

Agreeableness

To appear in *The Handbook of Personality Development*

(D. McAdams, R. Shiner, & J. L. Tackett, Eds.)

Jennifer L. Tackett

Northwestern University

Maciel M. Hernández and Nancy Eisenberg

Arizona State University

Agreeableness

"Interviewer: Imagine you are in a situation where someone is bothering you. What did you do?"

"....there was this girl in grade 2 and... I walked by and she kicked me in the shins. And, the principal was on duty so I told him that and... I talked to her and I said this wasn't good because it hurt me, and it's not nice first of all and it's just mean to do. ... I felt kinda like, what should I do, there's so much options, and I felt kind of nervous to make the right choice." -*12-year-old boy rated high on Agreeableness*

"I'm not sure. I'm not sure, like, it would be appropriate. ... I once punched a person pretty hard in the face and then I kinda beat the person up after he beat me up first. There was a lot of bleeding.. Yes I actually did. I'm not lying. It actually did all help." - *13-year-old male rated low on Agreeableness*

Children, adolescents, and adults differ in many ways, including their approach to handling interpersonal situations and their tendencies to show concern for others feelings. Such interpersonal manifestations—including empathy, compassion, altruism, and love—are inherently interesting to and consequential for everyone. The current chapter focuses on the personality trait of *agreeableness*, including how this trait manifests in children, adolescents, and adults, and is related to behavioral outcomes across the lifespan. In addition to being intrinsically interesting and consequential, agreeableness is multifaceted. It intersects with self-regulation, including negative self-regulation (e.g., aggression, anger, hostility) and self-discipline and order

(e.g., agreeable compliance and cooperation). Moreover, developmental research suggests that these distinct aspects of agreeableness are highly overlapping early in the lifespan (e.g., toddlerhood and early childhood), and become increasingly distinct from one another over the course of middle childhood and adolescence. Notable, these time periods are also when major social and academic changes are taking place, as well as emotional, cognitive, and biological changes within the individual, offering many possible mechanisms to potentially explain such changes. First, we discuss definitions and measurement approaches for trait agreeableness, and then turn to reviewing associations between agreeableness and psychological and social functioning.

Defining and Measuring Agreeableness

Trait Agreeableness

Agreeableness is a trait that typically indexes characteristics such as compassion, compliance, politeness, empathy, and modesty (e.g., Caprara, Alessandri, Di Giunta, Panerai, & Eisenberg, 2010; Soto & John, in press; Tackett, Kushner, De Fruyt, & Mervielde, 2013). Like the other traits in the Five Factor Model (FFM; Soto et al., 2008), agreeableness is a bipolar trait. Low levels of agreeableness reflect tendencies to be aggressive, hostile, manipulative, callous, oppositional, and strong-willed. As agreeableness is often missing or otherwise less consistently conceptualized in early taxonomies of personality traits, many questions remain about what early agreeableness looks like, how best it could be measured, and how early in life it manifests as a clearly differentiated trait.

It is now well established that five broad factors of personality traits can be measured in valid and reliable ways from very early in life, at least by early childhood (Goldberg, 2001; Halverson et al., 2003; Mervielde & De Fruyt, 1999). Yet, these traits are only analogous, not

identical, to the established FFM in adulthood. Importantly, trait agreeableness appears to be one of the more inconsistent traits across child and adult measures, and between different child personality and temperament measures.

Fairly consistent evidence has emerged indicating that agreeableness in childhood more strongly reflects willing compliance and low antagonism, in comparison with agreeableness conceptualizations in adults that focus more on empathic and compassionate tendencies (De Pauw & Mervielde, 2010; Digman & Shmelyov, 1996; Goldberg, 2001; Tackett, Krueger, Iacono, & McGue, 2008; Tackett et al., 2012). An important remaining question is the extent to which this reflects a measurement artifact, as opposed to an actual difference in developmental conceptualization of the substantive nature of the trait. Measurement of agreeableness is discussed in more depth below. Although agreeableness does tend to show gender differences favoring girls, these differences tend to be quite small – but fairly consistent from childhood to adulthood (Soto, 2016).

