

Longitudinal association of involvement and monitoring during early adolescence and empathy
and value regulation during emerging adulthood

by

Lindsay Howard

B.S., Brigham Young University, 2016
M.S.W., Brigham Young University, 2018

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Department of Applied Human Sciences
College of Health and Human Science

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2024

Abstract

Emerging adulthood is a time of exploration and discovery. Many in emerging adulthood are struggling to adapt. This study seeks to understand the role of parent involvement and monitoring in early adolescence on empathy and value regulation during emerging adulthood. Using data from the Flourishing Families Project, 434 mother, father, and child triads were used to examine these associations. Parental involvement during adolescence was found to significantly predict increased empathy and value regulation in emerging adults; whereas monitoring was not found to be significantly associated with either outcome. Results highlight the important role that parent involvement, including involvement in school activities, care provided for the child, and time spent doing things with their child, has on the development of internalized values and empathy. Suggestions for how findings might guide the work of human services professionals are provided along with a discussion of how future research might expand upon this work.

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Approved by:

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Table of Contents

List of Figures	vii
List of Tables	viii
Acknowledgments.....	ix
Dedication	x
Chapter 1 - Introduction.....	1
Chapter 2 - Literature Review.....	5
Chapter 3 - Method	17
Chapter 4 - Results.....	28
Chapter 5 - Discussion.....	36
References.....	47

List of Figures

Figure 1	26
Figure 2	27
Figure 3	31
Figure 4	33

List of Tables

Table 1	18
Table 2	24
Table 3	28
Table 4	29
Table 5	30
Table 6	34

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Dedication

To the ones who faithfully believed in me, which reminded me to believe in myself.

Chapter 1 - Introduction

Emerging adulthood (age 18-25) is a time of changes and many important life decisions (Arnett, 2000). Emerging adulthood is a time of identity exploration and trying new things. As emerging adults explore their identity, they develop a direction for life and explore different beliefs (Arnett, 2000). It is a time for young adults to develop their identity as they develop relationships, develop their view of the world, and internalize their values (Arnett, 2000). Emerging adults face many changes including leaving home for the first time and facing new challenges such as attending college, starting jobs, and undergoing various life transitions. Due to life transitions and stresses around identity development, emerging adults are likely to experience loneliness and other mental health symptoms (Buecker, et al., 2021; Diehl et al. 2018; Villarroel & Terlizzi, 2020).

Although emerging adulthood is a time of many changes and challenges, there is a large degree of variation in how people experience emerging adulthood (Nelson, 2021). It is a critical period of a person's life. Choices made during emerging adulthood can impact people's trajectories into their 30s and later life (Nelson, 2021). Due to the long-term implications of identity development and decision-making during emerging adulthood, it is important that youth develop the skills to be intentional and purposeful in their decision-making (Nelson, 2021). Values help us to be intentional about our decisions, and developing personal values is a part of becoming a well-adjusted adult (Arnett, 2000).

Emerging adulthood is the time to explore beliefs and values to guide decisions and behavior (Padilla-Walker et al., 2008). Nelson and Padilla-Walker (2013) found that emerging adults' high levels of internalized values were associated with using their worldview to intentionally guide their choices and behaviors (Nelson & Padilla-Walker, 2013). Among the

groups studied, the group that was flourishing was progressing in their value regulation and development and had more positive relationships (Nelson & Padilla-Walker, 2013). Value regulation and development are essential during emerging adulthood to help in decision-making and managing relationships.

Value regulation includes internal and external regulation. Internal value regulation is doing things because it fits our set of values. External value regulation is doing things because of others or outside expectations. An important developmental shift in later adolescence and early adulthood is a shift from external value regulation to internal value regulation (Grolnick et al., 1997). As we age, it becomes more important to develop internal value regulation due to the tasks of identity development. The development of internal value regulation supports individuation from parents and identity development, both hallmarks of a successful transition into adulthood. (Barry et al., 2008).

For many, values are connected to how we treat and respond to others. One of the main ways we connect to others is through empathy, which includes perspective-taking and moral reasoning. Empathy has been linked to prosocial behaviors, social competence, and moral development (Eisenberg & Fabes, 1998; Eisenberg et al., 1996; Hoffman, 1990). From adolescence to emerging adulthood, peer relationships become more important, and there starts to be a greater focus on building and maintaining interpersonal relationships, meaning there is a need to connect to others and for prosocial behaviors (Hollenstein, et al., 2017). An increase in empathy has been associated with heightened life satisfaction, relationship satisfaction, and closeness in relationships (Morelli et al., 2015).

It is important to understand how value regulation and empathy can be developed and strengthened before emerging adulthood, to be able to set individuals up for success. Parents play

an essential role in helping their children develop value regulation and empathy (Hollenstein et al., 2017; Karmakar, 2015). Knowing the various parenting practices or styles that impact value regulation and empathy would help parents understand what they can do to help their adolescents be more successful as they transition into adulthood. Research has found that parental support for adolescent autonomy and relatedness is fundamental to emerging adult development (Inguglia et al., 2015). When parents are warm, give opportunities to make decisions, and engage in appropriate monitoring, it creates an environment where youth can explore their interests, and goals (Hill & Wang, 2015).

The Self Determination Theory (SDT) of parenting (Deci & Ryan, 1985, 2000, 2008) states that as parents provide an environment of structure and safety, children grow and change. Children desire to grow and internalize their values and behaviors and are driven toward behaviors that are key to their development (Deci & Ryan, 1985, 2000). In SDT, parents provide autonomy support, structure, and involvement to meet children's needs (Grolnick et al., 1997). As parents provide environments for structure and safety, children will learn to have better internal social regulations such as values and empathy (Deci & Ryan, 1985, 2000, 2008), and higher internal motivation and desire for growth (Joussemet et al., 2008).

Although several studies have demonstrated that involvement and monitoring (an important element of structure) are important parenting practices (e.g., Distefano & Meuwissen, 2022; Urry et al., 2011; Sartor & Youniss 2002; Queiroz et al., 2020), little is known about the long-term impacts of parent monitoring and involvement on the development of value regulation and empathy. There are many short-term studies on involvement and monitoring (e.g., Distefano & Meuwissen, 2022; Sartor and Youniss 2002; Urry et al., 2011). However, longitudinal studies are needed to better understand the developmental aspects of parental monitoring and

involvement. It is an assumption of the self-determination theory of parenting that these would be connected and influence development. Understanding how parenting during adolescence is linked to empathy and value regulation during emerging adulthood would highlight for professionals the importance of helping parents understand the central role of involvement and monitoring in helping their teens develop empathy and internalized values.

Chapter 2 - Literature Review

Self Determination Theory

Self-Determination Theory (SDT) seeks to explain human motivation through basic human needs such as the need to feel competent, related to others, and have a sense of autonomy (Deci & Ryan, 1985, 2000, 2008). With these needs being met, people will thrive and function at their best (Deci & Ryan, 2000). SDT is a theory to aid in socialization, child development, and internalization of values. SDT seeks to understand the social world through assumptions about human needs and motivations. According to SDT, people are motivated to grow and change as they have the right environment, and their needs are met (Deci & Ryan, 1985, 2000, 2008). Competence, relatedness, and autonomy are essential in human development and innate psychological needs that are necessary for growth and well-being (Deci & Ryan, 1985, 2000). The need for competence is the need to be effective and proficient within our environment. It is being able to complete tasks within the environment while dealing with the environment (White, 1959). The need for connection, or relatedness, is the need to belong and to be connected to others (Deci & Ryan, 2000). It is the desire to feel connected to others, to love and care, and to be loved and cared for (Deci & Ryan, 2000). This connection includes closeness to peers and parents (Soenens & Vansteenkiste, 2010). It also includes the need for a sense of security (Bowlby, 1969) and the need for warmth and affection (Harlow, 1958).

Lastly, there is a need for autonomy, or the need to have a say in choices. Autonomy is the desire to have our self (who you are) and our sense of self (who you believe yourself to be) be aligned (Deci & Ryan, 2000). SDT suggests that we all need autonomy in our lives (Soenens & Vansteenkiste, 2010). People want to direct their behavior which enhances their intrinsic motivation (Deci & Ryan, 1985).

Value Regulation and Empathy

Value regulation and empathy are predicted outcomes of SDT (Deci & Ryan, 1985, 2000, 2008). When children have their needs of competence, connection, and autonomy met, they will learn to be self-regulated in their social interactions through empathy and acting according to their values (Deci & Ryan, 2000; Farkas & Grolnick, 2010). Internalization of values is taking external beliefs and standards and making them an internal part of oneself. The goal is socially acceptable behavior that comes from self and not pressure from others (Williams & Ciarrochi, 2019).

According to SDT, there are two types of motivation, intrinsic (internal) and extrinsic (external) (Grolnick et al., 1997). Intrinsic motivation does not require outside prompts or contingencies, while extrinsic motivation is driven more by an outcome. Similarly, four types of value regulation are derived from intrinsic (identified and integrated) and extrinsic (external and introjected) motivation. For integrated value regulation, motivation comes from enjoyment, and for identified regulation, motivation comes from acting on values. External value regulation refers to constraints, rewards, and punishments that motivate the values used. With introjected regulation, a person would feel unworthy if they did not do the action presented. The goal of value regulation is to shift the regulation of values from an external source to an internal source as we age (Grolnick et al., 1997).

Parenting and SDT

In SDT of parenting, parents provide autonomy support, structure, and involvement so that children's needs can be met, which helps children develop intrinsic motivation and better psychological well-being (Deci & Ryan, 2000; Grolnick et al., 1997). As parents provide structure and safety, children are more likely to operate from an internal guide through intrinsic

value regulation and natural empathic interest in others (Deci & Ryan, 1985, 2000, 2008).

Additionally, it helps children have higher internal motivation and desire for growth (Joussemet et al., 2008). When parents support children's autonomy, they encourage their children to behave based on internal rather than controlled motives. This is done by encouraging children to reflect on values at a developmentally appropriate level with choices, focused on the child's perspective (Deci et al., 1994).

Research Literature

In the SDT of parenting, parents provide an environment through involvement, monitoring, and autonomy support which allows for increased internal motivation for growth (Deci & Ryan, 2000). Part of this growth includes the development of values and empathy (Deci & Ryan, 2000; Farkas & Grolnick, 2010). I now explore the research relative to the factors that have been shown to be associated with the positive development of empathy and internal value regulation for emerging adults.

Value Development

Importance of Values. Value development is part of human development, particularly during emerging adulthood. A primary developmental task of individuation from parents and the development of identity for emerging adults is the development of internal value regulation (Barry et al., 2008). Having internalized values is associated with decreased harmful activities, increased identity development, and positive relationships with parents (Nelson & Walker, 2013). Values motivate people towards more positive behaviors such as empathy and other positive prosocial behaviors (Schwartz & Bari, 2001). Internalized values are associated with increased altruism and concern for others (Schwartz & Howard, 1984). In one study, 10-12-year-olds with greater reported internalized values showed more empathy, moral reasoning, and

positive relatedness to others (Ryan & Connell, 1989). Although little research has looked at the outcomes of internal value regulation, theorists have suggested that it is important for developing relationships, empathy, and a part of a person's moral development (Deci & Ryan, 2000; Ryan & Connell, 1989).

Development of Internal Values. Very little research has looked at the development of value regulation. A few variables have been examined including child's gender, child's age, parenting styles, and warmth in parenting (e.g., Martinez et al., 2020; Williams & Ciarrochi, 2019). Gender has been found to have mixed results in its association with the development of values. In a few studies, no gender differences were found in value internalization (Padilla-Walker, 2005; Padilla-Walker et al., 2008; Sartor & Youniss, 2002). However, in one study examining emerging adulthood, women scored higher than men on the internalizing of values (Padilla-Walker et al., 2008), but the authors note that this does not substantiate common perceptions that men are universally less prosocial during emerging adulthood. A study examining adolescents from three different countries also found females to have higher internalized values than males (Martinez et al., 2020). As individuals age, women may be showing more internal value regulation as they might be developing at a different pace than men.

