watson & Bird, 2020; Speyer et al., 2022; Kimber et al., 2024). It also raises concerns about relying on observable behavior as a direct measure of internal empathic experience.

Participants further described empathy as sometimes requiring substantial cognitive effort. They monitored facial expressions, tone, word choice, and social expectations in attempting to communicate appropriately. Thus, empathic expression could involve translating an internal experience into a socially recognizable form rather than simply producing an automatic social response.

Navigating Cultural and Gendered Expectations, Masking, and Camouflaging

Participants described societal expectations as a significant influence on how their empathy was expressed and interpreted. Participants described being expected to be emotionally attentive, tactful, friendly, and comfort others because they were women. Many described pressure to communicate softly and politely as tied to cultural expectations (i.e., specifically within one participant's experience of her Hispanic culture), while direct communication was often interpreted negatively. This participant described the ongoing pressure she felt to present as emotionally regulated in front of family members. These experiences are consistent with literature describing gendered and cultural expectations surrounding autistic women's social presentation (Kim et al., 2019; Kuo et al., 2022; Mandy & Lai, 2017).

Masking and camouflaging emerged as important strategies for navigating these gendered expectations. Participants described learning eye contact, small talk, emotional expression, and other behaviors with the intention of adhering to social norms. While these strategies may have helped them navigate professional and interpersonal environments, participants also described masking as substantial cognitive effort, therefore, leading to exhaustion and burnout.

On the other hand, participants also described unmasking as somewhat restorative. For example, one participant described that after receiving her autism diagnosis, she stopped forcing herself to engage in unnecessary small talk and constant friendliness, which gave her more energy to prioritize herself. These accounts support literature linking camouflaging with exhaustion and other negative consequences while illustrating the potential benefits of environments that reduce pressure to perform neurotypical social behavior (Cook et al., 2021; Evans et al., 2024; Lai et al., 2021).

The findings therefore suggest that gender may influence how empathy is judged and expressed rather than determining empathic ability and capacity. Autistic women may experience both genuine empathy and substantial difficulty meeting socially expectations of emotional expression. This may help explain why social competence can coexist with internal effort and why some autistic women remain unidentified or are diagnosed later in life (Cargill et al., 2024; Halladay et al., 2015; Tien et al., 2023).

Implications for Understanding Empathy in Autistic Women

Participants' narratives demonstrate that having empathy, experiencing empathy, expressing empathy, and having one's empathy recognized are distinct processes. As participants understood another person's experience without sharing the same emotion, intuitively sensed distress without knowing exactly how to respond, or experienced intense emotional concern while appearing externally neutral, they employed the four empathy-related processes in this scenarios (Walter, 2012).

Moreover, the findings also provide qualitative support for hyperempathy as a possible explanatory framework of empathy in autistic people (Fletcher-Watson & Bird, 2019; Kimber et al., 2024; Markham & Markham, 2010). Several participants described empathy as intense and difficult to regulate, which is consistent with existing research on hyperempathy (Cheang et al., 2025; Kimber et al., 2024). Notably, participants' narratives suggest that emotional intensity does not necessarily result in greater outward expression. In some instances, overwhelming emotions appeared to contribute to shutting down, withdrawal, delayed time to process, and limited verbal or facial expression.

This finding has implications for how empathy is conceptualized and assessed. If empathy is inferred from observable behaviors such as facial expressions, tone of voice, or

immediate verbal responses, individuals who experience emotions intensely but express them differently may be inaccurately perceived as lacking empathy. Participants' experiences demonstrate that the outward expression and visibility of an emotional response may not correspond to the presence or intensity of the underlying emotional experience. Some participants also described processing emotions privately or through writing and art, suggesting that emotional expression may occur through delayed or creative experiences. Finally, the participatory co-design methodology used in the present study further extends calls to center autistic voices by involving autistic women in the development of the research itself (Benevides et al., 2020; Chown et al., 2017; Cooper et al., 2024; Gomez et al., 2018; Hens et al., 2018; Nicolaidis et al., 2011).

Limitations

There are several limitations that should be considered when interpreting these findings. First, the exploratory qualitative design was intended to provide depth regarding participants' lived experiences, rather than produce findings that can be generalized to all autistic women. The findings therefore should be understood as contextually situated accounts of participants' experiences. Additionally, the study relied on live, self-report narratives and retrospective reflection. Participants' accounts may have been influenced by memory, their experiences, or changes in their understanding of autism and empathy over time. Occasionally, participants reflected on their experiences that occurred before their autism diagnosis, which may have influenced interpretations of past events. Retrospective reflection, however, remains valuable for understanding how individuals make meaning of their lived experiences over time.

