

# The Impact of Childhood Parenting Styles on Feelings of Embodiment in Adolescence

Abby Droeger & Joan Miller

Department of General Psychology, The New School for Social Research

This research project aims to better understand the relationship between parenting styles and feelings of embodiment. Embodiment is defined as a perceived sense of ownership and awareness that individuals have over their own bodies, and healthy embodiment is believed to positively impact psychological functioning in children. The parenting styles examined within this study were Baumrind's original three parenting styles: authoritative, authoritarian, and permissive. These parenting styles are based on two dimensions: control and warmth. Authoritative parenting has been found to encourage independence while maintaining a supportive environment. For this reason, there is a lot of research that supports authoritative parenting in young children. Undergraduate participants were asked to complete a modified version of the Parental Authority Questionnaire and the Body Consciousness Questionnaire. Participants were then shown three parent-child interactions related to sleep, food, and bathroom, as well as two potential parent responses to these interactions. Participants were asked to rate the level of autonomy and warmth each of these potential parent responses conveyed, as well as which response they preferred, which response they believed that their parents would have chosen, and which response they would choose if they were the parent. Due to the empirical research supporting the benefits of authoritative parenting in many aspects of psychological functioning, we predicted a correlation would exist between authoritative parenting and positive embodiment. However, there was no significant correlation found between these variables. A new significant relationship between authoritarian parenting and public body consciousness was found. Further research on this relationship is suggested, as well as the development of a better scale for measuring healthy embodiment.

*Keywords:* parenting styles, embodiment, body consciousness, authoritative, authoritarian

The human connection between mind and body is an essential component of psychological health. The concept of embodiment, a perceived sense of ownership and awareness that individuals have over their own bodies, has risen to prominence in the field of psychology within the last few decades. Despite abundant research linking a lack of embodiment to psychological dysfunction, little is known about the relationship between how development influences embodiment later in life. This study aims to examine the correlation between parenting styles during childhood and embodiment in late adolescence and early adulthood.

## Theories of Embodiment

Embodiment relies on the distinction between body image and body schema. Body image is the primarily conscious system of perceptions, emotional attitudes, and conceptual beliefs regarding one's body. A body schema, however, is the unconscious, automatic sensory-motor capacities and activations (i.e., posture and movement regulation). Both concepts describe embodiment, and both are correlated with healthy psychological functioning and a mind-body connection (Gallagher & Zahavi, 2008). This distinction between body ownership and agency is a useful tool for better understanding the bodily self and psychological dysfunction. The discussion surrounding body schema and body image prompted a classification of two kinds of disturbances of embodiment. The first, based

on body schema, affects the subject's embodied sense of self (i.e., within schizophrenia or depression). The second is related to body image and body awareness (e.g., eating disorders, body dysmorphic disorders, somatoform disorders) (Gallagher & Vaever, 2004). The mind-body relationship is influential in shaping positive psychopathology (Kearney et al., 2022). Embodied self-regulation has grown in therapeutic approaches. An integration of a behavioral component or embodied actions has been shown to benefit a greater connection of mind and body. For instance, mindfulness, yoga, and therapy practices such as CBT require an alignment of body and mind (Brown, 2003; Bryant, 2009). From a clinical lens, a lack of embodiment has been linked to psychological dysfunction and psychopathological disorders such as depression, eating disorders, and schizophrenia, which are often explained as a disturbance of embodiment (Fuchs & Schlimme, 2009). In general psychiatry, there are two kinds of body awareness disturbances: hyper-embodiment and disembodiment (Wilde, 2003). Fuchs and Schlimme (2009) describe disembodiment in the context of schizophrenia, where patients feel that they no longer inhabit the body or they feel alienated from the body. Patients also feel a mechanization of the body, a disintegration of habits, and a sense of detachment or disconnection around others. These researchers describe hyper-embodiment in the context

of depression, where patients feel that they cannot escape the body, the body feels oppressive/heavy, and it is an obstacle (Fuchs & Schilme, 2009). Additionally, individuals experiencing hyper-embodiment describe a loss of the capacity for affective attunement. Both bodily disturbances are the result of a disruption in embodiment in terms of body schema, the unconscious, and automatic processes of the body.

Another psychological dysfunction relating to embodiment dysregulation is the result of a disturbance in body image. Body image was first described by Paul Schilder (1935), who described it as a mental representation of one's body that is developed by every individual. It has been described as a multidimensional concept relating to other people's perceptions, thoughts, behaviors, and attitudes about body and appearance (Gardner, 1996). Eating disorders, such as anorexia nervosa and bulimia nervosa, are thought to develop from a disturbance in body image (Glashouwer et al., 2019). A relationship between positive embodiment and lower body image disturbance has been identified (Cook-Cottone, 2015). For instance, exercise frequency has been associated with higher positive body image (Homan & Tylka, 2014). Piran's developmental theory of embodiment describes five processes to gaining positive embodiment: (1) feeling "at home" in the body and fostering a positive connection, (2) experiencing agency/functionality of one's body, (3) perception and awareness of bodily needs (i.e., hunger), (4) self-care in response to perceived internal needs (e.g., eating when hungry), and (5) embodying one's body in the first person, as opposed to second or third person (Burychka et al., 2021).