Developmentally, higher-order trait agreeableness appears to increase during early/middle childhood, decline slightly during the transition to adolescence, but then increase again in later adolescence to adulthood (Slobodskaya & Akhmetova, 2010; Soto, 2016; Van den Akker, Deković, Asscher, & Prinzie, 2014). At the facet-level, developmental patterns appear more complex. One recent study found agreeableness facets to increase across early childhood, but found divergent patterns for different agreeableness facets during pre-adolescence and adolescence (A. de Haan, De Pauw, van den Akker, Dekovic, & Prinzie, 2016). Specifically, altruism increased during the adolescent transition, but only in girls. On the other hand, compliance decreased into adolescence; whereas, dominance showed a particular decrease in girls during the adolescent transition. Finally, egocentrism and irritability showed little

developmental change in pre-adolescence and adolescence. Thus, it is reasonable to expect developmental trends for higher-order Agreeableness to mask more complicated developmental patterns among relevant facets. There is also some empirical evidence to suggest that changes in effortful control (a self-regulatory temperament trait akin to conscientiousness) and agreeableness in later adolescence may promote increases in agreeableness-relevant behaviors such as prosociality (Alessandri, Kanacri, et al., 2014; Caprara, Alessandri, & Eisenberg, 2012).

There is a small body of literature speaking to the differential instantiation of trait agreeableness across countries and cultures. Comparing parental free descriptions of their children in a sample of parents from many countries, researchers found that Greek parents generated the greatest proportion of Agreeable phrases in their descriptions and Chinese parents generated that smallest proportion (Havill, Besevegis, & Mouroussaki, 1998). These researchers also found that German and Greek parents were more likely to use negative descriptors of Agreeableness (e.g., argumentative, mean) than were parents from the United States. In a study of children and early adolescents, a “pure” agreeableness trait (i.e., that does not contain substantial negative affectivity or antagonism variance) emerged for Canadian, Chinese, and Russian children, but not for Greek and American children (for whom a negative affect-laden antagonism trait did emerge; Tackett et al., 2012). These differences may reflect differing cultural values, if parents (who reported on their children’s characteristics) tend to show heightened differentiation of those traits most valued, or salient, to them. Specifically, values that parents hope to instill in their children do appear to show cultural differences, and many prioritized values appear to tap agreeableness content (e.g., honesty, good manners, assertiveness, and compassion; Tamis-LeMonda, Wang, Koutsouvanou, & Albright, 2002).

Agreeableness Covariation

Fairly robust evidence indicates that agreeableness covaries most highly with two traits: negative affectivity/neuroticism (NA/N) and effortful control/conscientiousness (EC/C; e.g., Martel, Nigg, & Lucas, 2008; Soto & Tackett, 2015; Tackett et al., 2008; Tackett et al., 2012). An understanding of trait covariation patterns is important because it helps us to identify the position of a given trait in broader personality space, more clearly delineate the substantive nature of each trait, and understand how traits are hierarchically related, it facilitates connections between empirical researchers using different trait measures and models.

The close connections with trait agreeableness and NA/N also show some evidence of developmental specificity. Although aspects of agreeableness (i.e., aggression) are modeled directly with NA/N in prominent temperament models, this close association in childhood appears to be more than a measurement artifact. In an investigation of trait covariation across development (ages 3-14), using a child personality measure (which identifies a distinct agreeableness trait), a clear agreeableness trait (distinguishable from negative affect) did not emerge until early adolescence (ages 12-14; Tackett et al., 2012). This might indicate an unusually close association between these traits in childhood, which becomes more differentiated as children age into adolescence. By adulthood, even three-factor temperament models show differentiated variance between aggressive negative affect (which correlates more highly with agreeableness) and nonaggressive negative affect (which correlates more highly with neuroticism; Evans & Rothbart, 2007), suggesting that agreeableness and neuroticism show greater differentiation across development.