Another factor that impacts value regulation is age. Developmentally, as emerging adults age, the goal is to move from external values to internalizing values (Arnett, 2000; Grolnick et al., 1997). Those in late adolescence (ages 16-18) have shown higher internalized values than those of early adolescence (ages 12-15; Queiroz et al., 2020). Values are likely to change during and right after high school years (Williams & Ciarrochi, 2019), as individuals transition to adulthood, making this a critical point in an individual's value development.

Parenting has also been shown to be a key factor in value development (Hardy et al., 2010; Padilla-Walker et al., 2012). Two studies found that authoritative parenting was helpful in the development of increasing internal values and decreasing the importance of external or extrinsic values (Queiroz et al., 2020; Williams & Ciarrochi, 2019). Parental warmth has also been shown to play a role in the internalization of values (Martinez et al., 2020). Due to the significant role of parenting in the development of value regulation, I will later return to a more in-depth exploration of this research.

Empathy

Importance of Empathy. Empathy can be defined as a person's ability to understand another's perspectives and experience and have an emotional response to another's emotions or situation (Eisenberg et al., 2006). Those who have greater empathy report pro-social goals, are more socially competent, are less aggressive, have more supportive peer relationships, are well-liked by peers, and are more likely to help others (Eisenberg et al., 2009). Increased empathy is connected to increased life satisfaction, relationship satisfaction, trust, and closeness in relationships (Morelli et al., 2015). Empathy is essential in building connections, which are important during emerging adulthood. Empathy levels during adolescence have been shown to be connected to social competencies, such as communication skills, in adulthood (Allemand et al., 2015). Adult empathy has also been linked to being more grateful (McCullough et al., 2002), increased volunteering (Davis et al., 1999), and donating more to charity (Wilhelm & Bekkers, 2010).

Development of Empathy. While empathy has been widely researched, much remains unclear about the development of empathy and its characteristics (Morelli et al., 2015). Many factors impact empathy development, such as parent-child relationships, socialization, peer

relationships, and cognitive abilities (e.g., Carlo et al., 1999; Yoo et al., 2013). Research relative to whether there are differences in empathy by gender are mixed. One study found that girls tend to report having more prosocial tendencies (Carlo et al., 2003), such as empathy. Adult women have also been shown to report higher empathy than adult men (Archer, 2015). Despite stereotypes of women being more likely to have higher empathy levels, in one longitudinal study, gender was not significantly related to empathy levels in adults (Allemand et al., 2014). Age has also been shown to impact the development of empathy. Empathy has been shown to increase with age (Khanjani et al., 2015). A longitudinal study found a general increase in empathy over time (Allemand et al., 2015).

Parenting has also been shown to be important in the development of empathy, as many studies have shown the importance of socialization and parent-child relationship in empathy development (e.g., Eisenberg and Valiente, 2002; Yoo et al., 2013). Socialization often happens in the context of parenting. As parents are warm, sensitive, and responsive to their children, their children show higher empathy and perspective-taking (Farrant et al., 2011). Adolescents who believe that their parents provide appropriate reinforcement have higher pro-social values and behaviors, such as empathy (Hardy et al., 2010). A meta-analysis looking at empathy found that the parent-child relationship and empathy development have a positive correlation (Boele et al., 2019). Due to similarities in how parenting influences internal value regulation and the development of empathy, I will review those areas of research together below.

Parenting and Internal Value Regulation and Empathy

A few parenting variables have been shown to be important in the development of both internal value regulation and empathy. These include parent-child closeness, peer socialization, cognitive development, and parent-child interactions (Carlo et al., 1999; Eisenberg & Valiente,

2002; Yoo et al., 2013); among these variables and consistent with SDT three variables seem to be particularly important: autonomy support, involvement, and structure (Grolnick et al., 1997). Research has shown involvement and monitoring to be elements of autonomy support, and of an autonomy supportive environment (Grolnick, 2002).

Autonomy Support. Autonomy support is the combination of monitoring and involvement together. When autonomy support is present in parenting, it means that higher levels of involvement and structure are present (Grolnick, 2002; Joussemet et al., 2008). Autonomy-supportive parenting is not permissiveness (lack of structure) or neglect (lack of involvement) (Joussemet et al., 2008). It is the combination of the two that allows for autonomy to be present and an autonomy supportive environment. Autonomy support is created when parents are involved and knowledgeable about their children's lives. The amount of time that parents spend with their children (involvement and monitoring) is associated with higher autonomy support (Distefano & Meuwissen, 2022). Grolnick et al. (1997) concluded that autonomy support, structure, and involvement are the means through which parents satisfy the needs of their children.

There has been a variety of research done on the positive impacts of autonomy support in parenting. A meta-analysis on autonomy-supportive parenting found positive associations between autonomy-support parenting and positive socioemotional outcomes such as empathy development and better social interactions (Vasquez et al., 2016). This meta-analysis found that increased autonomy-supportive parenting was related to autonomous functioning (Fousiani et al., 2014), higher self-esteem (Duineveld et al., 2017), and increased social competence (Soenens & Vansteenkiste, 2005). Autonomy support from parents has been connected to better longitudinal adjustment in college-age students (Van der Giessen et al., 2014). Adolescents and emerging

adults who report higher autonomy support from parents also report higher levels of connection to others (Inguglia et al., 2015). Autonomy support has also been strongly connected to internal value regulation (Padilla-Walker et al., 2012).

It is important to investigate how monitoring and involvement in parenting impact value regulation and empathy to further this growing body of research. In previous research, autonomy support has been measured using autonomy specific measurements connected to choices. For example, a common measure of autonomy support is the Perceived Parental Autonomy Support Scale (P-PASS; Mageau, et al., 2015). Sample items from the P-PASS measure include “My mother gave me many opportunities to make my own decisions about what I was doing” and “When my mother asked me to do something, she explained why she wanted me to do it” (Mageau, et al., 2015). Note that these items really focus on parents granting child autonomy but do not capture parenting that fosters an environment where autonomy is supported through parental involvement and monitoring through the relationship. In the current study, I look at both involvement and monitoring to more fully capture the elements of autonomy support as described in SDT. There is a need to better understand the uniqueness of the relationships between involvement and monitoring, and value regulation and empathy development.

Involvement. Parental involvement fosters parent-child connection. Involvement is demonstrated through parents’ time, attention, energy, and emotional availability for children (Grolnick & Slowiaczek, 1994). Adolescents and parents both benefit from active and supportive parental engagement daily (Griffith & Hankin, 2021). Parent involvement in children’s lives is mutually beneficial to building relationships and having a positive effect on children's life experiences (Griffith & Hankin, 2021).

Parental involvement has been associated with positive outcomes in their children (Smokowski et al., 2014), and is important for the parent-child relationship development. Increased parental involvement has been shown to predict adolescents' positive academic performance, which may increase their opportunities for future success (Otto & Atkinson, 1997). When there is more maternal involvement, there are fewer risk behaviors in adolescence (Urry et al., 2011). With increased involvement, there is a closer relationship between parents and children (Griffith & Hankin, 2021). Additionally, the quality of the relationship between mothers and emerging adults is associated with increased internal value regulation (Barry et al., 2008). Parent involvement is key to aiding children in the development of values. As parents are more involved with their children, they spend more time with them and are therefore more engaged in their socialization. This socialization of values may occur through parent-child communication and modeling. As this happens, children may receive more guidance from parents in thinking about their internal experiences and values.

Monitoring. Structure in parenting in the context of SDT has been noted as parents setting up an environment to assist in increasing their children's competence and healthy development (Grolnick et al., 1997; Grolnick, 2002). Grolnick and Pomerantz (2009) argued for the use of structure as a parenting dimension to account for positive parental monitoring. Soenens and Vansteenkiste (2010) agreed that structure is what parents do to monitor and regulate children. Structure includes expectations, guidelines, and following up to observe child responsiveness, which allows children to learn actions have consequences and helps them behave in a way that fits their values (Farkas & Grolnick, 2010). It organizes children's environment through monitoring (Grolnick et al., 2018). Structure in parenting includes clear and consistent

guidelines and expectations for children, as well as clear rules and consequences, which allows for predictability for children (Soenens & Vansteenkiste, 2010).

Structure is targeted at children's behaviors, thoughts, and feelings and is used to help children internalize key values (Grolnick & Pomerantz, 2009). Increased structure in parenting leads to an increase in internal growth, specifically internal value regulation (Grolnick et al., 1997; Grolnick & Pomerantz, 2009; Joussemet et al., 2008). Parenting that supports value regulation is based on identity and understanding rather than on obedience, reward seeking, or avoiding guilt (Karmakar, 2015).

A key part of structuring is monitoring. Monitoring in parenting allows parents to have increased knowledge about their children's lives. Parental knowledge of children's activities and elements of their lives is an important aspect of the parent-adolescent relationship (Kerr & Stattin, 2000). There are three sources of parental knowledge: parental control, parental solicitation, and child disclosure. As parents are more involved, they know more about their children's lives (Urry et al., 2011).

Monitoring is a beneficial aspect of parenting and is important for the development of children (Grolnick & Ryan 1989). Parental monitoring of daily adolescent activities is associated with higher identity achievement and better child emotional adjustment (Sartor & Youniss 2002). Monitoring within the parent-child relationships includes accountability for choices and coaching on prosocial behaviors. Monitoring in parenting helps children to begin to work toward internalizing their values and developing empathy.

Current Study

Value regulation and empathy are important to healthy development and relationship health, particularly during emerging adulthood (Nelson & Walker, 2013). SDT states that as

parents provide environments for structure and safety, children will learn to have better internal regulations such as values and empathy (Deci & Ryan, 2000; Farkas & Grolnick, 2010; Grolnick et al., 1997). Research has shown the importance of parental involvement and monitoring on several child outcomes such as better emotional adjustment, fewer risky behaviors in adolescence, and a closer parent-child relationship (Shumow & Lomax, 2002; Urry et al., 2011; Griffith & Hankin, 2021). Research has not yet looked at the connections between involvement and monitoring in parenting and empathy and value regulation. This study seeks to fill in the gaps of research in these areas.

In the current study, I examine the association between parental involvement and monitoring (structure) during early adolescence (ages 10-14) with empathy and internal value regulation for emerging adults seven years later (See Figure 2). The model allows for the examination of the unique contribution of each construct as it includes involvement and monitoring in the same model. This study utilizes multiple informants and measures to assess monitoring and involvement. Gender and age are used as controls due to evidence in prior research of their association with internal value regulation and empathy.

I hypothesized that an increase in involvement and monitoring from mothers and fathers, while their children are in early adolescence, would have a positive effect on value-regulation (internal and external) and empathy in emerging adulthood.

This study is important as it involves testing parenting constructs of monitoring and involvement within the same model to account for the uniqueness of each and its effects on emerging adult empathy and value regulation. Autonomy support will not be measured in this study using an autonomy scale, but rather with the combination of involvement and monitoring

in the model. This allows for examination of a more complete measure of autonomy support rather than individual elements of the construct.

This longitudinal study fills in gaps in the research through the inclusion of both parent involvement and monitoring as predictors of later emerging adult empathy and internalized value regulation. If we were to know more about parenting practices that increase value regulation and empathy development, this information could be used to help parents and service providers better know how we can set up children for success during adulthood.