### **Gaining Autonomy in Childhood**

Erikson (1950) argued that during early childhood, a conflict arises between our ability to develop autonomy and whether or not we will experience shame and doubt. Erikson classifies this experience as an essential developmental milestone. Strong resistance to parenting during toddlerhood is considered to reflect a child's healthy attempts to assert needs and control (Erickson, 1963; Kopp, 1982). Autonomy theories argue that children are motivated to be autonomous during toddlerhood and, therefore will begin to resist control by parents. During the second year of life, a goal-directed action to gain autonomy emerges, and they explore at greater distances from parents, check back in with mothers less, and orient play less

toward mothers (Eckerman et al., 1975; Bronson, 1974). Toddlers also begin to desire to complete tasks by themselves and resist being helped (Stipek et al., 1992). Additionally, young children begin to say "no" as well as other forms of resistance to control (Dunn & Munn, 1987). Rather than being seen as a complete act of defiance, this stage has been demonstrated to be an important milestone in developmental growth.

The concept of bodily autonomy has become a more widely discussed topic of political and research interest in the United States within the past decade (Kidd et al., 2021). Parenting behavior has been shown to impact the likelihood of children developing autonomy (Cohn et al., 1986). Researchers argue that an environment in which parents raise their children to feel that they can control certain events and assert action, and in which parents avoid powerful external controls, will help to foster autonomy in a beneficial way (Crockenberg & Litman, 1990).

### **Baumrind's Parenting Styles**

Baumrind (1971, 1991) identified three parenting styles based on two dimensions: control and warmth. Parental control refers to the degree to which parents manage their children's behavior, ranging from high control with strict rules and demands to low control with fewer rules and demands. Parental warmth refers to the degree to which parents accept and respond to their children's behavior. Using these dimensions, Baumrind identified three primary parenting styles: Authoritative, Authoritarian, and Permissive. Authoritative parents encourage independence while maintaining control and boundaries. These parents are both warm and firm, taking into account the viewpoint of the child. Authoritarian parents are highly controlling and demonstrate little warmth, providing strict rules and demands for their children. Permissive parents demonstrate warmth but provide very few demands. Their parenting is described as indulgent and passive. A fourth parenting style was later added, based on the research conducted by Maccoby & Martin (1983). This parenting style identifies parents who are neglectful and uninvolved in their children's lives.

According to Baumrind's parenting styles (1991), authoritative parenting has been shown to best recognize and encourage a child's sense of autonomy (Steinberg and Silk, 2002). Correlations have been found between authoritative parenting and both academic and social competence in school-aged children

(Baumrind 1971, 1991). Additionally, authoritarian parenting (characterized by high levels of controlling behavior) has been associated with low social and academic competence (P. Cowan et al., 1994). Mat-tanah (2005) argues that autonomy in childhood should not be confused with permissive parenting because active autonomy encouragement involves a high degree of parental involvement rather than giving into the child's every demand. For instance, a parent should listen to the child's desires, and encourage independent behavior and exploration of the environment rather than giving in to the child completely or demanding complete compliance.

### **Current Study**

When children attempt to address bodily needs and wants, they are sometimes met with disapproval. For instance, after dinner, a child tells their mother, "I am hungry," and they are met with, "No you are not; you just ate". This approach is often the result of frustration or impatience; however, in early childhood, this response may foster an ignoring of bodily needs. Although there is significant research indicating the importance of developing and fostering autonomy, there is little research that focuses on how children use their bodies to control autonomy (Ryan et al., 2015). There is a clear and present gap in the literature regarding the influence of autonomous decision-making, supportive parenting, and feeling a sense of ownership and connection to one's body later in life.

For this study, we have chosen three areas of control that children may use to assert their autonomy, all of which involve control over one's body: eating, bathroom, and sleep. We have defined embodiment as an awareness of one's internal bodily sensations and public perception of one's body. Lacking embodiment would mean feeling uncertain in one's body or lacking awareness, which may translate to feeling greater doubt and shame. We aim to demonstrate a correlation between parenting styles in childhood, particularly a sense of autonomy related to control over one's body and feeling a sense of embodiment later in life. We will use Baumrind's parenting styles (1991) to assess the dimensions of authoritative, authoritarian, and permissive parenting styles that the participants received. We will also use the Body Consciousness Scale, developed by Miller et al. (1981), to assess dimensions of private body consciousness (body schema), public body consciousness (body image), and body compe-

tence (body image). We hypothesize that authoritative parenting will correlate with greater private and public body consciousness, as well as body competence.