Participants may also have differed in their conceptualizations of empathy. As reflected in the findings, empathy can encompass emotional expression, perspective taking, compassion,

concern, validation, and prosocial behavior. These differences may have influenced how participants interpreted interview questions and described their experiences.

Finally, the study may be subject to selection effects. Individuals who were interested in or had particularly salient experiences related to empathy may have been more likely to participate. Additionally, although participants described cultural, gender, relational, and workplace influences on their experiences, these factors were not examined systematically. Future studies should more explicitly focus on how intersecting identities and social contexts shape empathy and emotional expression among autistic women.

Future Directions

Future research should continue to center autistic perspectives when conceptualizing and measuring empathy. Participants' distinctions between experiencing empathy, expressing empathy, and having empathy recognized by others suggest that conventional measures may capture only one part of the empathic experience. Participatory co-design (PCD) should continue to be used in developing measures that distinguish the internal emotional experience from outward expression.

Studies should further distinguish between internal emotional experience, outward emotional expression, and others' recognition of empathy. Studies that examine discrepancies between self-reported emotional experiences and observable behavior may provide a more nuanced understanding of empathy in autistic populations. Participants described modifying their facial expressions, tone, language, and emotional responses so that others would recognize their internal experiences. Research should examine whether environments that accommodate autistic communication improve observers' ability to recognize autistic individuals' emotions and reduce the cognitive effort required for social interaction. Furthermore, longitudinal studies could also

examine how experiences of empathy, emotional expression, masking, and understanding change over time, including before and after autism identification or diagnosis. Further research on masking and camouflaging may clarify how the cognitive effort associated with modifying emotional expression influences emotion regulation, exhaustion, and burnout.

Moreover, research grounded in the Double Empathy Framework should examine empathy as a reciprocal interpersonal process by comparing autistic-autistic, autistic-non-autistic, and non-autistic interactions. This may help identify how differences in communication and emotional expression contribute to mutual misunderstanding and connection.

Finally, future studies should more explicitly examine the intersections of race, ethnicity, culture, gender identity, and age to examine how these factors may interact with autistic identity to shape empathy, masking, and social expectations. Investigating how expectations surrounding femininity and emotional expression influence autistic women's experiences may provide greater insight into why some forms of empathy are recognized while others remain invisible. Comparative research including autistic men, nonbinary individuals, and other gender-diverse autistic populations would help determine which findings are specific to autistic women and which reflect broader autistic experiences.

Conclusion

This study provides evidence that autistic women experience empathy in complex and multifaceted ways that may not be adequately captured by previous empathy conceptualizations. Participants described intense emotional experiences, intuitive awareness of others' emotions, perspective taking, concern for others, and prosocial behavior. They also described, however, difficulty translating internal emotional experiences into outward expressions that others could

readily recognize. The distinction between experiencing empathy and having empathy recognized by others represents a central contribution of this study.

Participants' accounts demonstrate that atypical emotional expression should not necessarily be interpreted as a lack of emotional concern. Instead, empathy may be expressed through internal emotional experience, direct communication, delayed processing, creative expression, or helping behaviors.

The findings further support an understanding of empathy consistent with the Double Empathy Framework for some participants. While the framework does not capture all participants' experiences, some gravitated towards the double empathy framework in describing a disconnect between autistic and non-autistic communication and emotional expectations. Others described interpersonal misunderstandings that appeared to emerge from overall challenges with empathic communication that are not related to autistic differences. Additionally, gender norms and masking further shaped how participants navigated these differences.

The findings suggest that understanding empathy in autistic women requires attention to whether a person can identify or respond to another person's emotions, but more importantly to how empathy is experienced internally, communicated outwardly, recognized by others, and shaped by the social environment. Listening directly to autistic women offers a more nuanced understanding of empathy and challenges existing assumptions underlying traditional definitions and measures of empathic ability.

APPENDIX

Interview Guide

- Briefly introduce myself
- Invite participants to share about themselves (within their comfort level)
- Sharing study goals and purpose of study

Focus of interview: What has been your experience with empathy throughout your life?