On the other hand, positive aspects of agreeableness (e.g., compliance) also seem to covary with EC/C more tightly in childhood than is evidenced in adult research. However, “pure” conscientiousness (as differentiated from agreeableness/agreeable compliance) appears to

emerge by ages 6-8 and differentiates further by ages 9-11 (Tackett et al., 2012). This differentiation between agreeableness/agreeable compliance and “pure” conscientiousness potentially coincides with school entry and increased environmental demands for structured and self-regulated behaviors, offering some hint of an environmental mechanism driving this increased differentiation.

Agreeableness Facets

Facets, or lower-order traits, show even greater variability between measures, both within measures intended for younger populations, as well as across measures for children versus those for adults. Examining facets of agreeableness in different measures is pragmatically important because it allows us to better understand differences between measures and draw stronger connections across studies using different measures. It is also helpful theoretically because it offers a deeper understanding of the psychological content that trait agreeableness is composed of. Specific agreeableness facets will typically reflect both researchers’ expectations of agreeableness content (because researchers often offer their perspective on which items to include in a measure and make decisions about label names for facets) and empirical evidence for them (because facet formation, and connection to higher-order agreeableness, typically results from factor analytic and other quantitative efforts).

Given this context, we can briefly review those agreeableness facets that are measured in a variety of common dispositional models. Common measures of child personality include the Hierarchical Personality Inventory for Children (HiPIC; Mervielde & De Fruyt, 1999) and the Inventory for Child Individual Differences (ICID; Halverson et al., 2003). A common measure of youth temperament is the Revised Early Adolescent Temperament Questionnaire (EATQ-R; Ellis & Rothbart, 2001). The HiPIC higher-order trait is labeled Benevolence, and it consists of

five facets: Egocentrism, Irritability, Compliance, Dominance, and Altruism. The ICID higher-order trait is labeled Antagonism or Agreeableness, and various scoring systems are sometimes used in the literature. The simple structure outlined by Halverson et al. (2003) identifies two facets of Agreeableness: Antagonism and Strong Willed. The EATQ-R, as with most temperament measures (described in more depth below), does not include a specific higher-order agreeableness trait. However, it does assess a lower-order Affiliation trait, which indexes desires towards warmth and social closeness.

We can compare these facet-level taxonomies with those in adult measures. Two common measures in adults (both used frequently in adolescence, as well) are the Big Five Inventory (BFI; Soto et al., 2008) and the NEO-PI-R (Costa & McCrae, 1992). Although previous versions of the BFI did not include well-developed facet-level measurement, the most recent version (BFI-2) does incorporate facets (Soto & John, in press). Specifically, the BFI-2 Agreeableness domain comprises three facets: Compassion, Respectfulness, and Trust. On the other hand, NEO-PI-R Agreeableness comprises six facets: Warmth, Modesty, Trust, Tender-Mindedness, Compliance, and Straightforwardness. Comparing across all these measures, we see some common themes emerging – particularly to the extent that trait agreeableness often indexes both tendencies to get along well with others and follow interpersonal “rules,” as well as the ability and motivation to empathize with and care for others.

Temperament and Other Approaches

As previously noted, temperament approaches typically do not define a higher-order factor of Agreeableness (e.g., Rothbart, Ahadi, Hershey, & Fisher, 2001). Instead, these measures converge on three higher-order dispositional traits and, alongside popular three-factor measures used for adults (Tellegen & Waller, 1992), higher-order traits in these models include

one indexing positive affectivity/sociability (which in children often also includes activity level), one indexing negative affectivity, and one indexing self-control. An important remaining question is where agreeableness-relevant variance populates such three-factor models. In both temperament and adult personality models, agreeableness variance appears to load on both self-control (i.e., Effortful Control, Constraint) and negative affectivity traits (Caspi, Roberts, & Shiner, 2005; Tackett et al., 2012). This makes some sense, given that agreeableness can reflect both self-regulation (i.e., the ability to inhibit behavior in social adaptive and compassionate ways) and negative emotions (particularly low levels of interpersonal negativity such as anger and hostility). These distinctions have been discussed in developmental terms, with researchers suggesting that broadly defined self-regulatory traits (e.g., Effortful Control) may bifurcate into more narrowly defined interpersonal and intrapersonal aspects of self-regulation later in development (Rothbart, Ahadi, & Evans, 2000; Rothbart & Bates, 2006; Shiner & Caspi, 2003). This hypothesis has not undergone rigorous empirical scrutiny to date, although hierarchical analyses offer some indication that agreeableness may “break off” from conscientiousness, albeit with later agreeableness drawing from earlier negative affect tendencies, as well (Tackett et al., 2012).