## **Method**

### **Participants**

Participants were undergraduate students at the Eugene Lang College of Liberal Arts at The New School. Non-English speakers were excluded because the survey was conducted in English, and it was important to ensure participants were fully aware and could understand and interpret what was being asked. There were no exclusion criteria related to ethnicity, race, or gender. In total, there were 56 total participants, but not all participants completed every question. Fifty-two participants were aged 18-24 years, and four participants were aged 25-34 years. Forty-two participants identified as female, four participants identified as male, seven participants identified as non-binary, two participants indicated that they prefer to self-describe (with one identifying as transsexual), and one participant did not complete the question regarding gender identity.

Recruitment and distribution of the study survey occurred through email to the participants. The recruitment email disclosed that participants would need to complete demographic questions, questions related to different parenting situations, as well as two separate questionnaires. It also disclosed that the study should take approximately 30 minutes to one hour to complete, that participation was completely voluntary, and that participants would not receive any compensation from the researchers. Finally, the recruitment email included a link to the Qualtrics survey, and individuals who were willing to participate and fit the criteria were instructed to click on the link and complete the survey. If the participants did not fit the criteria, they were excluded from the data analysis. After being recruited, participants completed the study online via the New School's Qualtrics platform.

### **Materials and Procedure**

This study examines the correlation between parental authority and body consciousness, intending to better understand how parenting style in childhood influences feelings of embodiment later in life. All participants were recruited via email, and participants who met the criteria completed a Qualtrics survey. The survey first asked participants to fill out the following demographic questions: age, gender identity, race/eth-

nicity, and highest level of education. Participants were asked who they considered their primary caregiver(s) through childhood (which we have defined as ages 1-18), mother, father, both, or prefer not to say. They were asked if they were still in contact with their primary caregiver and if they had any children of their own.

The survey then described three hypothetical parent-child interactions presenting a conflict between the parent and child in which the child uses bodily control to gain autonomy in the situation (i.e., bodily control relating to food, bathroom, and sleep). Participants were then asked how they would respond if they were the parent in each situation. The parent-child interactions were created by the authors to reflect common interactions between parent and child that involve the child's attempt to gain autonomy over the situation using bodily control. The responses were created to reflect common responses of parents to children, one following more authoritative guidelines (i.e., greater warmth and autonomy) and the other following non-authoritative guidelines (i.e., less warmth and autonomy). The level of authoritativeness for each response was validated by how participants rated their level of warmth and autonomy.

The first situation was related to sleep and was presented to the participants in the following description:

For the past few weeks, 2-year-old Emma has been struggling with taking her nap. Every day at naptime, she protests and says she is not tired. She has never had difficulty sleeping on a schedule before, and this has been a new and difficult situation for her parents to deal with.

Two potential responses to this first situation were presented to participants in the following description:

Response one: Her parents listen when she says she is not tired and let her play longer and take her nap later each day.  
Response two: Her parents put her in her crib and leave her to fall asleep, even though she cries and protests. The times when she doesn't fall asleep, her parents say she must stay in her crib the whole naptime and stick to her sleep schedule.

The second situation was related to food and was presented to participants in the following description:

James is seven years old. He is a picky eater and doesn't like to eat any foods that are green. His parents try to get him to eat his

vegetables, even when he doesn't want to. One night his parents gave him broccoli with his dinner, and he asked for something else.

Two potential responses to this second situation were presented to participants in the following description:

Response one: When James refuses to eat broccoli, James's parents ask him to choose which vegetable he wants to replace the broccoli with (i.e., carrots or bell pepper).  
Response two: When James's parents give him broccoli for dinner, they do not allow him to have anything else and let him know that he cannot have dessert unless he finishes his broccoli.

The third situation was related to the bathroom and was presented to participants in the following description:

Mia is three years old and has been potty trained for one year. Even though she is potty trained, she prefers to go to the bathroom at home. Sometimes she has accidents at preschool because she does not want to go to the bathroom.

Two potential responses to this third situation were presented to participants in the following description:

Response one: Her parents say she needs to use the bathroom every day at school. If she does not use the bathroom at school, she does not get a treat when she gets home. If she does use the bathroom at school, she gets to pick out a treat as a reward.  
Response two: Her parents say it is okay to have accidents while she is learning to use the bathroom but encourage her to go when she is at school. They give her a stuffed animal to bring with her when she tries to use the potty so that she will feel more comfortable.