Chapter 3 - Method

Procedure

Data for this study was from the larger *Flourishing Families Project (FFP)*, a 10-year longitudinal study of inner family life and child social development. Participant families for the FFP were selected from two western cities-one in the northwest and one in the mountain west- to be interviewed during the first eight months of 2007 for Wave 1, then annually for 10 waves. Families were randomly selected from targeted census tracts to mirror the socio-economic and racial classification of local school districts, and then recruited from a purchased national telephone survey database (Polk Directories/InfoUSA). In this study, Wave 2 (W2) and Wave 9 (W9) were used. W2 ($N = 644$) was completed in 2008 when the children were 10-17 years old, and W9 ($N = 450$) was completed in 2015 when the children were 17-24 years old. Two-parent households (biological parents living together) were used in this study to assess the total involvement and monitoring that children were receiving. As I did not have access to information on the former partner of single parents' active presence in the children's lives, single-parent families were removed from the sample for homogeneity ($N = 148$). The sample was limited to children ages 10-14 at Wave 2 to assess the early adolescent developmental period. Due to the low proportion of non-heterosexual couples ($N = 6$), only heterosexual couples were used in the sample. The sample included two-parent heterosexual couples with children ages 10-14 during W2, resulting in 434 mother-father-child triads. Information from parents (self-reports, child-reports on parents, and observations of parenting) was used at W2 and self-report survey data from children were used from W9 due to the children having moved out of the home and living in various areas of the country.

Participants

In this study, 51.4% of the children were female and 48.6% were male. Child ages ranged from 10-14 ($M = 12.26$ years old, $SD = .94$) at Wave 2. For the parents, 86.4% of mothers and 88% of fathers were white, 3.7% of mothers and 4.2% of fathers were black, and 9.9% of mothers and 7.9% of fathers were from other ethnic groups or were multiethnic. About a quarter of parents had earned a master's degree or higher (21.5% of mothers and 28.7% of fathers), while 42.7% of mothers and 41.7% of fathers had a bachelor's degree (see Table 1).

Table 1

Descriptive Statistics for outcomes and measures (N = 434 mother-father-child dyads)

	<i>M or %</i>	<i>SD</i>	<i>Range</i>	<i>Cronbach's α</i>	<i>Number of Items</i>
Empathy	3.96	.66	1 – 5	.77	7
Internal Value-Regulation	3.49	.51	1 – 5	.78	8
External Value-Regulation	2.30	.74	1 – 5	.85	8
Parent Involvement					
Mother self-report	4.07	.44	1 – 5	.61	8
Child-report of mother	4.04	.61	1 – 5	.79	8
Father self-report	3.85	.45	1 – 5	.76	8
Child-report on father	3.91	.68	1 – 5	.80	8
Parental Monitoring					
Mother self-report	4.45	.36	1 – 5	.75	8
Child-report of mother	4.34	.55	1 – 5	.78	8
Father self-report	4.18	.47	1 – 5	.81	8
Child-report of father	4.05	.70	1 – 5	.83	8
Observed Parenting					
Mother-Quality time	5.26	1.57	1 – 9		1
Mother-Child monitoring	6.55	.97	1 – 9		1
Father-Quality time	5.29	1.42	1 – 9		1
Father-Child monitoring	6.04	1.05	1 – 9		1

Note. Child outcomes are from Wave 9. Parenting variables are from Wave 2.

Measures

Most of the measures used in this study have been validated in previous research. The parenting variables include parent involvement (self-report, partner-report, and child-report of parent), parental monitoring (self-report and child-report of parent), and two observational

measures (quality time and child monitoring). For the observational variables (see below), the parents and children completed various discussion tasks that were videotaped and coded. The Iowa Family Interaction Rating Scales (IFIRS; Melby et al., 1998) is an observational coding system that measures behavioral processes in discussions between families with adolescents. The IFIRS was used to code a discussion between parents and their child about the parent's behavior toward the child. Scores were on a scale of 1-9, with each parent receiving one score each. Interrater reliability of observational codes was assessed for 25% of the tasks using another coder that was blind to the previous coder. The emerging adult outcomes used are internal and external value regulation and empathy. The control variables include parent education and ethnicity and child age and gender. See Table 1 for descriptive statistics for all main study variables.

Parental Involvement

Parent-Report. Eight items from the Inventory of Father Involvement (Hawkins, et al., 2002) modified to apply to both parents were used to assess parents' perception of their involvement in their child's life on a Likert scale from 1 (*never*) to 5 (*very often*). Sample questions included how often they, "attend your child's activities" and "take care of your child (like fix him/her food or pick him/her up from school)." Items were averaged with higher scores indicating a greater degree of mother or father involvement in the child's life. Previous reliability coefficients (Hawkins et al., 2002) have been found to range from .69 to .80. The reliability was calculated for the scale in its entirety and was found to be acceptable overall (mother self-report: $\alpha = .61$; father self-report: $\alpha = .76$). An EFA was run to try to improve the alpha for mother self-report but did not show any modifications that improved fit. Because the scale is a valid and reliable scale, and having mother self-report was important to the overall model for cohesiveness and completeness, the scale was kept in the model.

Child-Report. Children reported their perception of both their mother's and father's involvement with them using an 8-item modified version of Inventory for Father Involvement (Hawkins, et al., 2002). Responses ranged from 1 (*never*) to 5 (*very often*) with sample items such as "read books or magazines with you" and "make it easy to talk to him/her." Items were averaged where higher scores indicate higher levels of parental involvement. For the shortened version used in this study, reliability was calculated for the scale (child-report on mother, $\alpha = .79$; child-report on father, $\alpha = .80$).

Observed. Quality time measured the extent of the parent's regular involvement with the child in settings that promote opportunities for conversation, companionship, and mutual enjoyment for each parent. Each parent received a score on a 9-point scale, where 1 is the parent spending no quality time with their child and 9 is frequently spending significant quality time with their child (Melby et al., 1998).

Parental Monitoring

Parent-Report. With two subscales (knowledge and disclosure; Kerr & Stattin, 2000) parents reported their monitoring of children's activities and behaviors on a 5-point Likert scale from 1 (*never*) to 5 (*always*). Sample questions included, "when my child is not at home, I know where he/she is" and "I know who my child's friends are." Items were averaged and higher scores on items 1-4 indicate more knowledge about the child and his/her behavior, and higher scores on items 6-8 indicate more disclosure by the child. Kerr and Stattin (2000) found the reliability to be .82 (knowledge) and .80 (disclosure). This measure was not divided into subscales and was calculated in its entirety using the combined knowledge and disclosure subscales (total of 8 items). Reliability was good for these scales (mother self-report: $\alpha = .75$; father self-report: $\alpha = .81$).

Child-Report. Children reported on their parents' attempts to monitor their behavior and their willingness to share information with parents. A modified 8-item measure which included items from the parental knowledge and child disclosure subscales were used (Kerr & Stattin, 2000). Sample items included "I tell my parents about what I do with my free time," "My parents know who my friends are," and "I tell my parents what I have done with friends when I get home." Alpha coefficient for this measure was previously found to be .80 for Child Disclosure Subscale and .78 for the Parental Knowledge Subscale (Kerr & Stattin, 2000). Children answered how often each item occurred in relation to each parent on a scale from 1 (*never*) to 5 (*always*). Items were averaged to create a parental monitoring scale score for each parent (child-report on mother: $\alpha = .78$ child-report on father: $\alpha = .83$).

Observed. Child monitoring measured the extent of the parent's specific knowledge and information concerning the child's life and daily activities, indicating the extent to which the parent accurately tracks the behaviors, activities, and social involvements of the child. The same process as noted above (in the measures section and observed quality time section) time was used for this observed variable. Scores were on a scale of 1-9, with each parent receiving their own score. On the scale, a 1 was the parent not having any knowledge of the child's routines, friends, schoolwork, or whereabouts and a 9 was the parent frequently had intimate knowledge of the child's behavior and pursues information about the child's life (Melby et al., 1998).

Emerging Adult Outcomes (Wave 9)

Empathy. Empathy was assessed using seven items from the self-report empathy subscale of the Interpersonal Reactivity Index (IRI; Davis, 1983) which has demonstrated strong reliability in previous studies ($\alpha = .72$; Barber, 2002). The empathy subscale items were answered on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*) and included items such as, "I often

have tender, concerned feelings for people less fortunate than I,” and “I am often quite touched by things that I see happen.” Items were averaged with higher scores indicating greater empathy ($\alpha = .77$).

Values Regulation. Various sources of motivation for adolescent self-regulation were assessed using subscales from the Self-Regulation Questionnaire (SRQ-A; Grolnick et al., 1997) in W9. Participants responded using a 4-point Likert scale from 1 (*not at all true*) to 4 (*very true*). Subscales included external (4 items), introjected (4 items), identified (4 items), and integrated (4 items) motivation. The subscales were divided into two scales which included external value-regulation (external and introjected subscales) and internal value-regulation (identified and integrated subscales), as recommended by the measure. Sample items included: “I try to be nice to others because I’ll get in trouble if I don’t” (external value-regulation), and “I try to be honest because I think it’s important to be honest” (internal value-regulation). Items for internal and external items were averaged to create scale scores with higher scores indicating greater internal and external sources of value regulation (external $\alpha = .85$, internal $\alpha = .78$).

Control Variables

Parent and child demographic variables were used in this study. Because empathy and value-regulation have shown mixed results by children’s gender (Allemand et al., 2014; Padilla-Walker et al., 2008; Padilla-Walker, 2005), gender was used as a control (0 = male, 1 = female). The age of children (child development) has shown differences in levels of parental involvement and monitoring as well as levels of empathy and value-regulation (Barry et al., 2008; Williams & Ciarrochi, 2019; Khanjani et al., 2015). Child age was added for parental involvement and monitoring as well at all outcome variables (empathy, internal value regulation, and external value regulation). For each parent, ethnicity was controlled on their individual monitoring and

involvement variables (See Figure 3). Response categories for ethnicity included *European American (white)*, *African American (black)*, *Hispanic*, *Asian American*, *Muli-Ethnic*, and *other*. Most of the sample was white (86.4% of mothers and 88% of fathers). Due to the high percentage of white participants, race was dummy coded to white and all other races. Education rather than income was used as a control due to discrepancies in household income reported by parents. Response categories for education included *less than high school*, *high school*, *some college*, *Associates*, *Bachelors*, *Masters*, and *advanced degree (JD, PhD., PsyD, etc.)*. Education was controlled for on parental involvement and monitoring. The parents in the study were highly educated with 64.2% of mothers and 70.4% of fathers having a bachelor's degree or higher. Higher education may be connected to higher socioeconomic status, which may affect how involved and how much monitoring parents do. Education was coded as an ordered categorical variable, with higher scores indicating an increase in education.

Analysis Plan

Descriptive statistics and correlations were first run to assess the attributes of the variables (see Table 2 for correlations). Using SPSS, missingness patterns showed that most variables had low missingness rates (0.02 – 13.17%). Since skewness and kurtosis of the variables were within the recommended range (Finney & DiStefano, 2006), full information maximum likelihood (FIML) was used to address the missingness in the data. The model fit will be assessed using the following: comparative fit index (CFI) above .90, RMSEA equal to or less than .05, SRMR less than .10, and an insignificant chi squared (Kline, 2005).