Although a higher-order agreeableness trait is not measured in popular temperament models, trait Affiliativeness, which is somewhat analogous, does appear in adolescent and adult measures, as also described in the previous section (Evans & Rothbart, 2009). These differences are particularly salient in a developmental context because temperament measures are very frequently used in studies of infants, children, and adolescents. Thus, this creates a more fragmented literature when seeking to understand the early emergence and development of agreeableness and related characteristics.

Measuring Agreeableness

Measuring personality traits across the lifespan encounters numerous challenges (De Pauw & Mervielde, 2010; Tackett et al., 2013). In particular, the field suffers from a lack of psychometrically sound measurement tools that span wide age ranges (De Pauw & Mervielde, 2010), and can therefore be used in samples with a wide variety of participant ages or longitudinal studies spanning many years and/or major developmental epochs. An understanding of measuring trait agreeableness, given its omission in many early temperament measures, particularly suffers from the consequences of these limitations. Of course, it is also important to acknowledge that trait manifestations may meaningfully differ across developmental stages, such that widely used trait measures (e.g., popular adult questionnaires) may not be ideal for younger age groups (Caspi et al., 2005; De Fruyt, Mervielde, Hoekstra, & Rolland, 2000).

Measurement of early personality traits similarly faces barriers due to methodological limitations and constraints. The use of parent report questionnaires is likely the most common, but not without limitations (Rothbart & Bates, 2006; Tackett, Herzhoff, Kushner, & Rule, 2016). Self-report questionnaires are often not feasible to use in young children, and when they are given to children, they typically demonstrate lower reliability and higher acquiescence (e.g., Rothbart & Bates, 2006; Soto, John, Gosling, & Potter, 2008). Other measures are often used, including interviews or the use of behavioral tasks, but each approach includes substantial limitations (Rothbart & Bates, 2006). In addition, many established protocols for laboratory tasks to measure early dispositions are formulated on popular measures of temperament, and thus do not include tasks specifically designed to measure agreeableness. Recent research indicates that laboratory tasks may contain just as much information about other traits as the ones they were designed to tap (Tackett et al., 2016), however. Although agreeableness information likely was

not coded in previously collected lab tasks designed to assess temperament, this suggests that it could potentially be added to coding protocols moving forward. This would greatly enhance our existing literature base regarding early agreeableness measurement and conceptualization.

Given these limitations in measuring personality traits more generally, as well as specific challenges for agreeableness, it is critically important to understand what any given measure is tapping into it. One way to do this is by examining the facets, or lower-order traits, indexing agreeableness (or its analogs) in a specific measure. This level of analysis may be impeded by instances of the jingle-jangle fallacy, if trait labels are not always adequate in delineating overlapping and unique variance. Thus, it is also important to draw on empirical investigations seeking to define the specific agreeableness variance captured as it overlaps with and is distinguished from that in other measures.

Some such investigations have been conducted, although more empirical work is sorely needed. For example, one study by Tackett and colleagues (2013) compared two measures of child personality (the ICID; Halverson et al., 2003 and the HiPIC; Mervielde & De Fruyt, 1999), as well as a popular measure of youth temperament (the EATQ-R; Ellis & Rothbart, 2001). The authors found HiPIC Benevolence and ICID-S (short form) Agreeableness correlated quite highly ($r = .89$), and showed superior unique prediction of one another when entered into a regression simultaneous with other higher-order traits from each measure. In other words, despite fairly different approaches to the agreeableness content in each measure (see previous delineation of agreeableness facets in both measures), they appear to capture very highly overlapping content. However, the authors found some differentiation in their measurement when examining associations with EATQ-R temperament traits. Although both HiPIC Benevolence and ICID-S Agreeableness showed substantial overlapping variance with EATQ-R

Negative Affectivity, ICID-S Agreeableness overlapped more with EATQ-R Surgency and Effortful Control than did HiPIC Benevolence. These differentiated patterns offer some hints as to their different coverage of the broader trait.