Participants were asked how much each of these responses conveys warmth and autonomy on a 4-point Likert scale (1 = Strongly Disagree; 4 = Strongly Agree). They were also asked which response they preferred and which response most closely resembled how their parents would have acted. These survey questions were presented to offer a more qualitative approach to better understanding participant's relationship with their parents and how they view parenting styles. These more qualitative questions also serve the purpose of reminding the participants of some of the experiences they may have faced as children to prepare them to answer the quantitative questions regarding parenting styles. Parenting styles

were operationalized with the Parental Authority Questionnaire (Trinkner et al., 2011), and Feelings of embodiment were operationalized using the Body Consciousness Questionnaire (Miller et al., 1981).

#### ***Parental Authority Questionnaire***

The original Parental Authority Questionnaire (PAQ; Buri, 1991) was developed to measure parenting style as conceptualized by Baumrind (1971, 1991). The original PAQ consists of 30 items, 10 for each parenting style: authoritarian, authoritative, and permissive. This study uses a modified version developed by Trinkner et al. (2012), which adapts the scale to examine both parents, rather than the mother and father separately. This modified version also shortens the scale due to time and space constraints. The modified version was developed by selecting four items for each parenting style that all the authors agreed were the best representations of each original parenting style as conceptualized by Baumrind. The modified version includes 12 statements (i.e., “My parents feel that children can do whatever they like”; “My parents get very angry if I disagree with them”), with a four-point Likert scale (1: “Disagree strongly; 4: “Agree Strongly”). Results are averaged for each parenting style, with higher scores indicating greater use of that parenting style. Each participant’s score reflects the extent to which their parents used authoritative, authoritarian, and permissive parenting styles. The modified parental authority questionnaire by Trinkner et al. (2012) can be found in the Appendix. Please note that a potential limitation of this questionnaire is that it does not include neglectful parenting as a fourth parenting style. In 1983, Maccoby and Martin suggested a way of measuring parenting styles using Baumrind’s typology and the parenting dimensions: demandingness and responsiveness. They added a fourth parenting style: neglectful. Based on this work, Baumrind expanded her typology to include the fourth parenting style, neglectful parenting (Maccoby & Martin, 1983). This has been left out of the parental authority questionnaire, perhaps because neglectful parenting involves no authority or care for a child’s authority at all. Further research is suggested to better understand the relationship between neglectful parenting styles and feelings of embodiment.

#### ***The Body Consciousness Questionnaire***

The Body Consciousness Questionnaire attempts to modify the psychological dichotomy of public ver-

sus private self-consciousness to the body self. This scale is based on a classification of observation of the self into both private aspects (i.e., thoughts, images, memories, motives, and feelings) as well as the public aspects, which can be observed by outside forces (i.e., appearance, manner, style of behavior). Private body consciousness is defined as the awareness of internal sensations and, public body consciousness is defined as the awareness of observable aspects of the body (Miller et al., 1981). The questionnaire also examines body competence and how effectively participants perceive their body functions. Body competence evaluation is positive; those high in body competence endorse items relevant to effective body functioning. This questionnaire properly addresses both disorders of embodiment situated in dysfunction surrounding the perception of body schema and body image. Body image is the primarily conscious system of perceptions, emotional attitudes, and conceptual beliefs regarding one’s body. A body schema, however, is the unconscious, automatic sensory-motor capacities and activations (i.e., posture and movement regulation). Therefore, in terms of the body consciousness scale, private and public body consciousness are measures of body image, and body competence is an evaluation of one’s body schema. The questionnaire is a 15-point scale with statements relating to all three factors of body consciousness: private, public, and body competence (“I am very aware of my best and worst facial features”; “I am very aware of changes in my body temperature”; “for my size, I’m pretty strong”). Participants were given a 5-point Likert scale (0: “extremely uncharacteristic; 4: “extremely characteristic”), and results were averaged to compare sample means with the means reported in Miller et al. (1981). The Body Consciousness Questionnaire can be found in the Appendix.

## **Results**

### **Control Analyses**

#### ***Validity of Parenting Response Measure***

We undertook paired samples *t*-tests to assess whether the sample parenting responses differed, as intended, on the degree to which each reflected more or less authoritative parenting. Providing evidence for the validity of the sample parenting responses as a measure, results revealed that warmth and autonomy were greater in the authoritative parenting responses as compared with the

non-authoritative parenting options (see Table 1).

### **Warmth and Autonomy Correlation**

Correlational analyses revealed that warmth and autonomy were significantly correlated with each other in the case of each parenting option (Sleep:  $r(41) = .58, p < .001$ ; Food:  $r(42) = .77, p < .001$ ; Bathroom:  $r(41) = .40, p = .005$ ). The lowest correlation between warmth and autonomy occurred in the case of the bathroom parent-child interaction. Additionally, the responses observed in the case of the food parent-child interaction were skewed in that only one participant preferred the non-authoritative option. For these reasons, further analyses focused solely on the sleep parent-child interaction (see Table 1).