Table 2*Descriptive Statistics for controls (N = 434 mother-father-child dyads)*

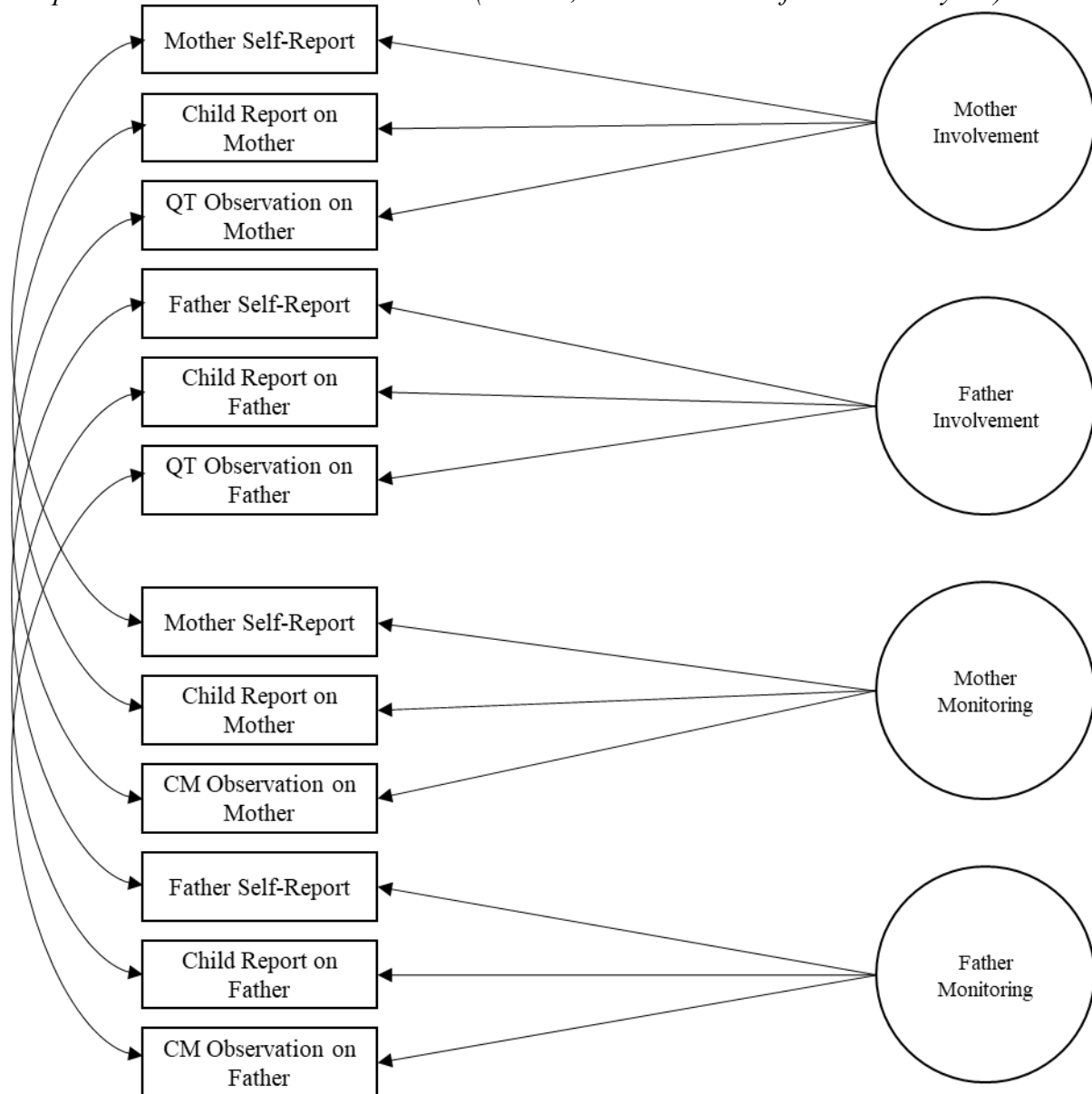
	<i>M or %</i>	<i>SD</i>	<i>Range</i>
Child Age	12.26	.94	10 – 14
Child Gender			
Female	51.4%		
Male	48.6%		
Mother Ethnicity			
White	86.4%		
African American	3.7%		
Hispanic	3.0%		
Asian American	3.0%		
Multi-Ethnic	2.5%		
Other	1.4%		
Father Ethnicity			
White	88.0%		
African American	4.2%		
Hispanic	1.2%		
Asian American	1.9%		
Multi-Ethnic	2.3%		
Other	2.5%		
Parent Education			
Mother	4.71	1.36	1 – 7
Less than High School	1.2%		
High School	5.8%		
Some College	23.1%		
Associate's	5.8%		
Bachelor's	42.7%		
Master's	16.2%		
Advanced Degree	5.3%		
Father	4.81	1.48	1 – 7
Less than High School	0.7%		
High School	5.1%		
Some College	20.4%		
Associate's	3.5%		
Bachelor's	41.7%		
Master's	18.5%		
Advanced Degree	10.2%		

Note. Child outcomes are from Wave 9. Parenting variables are from Wave 2.

The hypotheses were examined using a second-order structural equation model (SEM) on a first-order correlated uniqueness (CU) multitrait-multimethod model (MTMM), analyzed in *Mplus* 8 (Muthén & Muthén, 2017). A MTMM is used when there are multiple traits that are being measured by multiple methods (Byrne, 2013), as in the present study with multiple reporters and multiple methods being used to measure parenting. To begin, first-order latent variables were made for mother and father involvement and mother and father monitoring that each had three indicators: parent self-report, child report of parent, and observed score (see Figure 1). Next, to account for having multiple raters reporting on two different latent variables, CU is used to correlate the raters within the model (Byrne, 2013; see correlations in Figure 1). Once the first-order measurement model fit adequately to the data, second-order latent variables were made with the latent variables from fathers' and mothers' involvement and monitoring as indicators (see Figure 2). Once the second-order measurement model adequately fit the data, structural paths were added to predict the emerging adulthood outcomes of empathy, and internal and external value-regulation controlling for parent education, parent race, child age, and child gender. Parent race was controlled on the first-order latent variables due to race being unique to each parent. As a proxy for family income, parents' education levels were correlated and controlled for at the second-order family-level latent variables. The impact of children's ages was controlled for the second-order latent variables level and the emerging adult outcome variables. Variance due to child gender was controlled on the outcome variables.

Figure 1

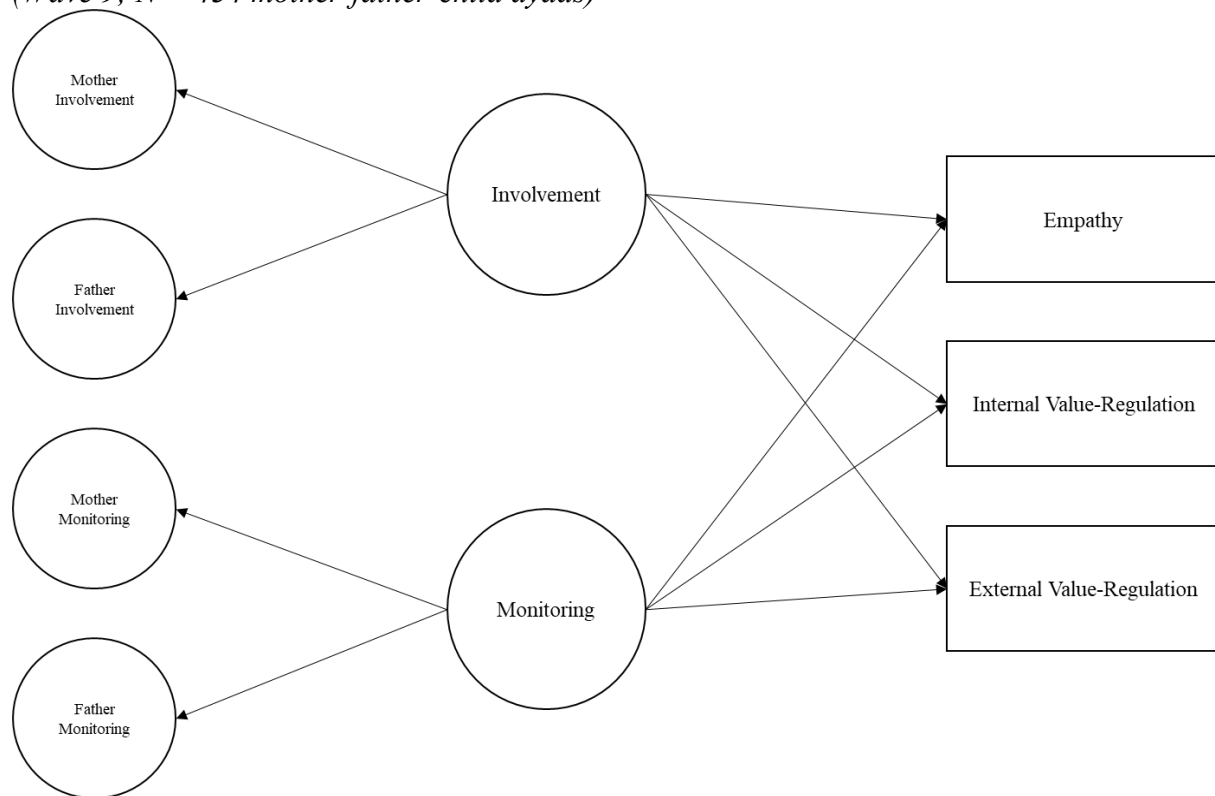
Proposed First-Order Latent Variables (Wave 2; N = 434 mother-father-child dyads)



Note. Rectangle items represent observed variables and circular items represent latent variables.

Figure 2

First and Second-Order Latent parenting variables (Wave 2) with emerging adulthood outcomes (Wave 9; N = 434 mother-father-child dyads)



Note. Rectangle items represent observed variables and circular items represent latent variables.

Chapter 4 - Results

Preliminary Findings

The predictor variables were significantly correlated with the outcomes in the expected directions. See Table 1 and Table 2 for a full list of descriptive results and Table 3 and Table 4 for bivariate correlations between main study variables.

Table 3

Correlations between Parenting and Emerging Adult Outcomes (N = 434 mother-father-child dyads)

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1 Empathy	1.00														
2 External Value Regulation	.12*	1.00													
3 Internal Value Regulation	.45***	.35***	1.00												
4 Mother Self-Report PI	.08	.11	.05	1.00											
5 Child-Report of Mother PI	.19*	.15*	.14*	.27***	1.00										
6 Father Self-Report PI	.09	.18**	.18**	.23***	.24***	1.00									
7 Child-Report of Father PI	.16**	.11	.11	.16**	.78***	.28***	1.00								
8 Observational Mother QT	.11	.18**	.09	.17**	.36***	.10	.29***	1.00							
9 Observational Mother CM	.10	.11	.08	.10	.20**	.17	.23***	.41***	1.00						
10 Observational Father QT	.18**	.07	.18**	.07	.18**	.07	.23***	.23***	.27***	1.00					
11 Observational Father CM	.02	.07	.04	.18**	.09	.23***	.22***	.17**	.26***	.42***	1.00				
12 Mother Self-Report PM	.04	.13*	.08	.43***	.36***	.13*	.34***	.27***	.26***	.16**	.17**	1.00			
13 Child-Report of Mother PM	.17**	.01**	.12*	.23***	.69***	.11	.57***	.40***	.32***	.22***	.09	.42***	1.00		
14 Father Self-Report PM	.10	.18**	.07	.19**	.32***	.51***	.34***	.24***	.29***	.12*	.19**	.30***	.30***	1.00	
15 Child-Report of Father PM	.12*	.15*	.09	.20**	.62***	.21***	.69***	.35***	.29***	.24***	.18***	.39***	.83***	.34***	1.00

Note. PI = Parent Involvement. QT = Quality Time. PM = Parental Monitoring. CM = Child Monitoring

* $p < .05$. ** $p < .01$. *** $p < .001$ (two-tailed)

Table 4

Correlations between Emerging Adult Outcomes and Controls

Variables	1	2	3	4	5	6	7	8	9
1 Empathy	1.00								
2 External Value Regulation	.12*	1.00							
3 Internal Value Regulation	.45***	.35***	1.00						
4 Child Age	-.06	.02	-.16**	1.00					
5 Child Female	.38**	.25**	.17**	-.02	1.00				
6 Mother White	.09	.09	.02	-.04	-.02	1.00			
7 Father White	.10	.08	-.03	.03	-.02	.48**	1.00		
8 Mother Education	.07	.02	.07	-.05	-.08	.26**	.13**	1.00	
9 Father Education	.07	.03	.11*	.03	-.01	.09*	.13**	.44**	1.00

Note. * $p < .05$. ** $p < .01$. *** $p < .001$ (two-tailed)

Measurement Model

The first four latent variables measuring mothers' and father's involvement and monitoring using three different reporters were created. Indicators of the same type of report (child, self, and partner) were correlated across latent variables to account for common method variance (See Figure 1). With first-order variables adequately fitting the data ($\chi^2(30) = 68.96$, $p < .001$; RMSEA = 0.040, 90% CI 0.026/0.054; SRMR = 0.043; CFI = 0.98), second-order latent variables were created by combining mother and father involvement as well as mother and father monitoring to make two latent variables of involvement and monitoring (see Figure 2 for model). See Table 5 for factor loading statistics on first- and second-order latent variables. Although some factor loadings were small, all loadings were significant. Therefore, all indicators were kept in the model for cohesiveness and consistency. Absolute fit indices revealed that the final measurement model had a good fit ($\chi^2(34) = 68.96$, $p < .001$; RMSEA = 0.040, 90% CI 0.026/0.054; SRMR = 0.043; CFI = 0.98).