Agreeableness and Psychological and Social Functioning

Agreeableness and Psychopathology

Given the various definitions and components of agreeableness discussed previously, there are strong conceptual reasons to expect agreeableness to relate negatively to psychopathology. In general, the research supports this expectation, especially for externalizing-type disorders (e.g., disinhibitory forms of psychopathology) and psychopathic traits.

Externalizing Problems

Almost by definition, agreeable people are positive and cooperative rather than aggressive with others, and they are indeed more prosocial and empathic (Caprara et al., 2010; Graziano, Habashi, Sheese, & Tobin, 2007; Habashi, Graziano, & Hoover, 2016). Moreover, agreeable people tend to be lower in impulsivity and higher in self-regulation (e.g., Cumberland-Li, Eisenberg, & Reiser, 2004; Hagekull & Bohlin, 1998; Laursen, Pulkkinen, & Adams, 2002; McCrae & Löckenhoff, 2010), prone to positive rather than negative emotion (Tackett et al., 2012; Zhang & Tsingan, 2013), and do not exhibit an undercontrolled personality (Alessandri, Vecchione, et al., 2014; Oshri, Rogosch, & Cicchetti, 2013)—all characteristics expected to relate to lower levels of externalizing problems (Eisenberg, Spinrad, & Eggum, 2010; Robins, John, Caspi, Moffitt, & Stouthamer-Loeber, 1996).

Considerable research supports a negative relation between agreeableness and externalizing behaviors. Most of the existing findings are derived from studies using FFM operationalizations of agreeableness. In various meta-analyses, agreeableness has been

negatively related to antisocial behavior (broadly defined) (apparently mostly studies with adults; Miller & Lynman, 2001), psychopathy or antisocial personality according to DSM-4 criteria (with adolescents and adults; Decuyper, De Pauw, De Fruyt, De Bolle, & De Clercq, 2009), children's externalizing problems and adults' alcohol and drug usage (Malouff, Thorsteinsson, & Schutte, 2005), and adults' substance disorders (Kotov, Gamez, Schmidt, & Watson, 2010). Moreover, in a meta-analysis including children and adults, agreeableness was negatively related to components of ADHD, with a small relation for inattention and a stronger relation for impulsivity/ hyperactivity (Gomez & Corr, 2014).

Some researchers have examined specific facets of agreeableness. In the Decuyper et al. (2009) meta-analysis, negative relations were found for both antisocial personality disorders and psychopathy for all facets of agreeableness (Trust, Straightforwardness, Compliance, Altruism, Modesty, Tendermindedness), although psychopathy was characterized by stronger negative associations with Agreeableness and Straightforwardness, Compliance, and Modesty compared to antisocial personality. In the Jones, Miller, and Lynam (2011) meta-analysis (in which it was unclear how young participants included were), antisocial personality and aggression were significantly related to all facets of agreeableness and were more strongly related to agreeableness than were other Big Five personality traits; however, positive relations with the Straightforwardness, Compliance, and Altruism factors were considerably stronger than for Trust, Modesty, and Tendermindedness.

In addition, agreeableness (or disagreeableness) tends to relate to the specific types of externalizing problems examined in children. For example, Tackett, Herzhoff, Reardon, De Clercq, and Sharp (2014) found that disagreeableness (characterized by antagonism and difficulty getting along with others) was positively associated with relational aggression as well

as with physical aggression, and weakly (and inconsistently) to rule breaking. Of interest, the relation of disagreeableness with rule breaking was higher in adolescence than in childhood whereas the relation of disagreeableness with relational aggression was highest in middle childhood. In a longitudinal study including maltreated and nonmaltreated youth, Oshri et al. (2013) found that agreeableness at age 10 to 12 predicted externalizing problems, cannabis use, and alcohol symptoms at age 15-18 years. Thus, findings linking agreeableness to low levels of multiple types of externalizing problems are relatively robust and have been found for both children and adults. However, it is unclear to what degree agreeableness and externalizing problems affect one another across time and to what degree genetics account for the relation.