### **Relationship Between Outlooks on Sleep Parent-Child Interaction**

We undertook correlational analyses on perceptions of the authoritative option for the sleep parent-child interaction (see Table 2). In addition to the correlation noted earlier between warmth and autonomy ( $r(42) = .58, p < .01$ ), we also found a negative correlation between autonomy and the response that the participant would choose if this were their own child ( $r(42) = .37, p < .05$ ). Although this latter effect was not predicted, it may suggest that participants valued warmth over autonomy in this particular parent-child interaction. We also observed a significant correlation between what participants would choose for their own child and what they would prefer for themselves ( $r(43) = .79, p < .01$ ), as well as between what participants would choose for their own child and the response, they believe their parents would have chosen ( $r(43) = .36, p < .05$ ) (see Table 2).

### **Relationship Between Scale Measures and Responses to Sleep Parent-Child Interaction**

We undertook correlational analyses examining the relationship between preferred response to the sleep parent-child interaction and the Parental Authority Questionnaire and Body Consciousness Questionnaires (see Table 3). As predicted, participants preferred response in the sleep interaction was positively correlated with the authoritative subscale of the parenting scale ( $r(40) = .37, p < .05$ ), and negatively correlated with the authoritarian subscale of this scale ( $r(40) = -.40, p < .05$ ). No significant correlations were observed between participant's preferred response in the sleep interaction and their score on the Body Consciousness Scale. The only other significant correlation

occurred between the participant's scores on the Authoritarian Parenting subscale and on the Public Body Consciousness scale ( $r(40) = .35, p < .05$ ) (see Table 3).

### **Discussion**

The findings found in all three parent-child interactions indicate that the participant's perception of the positive relationship between warmth and autonomy is congruent with the characteristics of authoritative parenting. As predicted, the participant's preferred response in the parent-child interaction regarding sleep was positively correlated with Authoritative items and negatively correlated with Authoritarian items. Additionally, the positive relationship between the response participants would choose for their own child and the response they believe their parents would have chosen is significant in demonstrating the continuity of parenting ideas across generations.

Within the sleep parent-child interaction, we were surprised to find a negative relationship between autonomy and the response that participants would choose if it were their own child. This may indicate that participants valued warmth over autonomy in this sleep-related interaction. The overall relationship between the Parental Authority Questionnaire and the Body Consciousness Questionnaire was not found to be significant. However, a significant positive relationship was found between the sum of the Authoritarian Parenting Items and the Public Body Consciousness items. This unexpected finding indicates the need for further exploration of the relationship between public body consciousness and an Authoritarian parenting style. There were no relationships found between the preferred parenting option and the body consciousness scale.

An indication of warmth and autonomy in our parent-child interactions is important in providing support for the Authoritative parenting style among participants and across generations. This finding adds to the research supporting warmth and autonomy in conflict related to parent-child interactions. Additionally, it advocates for this parenting style in issues related to the child's bodily decisions. Our interactions involved the child aiming to achieve autonomy through decisions involving food, sleep, and the bathroom. All of these require the child to use control over their body to gain autonomy. Support for all three parent-child interaction scenarios was found but was most significant in our sleep-relat-

## PARENTING STYLES AND FEELINGS OF EMBODIMENT

ed interaction. This may suggest strong support for parents to use authoritative parenting styles when dealing with conflict involving sleep-related decisions. Participants were more likely to advocate for authoritative parenting involving the sleep interaction and were less convinced about the appropriate way of dealing with the food and bathroom interaction.

We have considered a few reasons behind this finding. The sleep-related scenario may be considered as more of an independent task than the food and bathroom scenarios. For instance, a child choosing not to sleep may be considered less of an interference for other individuals around them. A child choosing to forego meals or having the parent cook them something else involves more dependence on a caretaker. Similarly, a child only willing to use one bathroom also involves greater dependence on caretakers around them, having to take them home to use the restroom or dealing with school accidents. Perhaps participants also believe that the inclination to sleep is something less controllable to the individual. In other words, participants may be more likely to empathize with a child who is physically unable to sleep rather than a child who willingly refuses to use the bathroom or eat a certain food. Further questioning of the reasoning behind the participant's choices is needed to better understand what separates the sleep interaction from the other two. There was also a significant demonstration of parenting ideas supported across generations. Within the sleep interaction, what response participants believed their parents would choose, participant's preference, and what they would choose for their child were all correlated. This information is important as it is indicative of the power of parenting styles to pass down to the next generation.

The relationship found between the Parental Authority Questionnaire and the Body Consciousness Questionnaire was overall insignificant. However, the findings demonstrate a significant relationship between authoritarian parenting styles and public body consciousness. We did not hypothesize this finding, but the results agree with previous research and our understanding of authoritarian parenting style. The findings suggest a link between authoritarian parenting and being highly attuned to how you are perceived in the outside world. We suggest that this is due to participants being forced to adhere to strict parenting and high expectations in order to avoid parental criticism. This finding also supports research that in-

dicates children under authoritarian parenting styles are at a higher risk of experiencing levels of body dissatisfaction (Salafia et al., 2007). Perhaps this research can be better explained by our findings which have suggested authoritarian parenting is correlated with being highly attuned to how others perceive them and their bodies. This may be an indication that hyper-embodiment exists in children who receive authoritarian parenting. We suggest further research to better discover the underlying reasoning for this relationship.