Table 5

Factor Loadings and Standardized Residuals for Model First- and Second-Order Latent Variables

Second Order Latent Variables	First-Order Latent Variable		β^a	b	SE	Residual ^b
Involvement						
Father			0.82***	1.00	0.00	0.32***
Mother			0.56***	0.70	0.14	0.67***
	Mother	Child Report	0.46***	1.00	0.00	0.79***
	Involvement	Self-Report	0.25***	0.79	0.12	0.94***
		Observation	0.55***	3.10	0.74	0.70***
	Father	Child Report	0.41***	1.00	0.00	0.84***
	Involvement	Self-Report	0.28***	0.45	0.12	0.92***
		Observation	0.40***	2.07	0.67	0.84***
Monitoring						
Father			0.92***	1.00	0.00	0.14
Mother			0.67***	0.62	0.12	0.51***
	Mother	Child Report	0.50***	1.00	0.00	0.75***
	Monitoring	Self-Report	0.49***	0.63	0.13	0.76***
		Observation	0.37***	1.22	0.30	0.86***
	Father	Child-Report	0.48***	1.00	0.00	0.77***
	Monitoring	Self-Report	0.50***	0.69	0.15	0.75***
		Observation	0.30***	0.92	0.27	0.91***

^a For the sake of parsimony, only standardized coefficients were marked for significance.

^b The standardized residual error for each factor loading

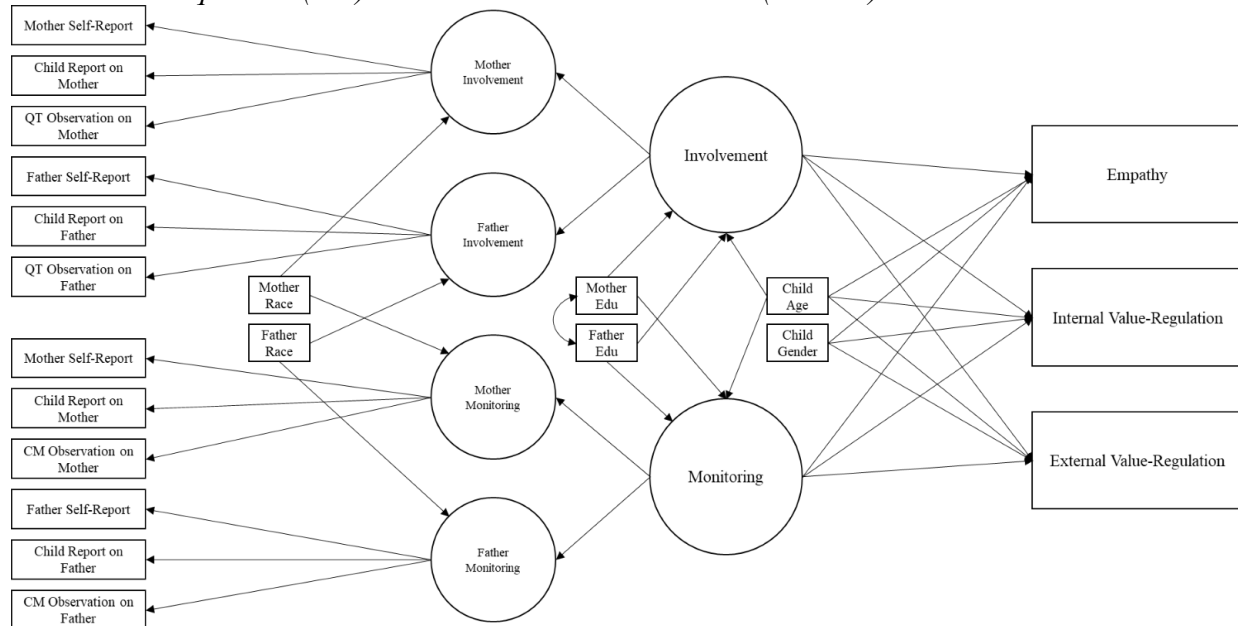
*** $p < .001$

Full Structural Equation Model

After establishing a well-fitting measurement model, the hypothesized outcomes were added to the structural equation model, resulting in a fit of $\chi^2 (151) = 398.91, p < .001$; RMSEA = 0.062, 90% CI 0.054/0.069; SRMR = 0.121; CFI = 0.89 (See Figure 3 for view of full model with controls).

Figure 3

Final model with controls; Second-order structure equation model (SEM) on a first-order correlated uniqueness (CU) multitrait-multimethod model (MTMM)



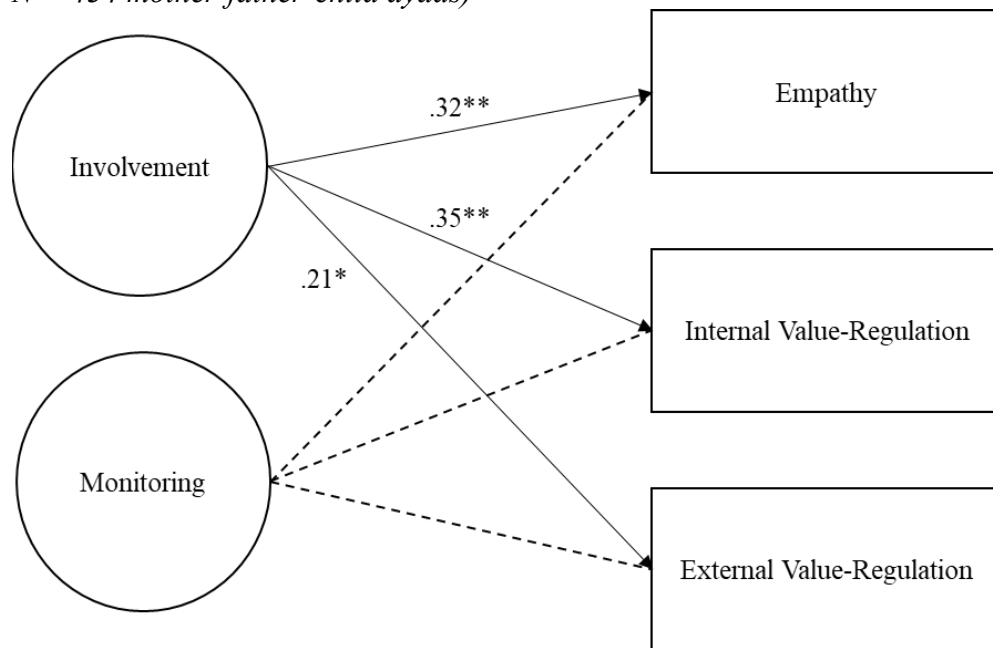
Note: Parenting variables were from Wave 2 and outcome variables were from Wave 9

After running the model for the first time, the path of child age on external value regulation was insignificant and was removed for parsimony. Various correlated paths that were insignificant were removed for parsimony. The model was run with the removed paths and absolute fit indices revealed that the full structural equation model had good fit ($\chi^2 (146) = 292.16, p < .001$; RMSEA = 0.048, 90% CI 0.048/0.056; SRMR = 0.095; CFI = 0.93). Insignificant paths from this model were kept as further removal of paths resulted in a decrease in overall model fit.

Figure 4 displays the direct relationships between the main study variables of interest. The significant and non-significant paths are indicated.

Figure 4

Second-order latent parenting variables (Wave 2) with emerging adulthood outcomes (Wave 9; N = 434 mother-father-child dyads)



Note. Significant paths are marked with a solid line and paths that showed no significance are marked with a dotted line. ** $p < .01$, * $p < .05$

Main Study Variable Paths

Parental involvement during adolescence positively predicted empathy and both internal and external value regulation by the time of emerging adulthood. Parental monitoring was not significantly associated with empathy, internal value-regulation, or external value-regulation. See Table 6 for full model path coefficients. The predictors explained 21.7% of the variance in empathy, 15.7% of the variance in internal value regulation, and 9.7% of the variance in external value regulation.

Table 6*Final Model Paths (N = 434 mother-father-child dyads)*

	β	<i>b</i>	<i>p</i>
Involvement			
Empathy	.32	.94	.003
Internal Value-Regulation	.35	.79	.002
External Value-Regulation	.21	.71	.021
Monitoring			
Empathy	.01	.03	.872
Internal Value-Regulation	-.08	-.05	.603
External Value-Regulation	.33	.14	.130
Controls ^a			
Fathers' Race on Fathers' Monitoring	.15	.15	.012
Mothers' Race on Mothers' Monitoring	.16	.20	.001
Mothers' Race on Mothers' Involvement	.15	.12	.012
Fathers' Education Level on Involvement	.38	.06	< .001
Fathers' Education Level on Monitoring	.29	.06	.001
Child's Age on Involvement	-.10	-.45	< .001
Child's Age on Monitoring	-.10	-.31	< .001
Child's Age on Internal Value-Regulation	.10	.20	.012
Female on Empathy	.37	.49	< .001
Female on Internal Value-Regulation	.25	.25	< .001
Female on External Value-Regulation	.14	.20	.017

^a For sake of parsimony, only significant controls were reported***Control Variables***

Race. Fathers who were white had increased monitoring in this study compared to those of all other races. However, fathers' race was not significantly associated with father involvement. In this sample, mothers who were white had increased involvement and monitoring with their children during early adolescence than mothers of other races.

Education Level. Mothers' and fathers' education levels were positively correlated with one another ($r = .42, p < .001$). As fathers' education level increased, parental monitoring and

parental involvement also increased. Mothers' education level was not significantly associated with parental involvement or parental monitoring.

Child Age. The older children were, the less parents were involved and monitored their children less. Age was not significantly associated with empathy or external value regulation during emerging adulthood. The older emerging adults were, the higher internal value regulation they reported.

Child Gender. During emerging adulthood, those that were female reported higher empathy, and internal and external value regulation compared to those that were male.

Chapter 5 - Discussion

This study examined the influence of parental involvement and monitoring during early adolescence on value regulation and empathy in emerging adulthood. By examining the distinct contributions of involvement and monitoring within the same model, this study utilized dyadic longitudinal data to explore their impact on the development of empathy and value regulation. The findings showed that parental involvement during adolescence is significantly associated with increased empathy and value regulation in emerging adulthood. In this model, monitoring did not significantly predict empathy and value regulation.

Involvement

The finding relative to the importance of parental involvement in the development of value regulation and the development of empathy is supported by prior research (e.g., Barry et al., 2008; Hardy et al., 2008; Smokowski et al., 2014). Involvement in parenting has been shown to have many benefits for the parent child relationship, and this study adds to that research as it shows it is important to the development of empathy and internalized values. When we have increased empathy, we do better in our social relationships, and we are more likely to act on our internalized values. Value regulation is also linked with close relationships and increased empathy (Schutte et al., 2001). This finding is also in alignment with SDT, which proposes that when parents are involved in their children's lives, their needs get met, and when their needs are met, they are more likely to develop an awareness and concern for others and are more likely to have values that are regulated internally (Deci & Ryan, 2000, 2008; Grolnick et al., 1997).