Internalizing Problems

Given that agreeable people tend to get along well with others (see below) and are high in personality resiliency (Cumberland-Li et al., 2004; also see Oshri et al., 2013), they would be expected to be less likely than non-agreeable people to be prone to social withdrawal, social anxiety, or depression. However, internalizing problems have been less consistently and less strongly related to agreeableness. In a meta-analysis, Kotov et al. (2010) found that agreeableness was not related to an array of diagnosed internalizing disorders (e.g., major depression, panic disorder, major depressive disorder; unipolar depression; generalized anxiety disorder; posttraumatic stress disorder, or obsessive-compulsive disorder), apparently assessed primarily in adults. Hakulinen et al. (2015), in a meta-analysis of 10 prospective community cohort studies, also found no relation of agreeableness to depression concurrently. However, prospectively, depressive symptoms were negatively related to personality change in agreeableness, albeit not vice versa. In a third meta-analysis, Zaninotto et al. (2016) found a negative relation between adults' mood disorders and cooperativeness, a personality trait

operationalized as highly similar to agreeableness.

In a meta-analysis of research with children and adolescents, Malouff et al. (2005) found a substantial negative relation between agreeableness and children's internalizing problems. Moreover, disagreeableness has been associated with internalizing problems in children and adolescents in studies since the 2005 meta-analysis (e.g., De Clercq, Van Leeuwen, De Fruyt, Van Hiel, & Mervielde, 2008; Laursen, Hafen, Rubin, Booth-LaForce, & Rose-Krasnor, 2010). In studies with adults, mood disorders, including depression, have often been the measure of internalizing problems, whereas in studies with children, internalizing problems sometimes include behaviors such as social withdrawal as well as anxiety and depressive symptoms, which might affect the strength of the negative relation with agreeableness.

Agreeableness likely is sometimes *positively* related to youths' internalizing symptoms: Overcontrolled youth, who tend to have internalizing problems (Oshri et al., 2013), tend to be high in agreeableness (Robins et al., 1996). Overcontrolled youths likely are high in compliance and regulated behaviors such as politeness and altruism (see Alessandri, Vecchione, et al., 2014), which could partly account for this relation. Thus, it may be that some aspects of agreeableness are positively related to internalizing problems (or some types of internalizing problems) whereas other aspects (e.g., trust) are negatively related.

Consequently, the relation between agreeableness and internalizing problems may vary as a function of age, as well as the facet of agreeableness and type of internalizing problems examined. In addition, it is quite possible that internalizing problems often have an effect on individual differences in agreeableness across time rather than low agreeableness increasing internalizing problems (Hakulinen et al., 2015).

Agreeableness and Quality of Relationships

Graziano and Eisenberg (1997) suggested that agreeableness refers to the motivation to accommodate to others with the goal of maintaining smooth interpersonal relationships.

Consistent with this view, individual differences in agreeableness have been associated with the quality of social relationship with peers, family, and romantic partners. Individuals who have agreeable personalities likely enjoy the company of others and are better able to relate to others, making it easier to build and maintain relationships.

For example, agreeableness has been associated with greater peer acceptance and decreased victimization from peers across the school year in childhood (Jensen-Campbell et al., 2002), better peer relations in adolescence (Laursen et al., 2010), and higher social competence in emerging and later adulthood (Shiner, 2000; Shiner & Masten, 2012). Similarly, agreeableness was concurrently associated with higher peer closeness, but not with change in relationships with peers, in a German young adult sample (Neyer & Lehnart, 2007). Thus, although agreeableness has generally been associated with peer competence, there are some measures of social competence that may be more (or less) often predicted by agreeableness.