Question Brainstorm

1. Think of a time when a person did not recognize your own feelings.
    a. How did you feel?
    b. How do you wish they had responded instead?
2. Everyone has times where they have feelings that can be misunderstood by others. Can you think of a time where you had an important feeling and others around you didn't understand? [*include example here from co-design group*]
3. Have you ever felt a mismatch between how you feel internal versus how you outwardly express your emotions?
    a. Has there ever been a time where someone directly asked you why you didn't cry or why you weren't happy? (*i.e., reacting to something "as expected")*
4. As a woman, what challenges have you experienced with sharing your emotions? (*e.g., living in a societal environment that my not fit your social needs*)
    a. Are there aspects of your identity that impact sharing your emotions?
        1. How do you think gender has impacted this?
        2. How do you think your autistic identity is impacted?
5. What do you think other people should know about autistic people's experiences with empathy?

Interview Protocol

1. What does empathy mean to you?

2. [*Build on response above & briefly share definition of empathy*]: "Understanding and sharing an emotional experience with another person, including awareness that the emotion being experienced by the other person and understanding the person's ensuing thoughts."

3. Everyone has times where they have feelings where may be misunderstood by others. Can you think of a time when you felt like you had an important feeling and others around you did not understand?
    a. How did you feel?
    b. How do you wish they had responded instead?
    [*include example here from co-design group (i.e., someone who lost their pet)*]

4. How would you describe feeling your emotions? Is there an inward/internal feeling or outward/external feeling that might not match?
    a. Do you feel that internal expression, outward expression, or both? [*Example: a feeling like you mentioned putting your pet down, or being rejected on a date*].
    b. What does it feel like? Is there a way to describe it through words or emotions? Can you tell me more about that?

5. Society has different expectations specific to gender (e.g., *expectations of women to show fewer emotions*). As a woman, what challenges have you experienced with sharing your emotions?
    a. [*Ask based on interviewee's response*] Are there aspects of your identity that impact sharing your own emotions?
        i. How do you think your gender identity has impacted this?
        ii. How do you think your autistic identity has impacted this?

6. What do you think other people should know about autistic people's experience with empathy? [*optional subcategories/themes for question stems*]
    a. Misconceptions of experiencing and expression feelings?
    b. Masking/camouflaging?
    c. Double empathy framework?
    d. Later-in-life diagnosis; experiences with empathy pre- and post-diagnosis

7. Is there anything else you would like to add?

Analytic Coding Process

Codes and Subthemes (Inductive)

1. *Concern with hurting people's feelings*
2. *Misunderstood by others/disconnect with the emotion experienced*
3. *Prosocial (helping behavior)*
4. *Outward versus inward expression of emotion*
5. *Frustration of being misunderstood*
6. *Being perceived as "cold or a bitch"*
7. *Mindful of language I use*
8. *Being labeled "dramatic" "sensitive" "blunt/direct"*
9. *Double empathy framework*
10. *Wish others would ask questions/be curious*
11. *Wonder how others perceive me in emotional situations*
12. *Coworkers showing empathy*
13. *Family members understanding me OR misunderstanding me*
14. *Planning what to say next on conversation (cognitive load of communication)*
15. *Overwhelm of feeling (stress, anxiety); embarrassment/guilt*
16. *Labelling of emotions*
17. *Hyperempathy*
18. *Not sure how I feel, but I know I feel something*
19. *Comply with society OR not fitting in*
20. *Cultural or religious impact of presenting myself in society*
21. *Keeping emotions to myself / making myself small around others*
22. *Gender stereotypes (female)*
23. *Showing empathy to animals or pets, movies/TV show characters*
24. *Process emotions through writing or art*
25. *Process emotions days later, after situation occurred*
26. *Feeling emotion in my body, but don't know where*
27. *Anecdote of anxious or negative emotion*
28. *Anecdote of positive emotion*

29. *Challenge understanding or labelling emotions*
30. *Perspective taking*
31. *Autistic identity*
32. *Support system (friends/family being supportive of autistic identity)*
33. *Effortful/cognitive load*
34. *Exhaustion/burnout*
35. *Masking or camouflaging*
36. *Emotional awareness, attunement, intuition*
37. *Strong feeling of emotions*
38. *Understanding emotions of others*

Codes and Subthemes (Deductive)

Conceptualizing Empathy Through Participant Lenses

Conceptualization of Empathy

Empathic Concern for Others

Emotional Mirroring

Difficulty Communicating Emotions

Confusion with Perspective Taking

Prosocial Motivation and Behavior in Response to Other's Affect

Experiencing Emotional Overwhelm

Emotional Experiences Beyond Empathy-Related Situations

Disconnection Between Internal and External Emotional Experiences

Desire to be Understood and Receive Empathy from Others

Feeling Misunderstood by Others

Double Empathy Framework

Identity and Societal Expectations

Autistic Identity

Gender and Cultural Identity

Masking and Camouflaging

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