### **Study Limitations**

The Body Consciousness Scale did not correlate with an authoritative parenting style. However, this does not mean that a relationship does not exist between body consciousness later in life and authoritative parenting. In all three parent-child interactions related to bodily autonomy, there was a preference for greater warmth and autonomy, indicating that participants did value authoritative parenting when dealing with embodied situations. There was also further indication that parenting styles get passed down through generations. However, the Body Consciousness Scale may be limited in its grasp of healthy embodiment. Our findings may suggest a need for a more comprehensive scale for measuring healthy embodiment. The Body Consciousness Scale measures how aware an individual is of their internal bodily sensations and observable aspects of the body, as well as how competent the individual believes their body is. We suggest a limitation within our interpretation of the scale, as we assumed high levels of these measures would indicate healthy embodiment. However, an over-awareness of bodily sensations may be better suited to represent a hyper-embodiment. We suggest that this limitation may be why we did not find a correlation between body consciousness and authoritative parenting. In future research, we hope to develop a scale that better encompasses healthy embodiment. However, this research did correlate authoritarian parenting with public body consciousness. This finding is valuable for future work, as the characteristics of public body consciousness may be better suited to demonstrate hyper-embodiment. We did not find any correlations between parenting styles, private body consciousness, or body competence. This may also be due to limitations within the scale itself or could indicate that there is no relationship between parenting styles and these measures. A further limitation is that we did not in-

investigate neglectful parenting style. The reason for this is that it is not included in the Parental Authority Questionnaire, and it may be a limitation that we assumed our population did not have neglectful parenting. The research would be strengthened by finding a measure that includes this parenting style. Another limitation was found in the lack of complete responses within the Qualtrics survey. Not all participants completed the entire questionnaire, and this may be due to the length of it. If we had found a way to shorten the survey, we may have had a better response rate. Our Qualtrics survey may have also been strengthened by making all scenario variables more independent. The sleep-related scenario, which was the most independent of all three scenarios, was found to have a stronger response to using an authoritative parenting style than the other two scenarios. Further research is suggested that examines parent-child interactions that are considered more independent, meaning less interference for other individuals around the child. Final limitations included a small sample size and time constraints in completing the project before the school year ended.

### Conclusion

This project did not result in the expected findings but was beneficial in contributing to the current knowledge and future directions that we should continue to research. The research provided support for the authoritative parenting style in relation to effective parenting when children are using their bodies as a means of gaining autonomy. The results also offered support for the generational transmission of parenting styles. Finally, these findings suggest a better development of an embodiment scale to further understand how parenting styles impact embodiment and future research on the ways authoritarian parenting impacts public body consciousness.

### References

- Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology Monograph*, 4, 1-103. <http://dx.doi.org/10.1037/h0030372>
- Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *The Journal of Early Adolescence*, 11(1), 56–95. <http://dx.doi.org/10.1177/0272431691111004>
- Brewer, M. B., & Gardner, W. (1996). Who is this "We"? Levels of collective identity and self-representations. *Journal of Personality and Social Psychology*, 71(1), 83–93. <https://doi.org/10.1037/0022-3514.71.1.83>
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84(4), 822–848. <https://doi.org/10.1037/0022-3514.84.4.822>
- Bryant, E. F. (2009). *The yoga sutras of Patanjali: A new edition, translation, and commentary*. New York, NY: North Point Press.
- Buri, J.R. (1991). Parental Authority Questionnaire. *Journal of Personality and Social Assessment*, 57, 110-119. [https://doi.org/10.1207/s15327752jpa5701\\_13](https://doi.org/10.1207/s15327752jpa5701_13)
- Burychka, D., Miragall, M., & Baños, R. M. (2021). Towards a Comprehensive Understanding of Body Image: Integrating Positive Body Image, Embodiment and Self-Compassion. *Psychologica Belgica*, 61(1), 248–261. <https://doi.org/10.5334/pb.1057>
- Cook-Cottone, C. (2015). Embodied self-regulation and mindful self-care in the prevention of eating disorders. *Eating Disorders*, 24(1), 98–105. <https://doi.org/10.1080/10640266.2015.1118954>
- Cohn, J. F., Matias, R., Tronick, E. Z., Connell, D., & Lyons-Ruth, K. (1986). Face-to-face interactions of depressed mothers and their infants. *New Directions for Child Development*, (34), 31–45. <https://doi.org/10.1002/cd.23219863405>
- Crockenberg, S., & Litman, C. (1990). Autonomy as competence in 2-year-olds: Maternal correlates of child defiance, compliance, and self-assertion. *Developmental Psychology*, 26(6), 961–971. <https://doi.org/10.1037/0012-1649.26.6.961>
- Dunn, J., Bretherton, I., & Munn, P. (1987). Conversations about feeling states between mothers and their young children. *Developmental Psychology*, 23(1), 132–139. <https://doi.org/10.1037/0012-1649.23.1.132>
- Eckerman, C. O., Whatley, J. L., & Kutz, S. L. (1975). Growth of social play with peers during the second year of life. *Developmental Psychology*, 11(1), 42–49. <https://doi.org/10.1037/h0076131>
- Erikson, E. H. (1950). *Childhood and society*. W Norton & Co.
- Erikson, E. H. (1963). *Childhood and society* (2nd ed.). W Norton & Co.