Involvement implies active engagement and emotional connection between parents and children, fostering security and trust that serves as a foundation for decision-making and empathy. Parental involvement, including shared experiences, discussions, and understanding,

offers children a context for internalizing values. This emotional connectivity promotes a deeper understanding of moral principles and encourages empathy through direct emotional interactions and shared perspectives. Therefore, it was not surprising that involvement was significant in the model as involvement speaks more to the nuanced interactions of the parent-child relationships.

Monitoring

Within the context of the model, monitoring was not significant in predicting empathy and value regulation. In a longitudinal study of parents and adolescents, Yoo and colleagues (2013) similarly found that parental knowledge (monitoring) did not predict empathy in emerging adulthood directly. However, the findings of the current study are inconsistent with prior research by Kerr et al., (2003) that looked at family factors and outcomes in Latino adolescents. They found higher monitoring (parental knowledge) to be associated positively with adolescent prosocial behaviors (Kerr et al., 2003). This study and the current study may have different results due to sample differences. In the current study, the majority of the sample was white, while in the Kerr et al., (2003) study, the sample was of Latino youth that were living in the United States. Monitoring levels among parents of different racial backgrounds may be influenced by factors such as cultural norms, socioeconomic status, and parenting styles. Parental monitoring differs across cultures partly due to different expectations and beliefs about how much control parents give over their children's decisions and activities (Soenens & Vansteenkiste, 2020). Additionally, a review of cultural differences and similarities in parenting found the monitoring was different among different cultures due to factors such as beliefs around control, culture norms, and beliefs on parental authority (Lansford, 2022). Due to differences in cultural norms around parental monitoring, it may be that adolescents experience the monitoring differently. For example, if an adolescent perceives the monitoring as expected and supportive,

monitoring would have a different influence than if they experienced or perceived it as intrusive or controlling. Kerr et al. (2003), was also not longitudinal and prosocial behaviors were measured during adolescence rather than during emerging adulthood. In the current longitudinal study, it may be that levels of parent monitoring changed across time and would not have been reflected in the Wave 2 measurement of monitoring. It is also possible that prosocial behaviors that Kerr et al., (2003) were measuring were not as specific to the measurement of empathy, in the current study. In the Kerr et al., (2003) study, the measure of prosocial behaviors included empathy but was broad in including items measuring their involvement in extracurricular activities and volunteer activities. With this wider assessment of prosocial behaviors, Kerr et al., (2003) study may be measuring other things such as activity level and extraversion. This would be different from empathy and the ability to understand the emotions of others, as measured in the current study. Additionally, the majority of research on monitoring has been done by western cultures, and may not transfer to all cultures (Venkatraman et al., 2010). For example, in Eastern cultures, extended family and community members are often more involved. As a result, although a parent may not closely monitor a child, another adult in the family may be aware of the child's actions and may hold them accountable (Venkatraman et al., 2010).

When involvement is introduced into the model, the significance of monitoring diminishes. Involvement may account for some of the potential positive benefits of monitoring. Although parental knowledge is an important element of the parent-adolescent relationship (Kerr & Stattin, 2000), monitoring typically involves observation and awareness of a child's external activities, but it may lack the nuanced, emotionally rich interactions that are inherent in parental involvement. According to SDT, monitoring plays an important part in development, specifically value regulation (Grolnick et al., 1997; Grolnick & Pomerantz, 2009; Joussemet et al., 2008).

Additional research is required to discern the role of monitoring in the relationships between involvement and autonomy support. Empathy and value development are rooted in emotional understanding, moral reasoning, and shared experiences that go beyond mere surveillance. The interpersonal dynamics within the family, characterized by trust, communication, and shared values, play a critical role in shaping a child's ethical framework. Thus, parental involvement may be the predominant factor for what is most significant in terms of young adult empathy and value development.

Autonomy Support

In this study, autonomy support was measured by the combination of including involvement and monitoring in the same model. Autonomy-supportive parenting has been categorized as having high levels of involvement and structure (Grolnick, 2002; Joussemet et al., 2008). The combination allows for a look at the environment of autonomy-supportive parenting, rather than measuring the level at which parents give their children freedom of choice. In this study, involvement was significant in predicting empathy and value regulation, while monitoring was not. While monitoring is an element of structure, it does not capture all the elements of structure. In this study, monitoring included parental knowledge and child disclosure. Structure includes those things but also includes expectations and guidelines and observation follow-up to support child responsiveness to parents (Grolnick et al., 1997; Grolnick, 2002, Grolnick et al., 2018). Therefore, the measurement of monitoring alone may not fully capture the structuring construct. Future research should examine a more comprehensive measure of structuring along with parent involvement to examine the role of autonomy support more effectively on the development of empathy. Although the current study fails to fully support SDT, future research examining both involvement and a more complete measurement of structure as latent variables

may provide a stronger representation of autonomy support and may support SDT. Therefore, more research on monitoring and structure is needed, as well as additional studies including structure, involvement, and autonomy support (beyond measuring choices). Studies may consider combining structure and involvement variables as a latent variable to test autonomy support in a different way, in the context of the theory.

Controls

Various controls were used in the study to account for differences among participants. Examination of controls indicated that as children got older, parental monitoring and involvement decreased. This was expected as children seek more independence during early adolescence. They are becoming more involved with peers and more independent. As children get older, they may start to turn toward peers more and to their parents less. As predicted, increased age showed increased internal value regulation, which is in alignment with previous research (Arnett, 2000). Surprisingly, age showed no connection to empathy level or external values regulation. This might be due to the narrow age range in the final wave of this sample. It may be too narrow to show significance in the development of empathy and external value regulation. A study with broader age ranges may show different results. In this study, females reported higher empathy, internal value regulation, and external value regulation. This is congruent with past research (e.g., Padilla-Walker et al., 2008; Archer, 2015). Those that were white reported increased levels of father's monitoring, mom's monitoring, and mother's involvement. White families, on average, may experience more favorable socio-economic conditions, allowing for greater resources and time availability to invest in monitoring and active involvement with their children. In this sample, most participants were white. Cultural

differences and societal expectations related to parenting roles might also play a role, shaping distinct approaches to monitoring and involvement within different racial communities.

Education was used as a proxy for income to account for socioeconomic status, as previous research has found education to be correlated to income or economic status (Jamison et al., 2007). The findings showed that higher paternal education is associated with increased total parental involvement, while no significant correlation was found with maternal education. Higher paternal education often aligns with enhanced financial stability and potentially more flexible work schedules, allowing fathers to time for family interactions and active involvement in their children's lives. Furthermore, fathers with higher education levels may exhibit a heightened awareness of the significance of active parenting, contributing to their increased commitment to engaging with their children. The lack of significance in the relationship between mother's education and involvement could be influenced by traditional gender roles, where mothers may be more commonly associated with caregiving responsibilities, and consequently, their educational attainment might not directly correlate with increased direct involvement. Similar patterns were observed with monitoring. As paternal education was higher, there was more total monitoring, and mother's education was not significantly correlated.

Parent and Child Reports

Correlations between parent and child reports showed some interesting correlations (See Table 3). While most were significant, the correlations were not high, showing that parents and children are not always on the same page with how the other is doing, or with their perceptions or experience of parent behavior. This is congruent with previous research. Two meta-analyses found that there are often parent-child discrepancies in reports on parenting (Korelitz & Garber, 2016; Hou et al., 2020). In terms of monitoring and parental knowledge, findings indicate that

parents might not know as much as they think they do about their children's lives. The highest correlations among reports were the child's report of mother with the child's report of father in both monitoring and involvement; showing that the child might be rating both parents similarly to each other. The child's reports of both parents show higher correlations with each other than the parent self-report and child report on each parent. These correlations further suggest the benefit of having multiple informants to get a wider view of what is happening within the family context. Hou et al. (2020) suggest that there is a need for multi-informant design in studies to give a more comprehensive assessment of the constructs. Thus, with multiple informants, this study provided a more comprehensive assessment of the parenting constructs.

Strengths

This study has several strengths that contribute to the current field of research. This study includes dyadic data from mothers, fathers, children, and observers. Multiple informants allow for increased validity in the measures and having a more accurate and complete measurement. The inclusion of dyadic data provides a richer dataset, offering valuable insights into family systems. Some have argued that child reports of parenting are better than parent reports and related more to observations (Gonzalez et al., 1996), and this study used self-reports and child reports. The emphasis on utilizing multiple informants aligns with recommendations from previous research (Landry et al., 2008), fulfilling a crucial need in the research. Furthermore, the study utilizes multiple validated measures to assess parenting in fuller and more accurate ways. Additionally, these measures are validated cross-culturally (e.g. Parung & Ferreira, 2017). This study is longitudinal, spanning seven years, giving good insight into the developmental process of adolescence through emerging adulthood, which developmental period includes the configuring of personality and relationship building. Additionally, the unique measurement

approach of involvement and monitoring in parenting as a latent variable, incorporating various aspects from different informants, minimizes measurement error and enhances the study's methodological rigor.

Limitations

Despite its strengths, this study is not without limitations. Firstly, the research is confined to two-parent, different-sex couple households. Additional research is needed to identify whether findings are generalizable to other family dynamics such as single-parent households and same-sex-parent households. Additionally, the data used spans from 2008 to 2015, and given the rapid social changes during this period, the parent-child relationships examined may not fully represent the current societal dynamics. In the sample, there is a potential for selection bias that might impact the findings as well.

The sample for this study was mostly white, and not a representation of all groups, ethnicities, and cultures. Further research is needed in a nationally representative sample. More research is needed across a variety of family types and environments to better understand autonomy support (Distefano & Meuwissen, 2022). Additionally, westernized theories of emerging adulthood may not apply to those in diverse cultural, social, ethnic, or economic backgrounds (Collins & Madsen, 2006). Currently, there are few studies of emerging adults who are not in college and from non-western samples (Padilla-Walker et al., 2008), and further research is needed to understand the differences present. The sample was highly educated and of higher socioeconomic status, which may influence parent's ability to monitor and be involved, making this not generalizable to all groups.

The limitation of measurements being taken at a single moment in this study is noteworthy, considering the substantial daily variations in autonomy-supportive and controlling

parental behavior reported by children in previous research (van der Kaap-Deeder et al., 2017). Data collected across multiple time points may more accurately capture the dynamic nature of parent-child interactions. Diary studies have been shown to help capture fluctuations in the short-term (Laurenceau & Bolger, 2005). Future studies should consider the inclusion of diary studies when assessing child reports.

Future Directions

Future research in SDT and parenting should assess the impacts of varying levels of parenting, in connection with both parents. For instance, it is important to identify how having one parent highly involved or monitoring, while the other has low involvement or monitoring, affects children and adolescents. According to Lamb and Lewis (2010), adolescents often perceive mothers as having a better understanding of them than fathers; therefore, this area of research would help identify various parent-child relationships within the context of both parents. Additionally, future research should identify the impacts of mother and father involvement separately, to identify the specific impact of involvement from different parents. Exploring the concept of over-involvement, often called helicopter parenting, is also an important area of study. Unlike regular involvement, helicopter parents tend to exert excessive control over their children and their surroundings, leading to increased parental control and decreased autonomy (Padilla-Walker & Nelson, 2012). Research found that parents who have a strong sense of trust in child development are more autonomy-supportive (Landry et al., 2008). Parents who trust the developmental process and approach their kids at a developmentally appropriate level, allow for increased appropriate autonomy. Considering cultural variations in monitoring and involvement is essential, as these practices may differ across cultures. This research is a steppingstone, and more research is needed for

more generalizable findings. Further research is necessary for diverse populations based on ethnicity, race, gender, language, socioeconomic status, and family structure, including variations in single-parent, two-parent, blended, and adoptive households.

Clinical Implications

This study provides valuable insights for parents and service providers, offering a clearer understanding of how parenting practices, especially involvement, contribute to the development of values and empathy. The findings from this study could guide clinicians and parent educators in helping parents better understand the parenting factors that aid in children's empathy and value regulation development. Clinicians can help provide parents with psychoeducation around the importance of parental involvement in their children's lives. Psychoeducation, paired with clinical therapy interventions can help support parents and teens to foster a relationship through increased involvement in their lives. This research identifies the need for clinicians to improve family therapy involving adolescents and helping parents increase their involvement in their children's lives. Clinicians can help parents by identifying areas where parents can be involved in their children's lives in areas such as academically, socially, sports, and activities/hobbies. Using this research, clinicians can work toward the development and implementation of treatment that aligns with the self-determination theory of parenting and increase parental involvement in healthy and productive ways. Additionally, this research can help inform and guide parent education to include the importance of parental involvement during adolescence.

Conclusion

In conclusion, the current research provides support for SDT and the role of parents in supporting emerging adults' development of self-determination, namely empathy and internalized values. Emerging adulthood is a time of self-discovery and relationship-building.

Empathy and value regulation help in this phase of development. This study highlights the positive impact of parental involvement during adolescence, showing its role in fostering empathy and facilitating the development of value regulation in emerging adulthood. Meaningful time spent with children in adolescence can help set them up for success during emerging adulthood. By recognizing the importance of SDT parenting principles, parents can actively contribute to the development of their children, ensuring a foundation for success and growth during these critical stages of their children's lives.

References

- Allemand, M., Steiger, A. E., & Fend, H. A. (2015). Empathy Development in Adolescence Predicts Social Competencies in Adulthood. *Journal of Personality*, 83(2), 229–241. <https://doi.org/10.1111/jopy.12098>
- Allen, E. S., Grolnick, W. S., & Córdova, J. V. (2019). Evaluating a self-determination theory-based preventive parenting consultation: The parent check-in. *Journal of Child and Family Studies*, 28, 732–743. <https://doi.org/10.1007/s10826-018-01309-0>
- Archer, J. (2019). The reality and evolutionary significance of human psychological sex differences. *Biological Reviews*, 94, 1381–1415. <https://doi.org/10.1111/brv.12507>
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469–480. <https://doi.org/10.1037/0003-066X.55.5.469>
- Barber, B. K. (2002). Positive Interpersonal and Intrapersonal Functioning: An Assessment of Measures among Adolescents. In *What Do Children Need to Flourish?* (pp. 147–161). Springer US. https://doi.org/10.1007/0-387-23823-9_10
- Barry, C. M., Padilla-Walker, L. M., Madsen, S. D., & Nelson, L. J. (2008). The Impact of Maternal Relationship Quality on Emerging Adults' Prosocial Tendencies: Indirect Effects via Regulation of Prosocial Values. *Journal of Youth and Adolescence*, 37(5), 581–591. <https://doi.org/10.1007/s10964-007-9238-7>
- Boele, S., Van Der Graaff, J., De Wied, M., Van Der Valk, I. E., Crocetti, E., Branje, S., Leerstoel Branje, & Adolescent development: Characteristics and determinants. (2019). Linking Parent–Child and Peer Relationship Quality to Empathy in Adolescence: A

- Multilevel Meta-Analysis. *Journal of Youth and Adolescence*, 48(6), 1033–1055.
<https://doi.org/10.1007/s10964-019-00993-5>
- Bowlby, J. (1969). *Attachment and loss, Vol. 1: Attachment*. Attachment and Loss. Basic Books.
- Buecker, S., Mund, M., Chwastek, S., Sostmann, M., & Luhmann, M. (2021). Is loneliness in emerging adults increasing over time? A preregistered cross-temporal meta-analysis and systematic review. *Psychological Bulletin*, 147(8), 787–805.
<https://doi.org/10.1037/bul0000332>
- Byrne, B. M. (2013). *Structural Equation Modeling with Mplus: Basic Concepts, Applications, and Programing* (1st edition). Routledge. <https://doi.org/10.4324/9780203807644>
- Davis, M. H. (1983). The effects of dispositional empathy on emotional reactions and helping: A multidimensional approach. *Journal of Personality*, 51(2), 167–184.
<https://doi.org/10.1111/j.1467-6494.1983.tb00860.x>
- Davis, M. H., Mitchell, K. V., Hall, J. A., Lothert, J., Snapp, T., & Meyer, M. (1999). Empathy, Expectations, and Situational Preferences: Personality Influences on the Decision to Participate in Volunteer Helping Behaviors. *Journal of Personality*, 67(3), 469–503.
<https://doi.org/10.1111/1467-6494.00062>
- Deci, E. L., & Ryan, R. M. (2000). The “What” and “Why” of Goal Pursuits: Human Needs and the Self-Determination of Behavior. *Psychological Inquiry*, 11(4), 227–268.
https://doi.org/10.1207/S15327965PLI1104_01
- Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology*, 49(3), 182–185.
<https://doi.org/10.1037/a0012801>

- Deci, E. L., Eghrari, H., Patrick, B. C., & Leone, D. R. (1994). Facilitating internalization: the self-determination theory perspective. *Journal of personality*, 62(1), 119–142.
<https://doi.org/10.1111/j.1467-6494.1994.tb00797.x>
- Deci, E.L., Ryan, R.M. (1985). Conceptualizations of Intrinsic Motivation and Self-Determination in Intrinsic Motivation and Self-Determination in Human Behavior. *Perspectives in Social Psychology*. Springer. https://doi.org/10.1007/978-1-4899-2271-7_2
- Diehl, K., Jansen, C., Ishchanova, K., & Hilger-Kolb, J. (2018). Loneliness at universities: determinants of emotional and social loneliness among students. *International journal of environmental research and public health*, 15(9), 1865.
<https://doi.org/10.3390/ijerph15091865>
- Distefano, R., & Meuwissen, A. S. (2022). Parenting in context: A systematic review of the correlates of autonomy support. *Journal of Family Theory & Review*, 14(4), 571-592.
<https://doi.org/10.1111/jftr.12465>
- Duineveld, J. J., Parker, P. D., Ryan, R. M., Ciarrochi, J., & Salmela-Aro, K. (2017). The link between perceived maternal and paternal autonomy support and adolescent well-being across three major educational transitions. *Developmental Psychology*, 53, 1978-1994.
<https://doi.org/10.1037/dev0000364>
- Eisenberg, N., & Fabes, R. A. (1998). Prosocial development. *Handbook of child psychology: Social, emotional, and personality development* (pp. 701–778).
- Eisenberg, N., & Valiente, C. (2002). Parenting and children’s prosocial and moral development. *Handbook of Parenting Volume 5 Practical Issues in Parenting*, 111.

- Eisenberg, N., Fabes, R. A., Murphy, B., Karbon, M., Smith, M., & Maszk, P. (1996). The Relations of Children's Dispositional Empathy-Related Responding to Their Emotionality, Regulation, and Social Functioning. *Developmental Psychology*, 32(2), 195–209. <https://doi.org/10.1037/0012-1649.32.2.195>
- Eisenberg, N., Morris, A. S., McDaniel, B., & Spinrad, T. L. (2009). Moral cognitions and prosocial responding in adolescence. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (pp. 229–265). John Wiley & Sons.
doi:10.1002/9780470479193.adlpsy001009
- Farkas, M. S., & Grolnick, W. S. (2010). Examining the components and concomitants of parental structure in the academic domain. *Motivation and Emotion*, 34(3), 266–279.
<https://doi.org/10.1007/s11031-010-9176-7>
- Farrant, B. M., Devine, T. A. J., Maybery, M. T., & Fletcher, J. (2012). Empathy, Perspective Taking and Prosocial Behaviour: The Importance of Parenting Practices. *Infant and Child Development*, 21(2), 175–188. <https://doi.org/10.1002/icd.740>
- Finney, S. J., & DiStefano, C. (2006). Non-normal and categorical data in structural equation modeling. *Structural equation modeling: A second course*, 10(6), 269-314.
- Fousiani, K., Van Petegem, S., Soenens, B., Vansteenkiste, M., & Chen, B. (2014). Does parental autonomy support relate to adolescent autonomy? An in-depth examination of a seemingly simple question. *Journal of Adolescent Research*, 29, 299-330.
<https://doi.org/10.1177/0743558413502536>
- Griffith, J. M. & Hankin, B. L. (2021). Affective Benefits of Parental Engagement with Adolescent Positive Daily Life Experiences. *Journal of Youth and Adolescence*, 50(10), 2036–2051. <https://doi.org/10.1007/s10964-021-01484-2>

- Grolnick, W. S. (2002). *The Psychology of Parental Control: How Well-Meant Parenting Backfires*. Lawrence Erlbaum Associates, Inc. <https://doi.org/10.4324/9781410606303>
- Grolnick, W. S., & Pomerantz, E. M. (2009). Issues and challenges in studying parental control: Toward a new conceptualization. *Child Development Perspectives*, 3(3), 165-170. <https://doi.org/10.1111/j.1750-8606.2009.00099.x>
- Grolnick, W. S., & Ryan, R. M. (1989). Parent styles associated with children's self-regulation and competence in school. *Journal of Educational Psychology*, 81(2), 143-154. <https://doi.org/10.1037/0022-0663.81.2.143>
- Grolnick, W. S., & Slowiaczek, M. L. (1994). Parents' involvement in children's schooling: A multidimensional conceptualization and motivational model. *Child development*, 65(1), 237-252. <https://doi.org/10.1111/j.1467-8624.1994.tb00747.x>
- Grolnick, W. S., Deci, E. L., & Ryan, R. M. (1997). Internalization within the family: The self-determination theory perspective. *Parenting and children's internalization of values: A handbook of contemporary theory*, 135-161.
- Grolnick, W. S., Levitt, M., & Caruso, A. (2018). Adolescent autonomy in context: Facilitative parenting in different cultures, domains and settings. *Autonomy in adolescent development: Towards conceptual clarity* (pp. 94-118). Routledge.
- Hardy, S. A., Carlo, G., & Roesch, S. C. (2010). Links Between Adolescents' Expected Parental Reactions and Prosocial Behavioral Tendencies: The Mediating Role of Prosocial Values. *Journal of Youth and Adolescence*, 39(1), 84–95. <https://doi.org/10.1007/s10964-008-9383-7>

- Hardy, S. A., Padilla-Walker, L. M., & Carlo, G. (2008). Parenting dimensions and adolescents' internalization of moral values. *Journal of Moral Education*, 37(2), 205–223.
<https://doi.org/10.1080/03057240802009512>
- Harlow, H. F. (1958). The nature of love. *American Psychologist*, 13(12), 673–685.
<https://doi.org/10.1037/h0047884>
- Hawkins, A. J., Bradford, K.P., Palkovitz, R. Day, R.D., Christiansen, S.L., & Call, V.C. (2002). The inventory of father involvement: A pilot study of a new measure of father involvement. *Journal of Men's Studies*, 10, 183-196.
- Hill, N. E., & Wang, M. T. (2015). From middle school to college: developing aspirations, promoting engagement, and indirect pathways from parenting to post high school enrollment. *Developmental psychology*, 51(2), 224.
- Hoffman, M. L. (1990). Empathy and justice motivation. *Motivation and Emotion*, 14, 151–172.
<https://doi.org/10.1007/BF00991641>
- Hollenstein, T., Tighe, A. B., & Loughheed, J. P. (2017). Emotional development in the context of mother–child relationships. *Current opinion in psychology*, 17, 140-144.
<https://doi.org/10.1016/j.copsyc.2017.07.010>
- Hou, Y., Benner, A. D., Kim, S. Y., Chen, S., Spitz, S., Shi, Y., & Beretvas, T. (2020). Discordance in parents' and adolescents' reports of parenting: A meta-analysis and qualitative review. *American Psychologist*, 75(3), 329- 348.
<https://doi.org/10.1037/amp0000463>
- Inguglia, C., Ingoglia, S., Liga, F., lo Coco, A., Grazia, M., & Cricchio, L. (2015). Autonomy and Relatedness in Adolescence and Emerging Adulthood: Relationships with Parental