## PARENTING STYLES AND FEELINGS OF EMBODIMENT

- Fuchs, T., & Schlimme, J. E. (2009). Embodiment and psychopathology: a phenomenological perspective. *Current Opinion in Psychiatry*, *22*(6), 570–575. <https://doi.org/10.1097/YCO.0b013e3283318e5c>
- Gallagher, S., & Zahavi, D. (2008). *The phenomenological mind*. Routledge.
- Glashouwer, K. A., van der Veer, R. M. L., Adipatria, F., de Jong, P. J., & Vocks, S. (2019). The role of body image disturbance in the onset, maintenance, and relapse of anorexia nervosa: A systematic review. *Clinical Psychology Review*, *74*, 101771. <https://doi.org/10.1016/j.cpr.2019.101771>
- Hinshaw, S. P., Zupan, B. A., Simmel, C., Nigg, J. T., & Melnick, S. (1997). Peer status in boys with and without Attention-Deficit Hyperactivity Disorder: predictions from overt and covert antisocial behavior, social isolation, and authoritative parenting beliefs. *Child Development*, *68*(5), 880–896. <https://doi.org/10.1111/j.1467-8624.1997.tb01968.x>
- Homan, K. J., & Tylka, T. L. (2014). Appearance-based exercise motivation moderates the relationship between exercise frequency and positive body image. *Body Image*, *11*(2), 101–108. <https://doi.org/10.1016/j.bodyim.2014.01.003>
- Kearney, B. E., & Lanius, R. A. (2022). The brain-body disconnect: A somatic sensory basis for trauma-related disorders. *Frontiers in Neuroscience*, *16*, 1015749. <https://doi.org/10.3389/fnins.2022.1015749>
- Kidd, K. M., Sequeira, G. M., Douglas, C., Paglisotti, T., Inwards-Breland, D. J., Miller, E., & Coulter, R. W. S. (2021). Prevalence of gender-diverse youth in an urban school district. *Pediatrics*, *147*(6), e2020049823. <https://doi.org/10.1542/peds.2020-049823>
- Kopp, C. B. (1982). Antecedents of self-regulation: A developmental perspective. *Developmental Psychology*, *18*(2), 199–214. <https://doi.org/10.1037/0012-1649.18.2.199>
- Maccoby, E. E., & Martin, J. A. (1983). Socialization in the Context of the Family: Parent-Child Interaction. In P. H. Mussen, & E. M. Hetherington (Eds.), *Handbook of Child Psychology: Vol. 4. Socialization, Personality, and Social Development* (pp. 1-101). New York: Wiley.
- Mattanah, J. F. (2005). Authoritative Parenting and the Encouragement of Children's Autonomy. In P. A. Cowan, C. P. Cowan, J. C. Ablow, V. K. Johnson, & J. R. Measelle (Eds.), *The family context of parenting in children's adaptation to elementary school* (pp. 119–138). Lawrence Erlbaum Associates Publishers.
- Miller, Lynn C., Murphy, Richard, & Buss, Arnold H. (1981). Consciousness of body: Private and public. *Journal of Personality and Social Psychology*, Vol *41*(2), 397-406. <https://doi.org/10.1037/0022-3514.41.2.397>
- Pearson, J., Cohn, D., Cowan, P., & Cowan, C. (1994). Earned- and continuous-security in adult attachment: Relation to depressive symptomatology and parenting style. *Development and Psychopathology*, *6*(2), 359-373. <https://doi.org/10.1017/S0954579400004636>
- Ryan, R.M., Deci, E.L., Grolnick, W.S. and La Guardia, J.G. (2015). The Significance of Autonomy and Autonomy Support in Psychological Development and Psychopathology. *Developmental Psychopathology* (eds D. Cicchetti and D.J. Cohen). <https://doi.org/10.1002/9780470939383.ch20>
- Salafia, E. H. B., Gondoli, D. M., Corning, A. F., McEnery, A. M., & Grundy, A. M. (2007). Psychological distress as a mediator of the relation between perceived maternal parenting and normative maladaptive eating among adolescent girls. *Journal of Counseling Psychology*, *54*(4), 434–446.
- Schilder, P. (1935). *The image and appearance of the human body*. Kegan Paul.
- Steinberg, L., & Silk, J. S. (2002). Parenting adolescents. In M. H. Bornstein (Ed.), *Handbook of parenting: Children and parenting* (pp. 103–133). Lawrence Erlbaum Associates Publishers.
- Stipek, D., Recchia, S., & McClintic, S. (1992). Self-evaluation in young children. *Monographs of the Society for Research in Child Development*, *57*(1), 100. <https://doi.org/10.2307/1166190>
- Trinkner, R., Cohn, E. S., Rebellon, C. J., & Van Gundy, K. (2012). Don't trust anyone over 30: Parental legitimacy as a mediator between parenting style and changes in delinquent behavior over time. *Journal of Adolescence*, *35*(1), 119-132. <https://doi.org/10.1016/j.adolescence.2011.05.003>
- Vaeber, Mette (2004). Shaun Gallagher. In Jennifer Radden (ed.), *The Philosophy of Psychiatry: A Companion*. Oxford University Press. pp. 118.