- Support and Psychological Distress. *Journal of Adult Development*, 1–13.
<https://doi.org/10.1007/s10804-014-9196-8>
- Jamison, E. A., Jamison, D. T., & Hanushek, E. A. (2007). The effects of education quality on income growth and mortality decline. *Economics of Education Review*, 26(6), 771–788.
<https://doi.org/10.1016/j.econedurev.2007.07.001>
- Joussemet, M., Landry, R., & Koestner, R. (2008). A self-determination theory perspective on parenting. *Canadian Psychology/Psychologie canadienne*, 49(3), 194–200.
<https://doi.org/10.1037/a0012754>
- Karmakar, R. (2015). Does Parenting Style Influence the Internalization of Moral Values in Children and Adolescents? *Psychological Studies*, 60(4), 438–446.
<https://doi.org/10.1007/s12646-015-0338-2>
- Kerr, M. & Stattin, H. (2000). What parents know, how they know it, and several forms of adolescent adjustment: Further support for a reinterpretation of monitoring. *Developmental Psychology*, 36(3), 366–380. <https://doi.org/10.1037/0012-1649.36.3.366>
- Kerr, M. H., Beck, K., Downs Shattuck, T., Kattar, C., & Uriburu, D. (2003). Family involvement, problem, and prosocial behavior outcomes of Latino youth. *American Journal of Health Behavior*, 27(1), S55–S65. <https://doi.org/10.5993/ajhb.27.1.s1.6>
- Khanjani, Z., Mosanezhad jeddi, E., Hekmati, I., Khalilzade, S., Etemadi nia, M., Andalib, M., & Ashrafian, P. (2015). Comparison of Cognitive Empathy, Emotional Empathy, and Social Functioning in Different Age Groups. *Australian Psychologist*, 50(1), 80–85.
<https://doi.org/10.1111/ap.12099>
- Kline, T. (2005). *Psychological testing a practical approach to design and evaluation*. SAGE.

- Korelitz, K. E., & Garber, J. (2016). Congruence of parents' and children's perceptions of parenting: A meta-analysis. *Journal of Youth and Adolescence*, 45, 1973-1995. doi: 10.1007/s10964-016-0524-0
- Lamb, M. E., & Lewis, C. (2010). The role of parent-child relationships in child development. In *Developmental science* (pp. 477-526). Psychology Press.
- Landry, R., Whipple, N., Mageau, G., Joussemet, M., Koestner, R., DiDio, L., ... & Haga, S. M. (2008). Trust in organismic development, autonomy support, and adaptation among mothers and their children. *Motivation and Emotion*, 32, 173-188. <https://doi.org/10.1007/s11031-008-9092-2>
- Lansford, J. E. (2022). Annual Research Review: Cross-cultural similarities and differences in parenting. *Journal of Child Psychology and Psychiatry and Allied Disciplines.*, 63(4), 466–479. <https://doi.org/10.1111/jcpp.13539>
- Mageau, G. A., Ranger, F., Joussemet, M., Koestner, R., Moreau, E., & Forest, J. (2015). Validation of the Perceived Parental Autonomy Support Scale (P-PASS). *Canadian Journal of Behavioural Science*, 47, 251–262. doi:10.1037/a0039325
- Mageau, G.A., Bureau, J.S., Ranger, F. *et al.* (2016). The Role of Parental Achievement Goals in Predicting Autonomy-Supportive and Controlling Parenting. *Journal of Child & Family Studies*, 25, 1702–1711. <https://doi.org/10.1007/s10826-015-0341-1>
- McCullough, M. E., Emmons, R. A., & Tsang, J.-A. (2002). The Grateful Disposition: A Conceptual and Empirical Topography. *Journal of Personality and Social Psychology*, 82(1), 112–127. <https://doi.org/10.1037/0022-3514.82.1.112>

- Melby, J., Conger, R., Book, R., Rueter, M., Lucy, L., Repinski, D., . . . Scaramella, L. (1998). The Iowa Family Interaction Rating Scales (5th ed.). Iowa State University, Institute for Social and Behavioral Research.
- Morelli, S. A., Lieberman, M. D., & Zaki, J. (2015). The Emerging Study of Positive Empathy. *Social and Personality Psychology Compass*, 9(2), 57–68.
<https://doi.org/10.1111/spc3.12157>
- Muthén, L. K., & Muthén, B. O. (2017). Mplus: Statistical Analysis with Latent Variables: User's Guide (Version 8).
- Nelson, L. J. (2021). The theory of emerging adulthood 20 years later: A look at where it has taken us, what we know now, and where we need to go. *Emerging Adulthood*, 9(3), 179-188. <https://doi.org/10.1177/2167696820950884>
- Nelson, L. J., & Padilla-Walker, L. M. (2013). Flourishing and Floundering in Emerging Adult College Students. *Emerging Adulthood* (Thousand Oaks, CA), 1(1), 67–78.
<https://doi.org/10.1177/2167696812470938>
- Otto, L. B. & Atkinson, M. P. (1997). Parental Involvement and Adolescent Development. *Journal of Adolescent Research*, 12(1), 68–89.
<https://doi.org/10.1177/0743554897121005>
- Padilla-Walker, L. M. (2005). *Perceived appropriateness and accurate perception of parental messages as predictors of adolescents' internalization of values and behaviors*. ProQuest Dissertations Publishing.
- Padilla-Walker, L. M., & Nelson, L. J. (2012). Black hawk down?: Establishing helicopter parenting as a distinct construct from other forms of parental control during emerging

- adulthood. *Journal of Adolescence*, 35(5), 1177–1190.
<https://doi.org/10.1016/j.adolescence.2012.03.007>
- Padilla-Walker, L. M., Barry, C. M., Carroll, J. S., Madsen, S. D., & Nelson, L. J. (2008).
 Looking on the bright side: The role of identity status and gender on positive orientations
 during emerging adulthood. *Journal of Adolescence*, 31(4), 451–467.
<https://doi.org/10.1016/j.adolescence.2007.09.001>
- Padilla-Walker, L. M., Fraser, A. M., & Harper, J. M. (2012). Walking the walk: The moderating
 role of proactive parenting on adolescents' value-congruent behaviors. *Journal of
 Adolescence*, 35(5), 1141–1152. <https://doi.org/10.1016/j.adolescence.2012.03.003>
- Parung, G. E., & Ferreira, N. (2017). Work-Life Balance, Couple Satisfaction, and Father
 Involvement: A Cross-Cultural Study. *ANIMA Indonesian Psychological Journal*, 32(4),
 201–216. <https://doi.org/10.24123/aipj.v32i4.851>
- Queiroz, P., Garcia, O. F., Garcia, F., Zacaes, J. J., & Camino, C. (2020). Self and Nature:
 Parental Socialization, Self-Esteem, and Environmental Values in Spanish Adolescents.
International Journal of Environmental Research and Public Health, 17(10), 3732–.
<https://doi.org/10.3390/ijerph17103732>
- Ryan, R. M., & Connell, J. P. (1989). Perceived locus of causality and internalization:
 Examining reasons for acting in two domains. *Journal of Personality and Social
 Psychology*, 57(5), 749–761. <https://doi.org/10.1037/0022-3514.57.5.749>
- Sartor, C. E. & Youniss, J. (2002). The relationship between positive parental involvement and
 identity achievement during adolescence. *Adolescence*, 37(146), 221–234.

- Schutte, N. S., Malouff, J. M., Bobik, C., Coston, T. D., Greeson, C., Jedlicka, C., Rhodes, E., & Wendorf, G. (2001). Emotional intelligence and interpersonal relations. *Journal of Social Psychology*, 141(4), 523–536. <https://doi.org/10.1080/00224540109600569>
- Schwartz, S. H., & Bardi, A. (2001). Value Hierarchies Across Cultures: Taking a Similarities Perspective. *Journal of Cross-Cultural Psychology*, 32(3), 268–290. <https://doi.org/10.1177/0022022101032003002>
- Shumow, L., & Lomax, R. (2002). Parental efficacy: predictor of parenting behavior and adolescent outcomes. *Parenting: Science and practice*, 2(2), 127-150. https://doi.org/10.1207/S15327922PAR0202_03
- Smokowski, P. R., Bacallao, M. L., Cotter, K. L., & Evans, C. B. R. (2014). The Effects of Positive and Negative Parenting Practices on Adolescent Mental Health Outcomes in a Multicultural Sample of Rural Youth. *Child Psychiatry and Human Development*, 46(3), 333–345. <https://doi.org/10.1007/S10578-014-0474-2>
- Soenens, B., & Vansteenkiste, M. (2005). Antecedents and outcomes of self-determination in 3 life domains: The role of parents' and teachers' autonomy support. *Journal of Youth and Adolescence*, 34, 589-604. <https://doi.org/10.1007/s10964-005-8948-y>
- Soenens, B., & Vansteenkiste, M. (2010). A theoretical upgrade of the concept of parental psychological control: Proposing new insights on the basis of self-determination theory. *Developmental Review*, 30(1), 74-99. <https://doi.org/10.1016/j.dr.2009.11.001>
- Soenens, B., & Vansteenkiste, M. (2020). Taking adolescents' agency in socialization seriously: The role of appraisals and cognitive-behavioral responses in autonomy-relevant parenting. *New Directions for Child and Adolescent Development*, 2, 7–26. <https://doi.org/10.1002/cad.20370>

- Urry, S. A., Nelson, L. J., & Padilla-Walker, L. M. (2011). Mother knows best: Psychological control, child disclosure, and maternal knowledge in emerging adulthood. *Journal of Family Studies*, 17(2), 157–173. <https://doi.org/10.5172/jfs.2011.17.2.157>
- Van der Giessen, D., Branje, S., & Meeus, W. (2014). Perceived Autonomy Support from Parents and Best Friends: Longitudinal Associations with Adolescents' Depressive Symptoms. *Social Development*, 23(3), 537–555. <https://doi.org/10.1111/SODE.12061>
- van der Kaap-Deeder, J., Vansteenkiste, M., Soenens, B., & Mabbe, E. (2017). Children's daily well-being: The role of mothers,' teachers,' and siblings' autonomy support and psychological control. *Developmental Psychology*, 53(2), 237–251. <https://doi.org/10.1037/dev0000218>
- Vasquez, A. C., Patall, E. A., Fong, C. J., Corrigan, A. S., & Pine, L. (2016). Parent autonomy support, academic achievement, and psychosocial functioning: A meta-analysis of research. *Educational Psychology Review*, 26, 605– 644. <https://doi.org/10.1007/s10648-015-9329-z>
- Venkatraman, S., Dishion, T. J., Kiesner, J., & Poulin, F. (2010). Cross-cultural analysis of parental monitoring and adolescent problem behavior: Theoretical challenges of model replication when East meets West. In *Parental monitoring of adolescents: Current perspectives for researchers and practitioners* (pp. 90-123). Columbia University Press. <https://doi.org/10.7312/guil14080-005>
- Villarroel MA, Terlizzi EP (2020). *Symptoms of depression among adults: United States, 2019*. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics.

- White, R. W. (1959). Motivation reconsidered: The concept of competence. *Psychological Review*, 66(5), 297–333. <https://doi.org/10.1037/h0040934>
- Wilhelm, M. O., & Bekkers, R. (2010). Helping Behavior, Dispositional Empathic Concern, and the Principle of Care. *Social Psychology Quarterly*, 73(1), 11–32. <https://doi.org/10.1177/0190272510361435>
- Williams, K. E., & Ciarrochi, J. (2020). Perceived Parenting Styles and Values Development: A Longitudinal Study of Adolescents and Emerging Adults. *Journal of Research on Adolescence*, 30(2), 541–558. <https://doi.org/10.1111/jora.12542>
- Yoo, H., Feng, X., & Day, R. D. (2013). Adolescents' Empathy and Prosocial Behavior in the Family Context: A Longitudinal Study. *Journal of Youth and Adolescence*, 42(12), 1858–1872. <https://doi.org/10.1007/s10964-012-9900-6>