Wilde, M. H. (2003). Embodied knowledge in chronic illness and injury. *Nursing Inquiry*, 10(3), 170-176. <https://doi.org/10.1046/j.1440-1800.2003.00178.x>

## PARENTING STYLES AND FEELINGS OF EMBODIMENT

**Table 1**

*Mean Warmth and Autonomy for Different Parenting Options*

	Parenting Option	Mean		t	p
		Warmth	Autonomy		
Sleep	Authoritative	3.26	3.60	10.05	<.001
	Non-Authoritative	1.58	1.47		
Food	Authoritative	3.64	3.60	14.92	<.001
	Non-Authoritative	1.74	1.62		
Bathroom	Authoritative	3.80	3.56	13.24	<.001
	Non-Authoritative	2.51	2.27		

*Note.* Sleep refers to the sleep related parent-child interaction. Food refers to the food related parent-child interaction. Bathroom refers to the bathroom related parent-child interaction. Authoritative refers to the response that was designed to be more authoritative. Non-authoritative refers to the response that was designed to be less authoritative. Warmth refers to the level of warmth participants rated each response. Autonomy refers to the level of autonomy participants rated each response.

**Table 2***Correlations for Sleep Parent-Child Interaction*

	Authoritative Warmth	Authoritative Autonomy	Participant Preference	Caregiver Preference	Participant Preference
Authoritative Warmth	--				
Authoritative Autonomy	.58**	--			
Participant Preference	-.006	-.051	--		
Caregiver Preference	-.02	-.04	.29	--	
Participant Choice	-.16	-.37*	.79**	.36*	--

\*Correlation is significant at the 0.05 level (2-tailed)

\*\*Correlation is significant at the 0.01 level (2-tailed)

*Note.* Authoritative Autonomy is the response participants indicated had a higher level of autonomy. Authoritative Warmth is the response participants indicated had a higher level of warmth. Participant preference is the response participants preferred. Caregiver Preference is the response participants believe their caregiver would have chosen. Participant choice is the response that participants would choose for their own child.

PARENTING STYLES AND FEELINGS OF EMBODIMENT

**Table 3**

*Correlations for Parental Authority Questionnaire, Body Consciousness Questionnaire, and Sleep Parent-Child Interaction*

	Sleep Preference	Permissive	Authoritarian	Authoritative	Private	Public	BC
Sleep Preference	--						
Permissive Sum	-.09	--					
Authoritarian Sum	-.40*	-.50**	--				
Authoritative Sum	.37*	.39*	-.711**	--			
Private Sum	.06	-.27	-.02	.11	--		
Public Sum	-.22	-.30	.35*	-.11	.25	--	
Body Competence	.14	-.06	-.07	.29.	.25	.32*	--

\*Correlation is significant at the 0.05 level (2-tailed)

\*\*Correlation is significant at the 0.01 level (2-tailed)

*Note.* Permissive sum is the level of participant caregiver’s permissive parenting style that participants received on the modified Parental Authority Questionnaire. Authoritarian sum is the level of participant caregiver’s authoritarian parenting style that participants received on the modified Parental Authority Questionnaire. Authoritative sum is the level of participant caregiver’s authoritative parenting style that participants received on the modified Parental Authority Questionnaire. Private Sum is the level of private body consciousness that participants scored on the Body Consciousness Questionnaire. Public Sum is the level of public body consciousness that participants scored on the Body Consciousness Questionnaire. Body Competence is the level of body competence that participants scored on the Body Consciousness Questionnaire.