Consistent with the transactional model of development (Sameroff, 2009), parents' and children's personalities also have implications for parent–child interactions and relationship quality in the family. For example, Denissen, van Aken, and Dubas (2009) found that Dutch adolescents' agreeableness was positively associated with parent–child relationship warmth (e.g., quality of information, warmth, acceptance). Consistent with these findings, Parker, Ludtke, Trautwein, and Roberts (2012) found that an increase in agreeableness from high school to adulthood was associated with declines in conflictual relationships with parents, siblings, and friends. Among adults in Germany, agreeableness was concurrently associated with lower family conflict (but was not significantly associated with change in relationships with family members

because there was no significant variability in change across 8 years; Neyer & Lehnart, 2007). In regard to parents, fathers' agreeableness was positively associated with more positive observed interactions with their infant children (Kochanska, Friesenborg, Lange, Martel, & Kochanska, 2004). Similarly, in a meta-analysis, Prinzie, Stams, Dekovic, Reijntjes, and Belsky (2009) found that parental agreeableness was positively associated with parental warmth (especially among younger children), negatively associated with parental control, and positively associated with autonomy support. Thus, both child (Denissen et al., 2009; Parker et al., 2012) and parent (Kochanska et al., 2004; Prinzie et al., 2009) agreeableness have been positively associated with parent-child relationship quality, highlighting how parents and children jointly shape their relationship with each other.

Agreeableness also has implications for romantic relationships. Based on a review of longitudinal studies, Roberts, Kuncel, Shiner, Caspi, and Goldberg (2007) concluded that agreeableness was negatively related to divorce and positively related to the number of years married. Similarly, in meta-analyses, agreeableness was positively associated with relationship satisfaction (Malouff, Thorsteinsson, Schutte, Bhullar, & Rooke, 2010) and family life social investments (e.g., commitment to family, investment in family) and marital status (i.e., length and status of marriage; Lodi-Smith & Roberts, 2007). Other findings suggest bidirectional effects: Mund and Neyer (2014) found that change in prosociality (a facet of agreeableness) was positively related to change in adults' romantic relationship closeness across 15 years, and vice versa.

Conflict in relationships is expected and appropriately managing conflict is key to relationship stability. Agreeableness has been negatively associated with aggressive tendencies in childhood and adulthood (Caprara et al., 2013; de Haan, Prinzie, & Dekovic, 2010; Shiner,

Masten, & Roberts, 2003), which also has implications for how individuals resolve conflict with others. Agreeable adolescents tend to be more likely to endorse negotiation resolution strategies (e.g., third-party mediation, stepping down from argument) and less likely to endorse power assertion resolution strategies (e.g., physical action, criticism, threats, low compromise) as acceptable ways to deal with conflict with parents, siblings, and friends (Jensen-Campbell, Graziano, & Hair, 1996). Similarly, children's agreeableness was positively associated with constructive conflict resolutions (including submission, disengagement, third-party intervention), and negatively associated with destructive resolutions (including manipulation, guilt, physical force, Jensen-Campbell, Gleason, Adams, & Malcolm, 2003). These resolution strategies inevitably affect social relationship formation and maintenance, for which power assertion resolution strategies may be perceived as threatening to others.

The underlying mechanisms facilitating constructive resolutions appear to have an automatic cognitive component. When adults were presented with an emotion attribution task (i.e., attributing positive or negative causes to happy or sad faces, respectively, versus a control task), agreeableness was associated with greater right temporoparietal junction activity when making emotion attribution decisions, suggesting that it was positively related to a person's perspective-taking (given higher activity in the temporoparietal junction) during emotional attribution decisions (Haas, Ishak, Denison, Anderson, & Filkowski, 2015). These findings align with studies pointing to a positive relation between agreeableness and prosocial behaviors (e.g., Caprara et al., 2010; Graziano et al., 2007; Habashi et al., 2016).

Numerous mechanisms have been identified that could explain the association between agreeableness and social relationships. In two meta-analyses, agreeableness was positively associated with forgiveness tendencies among adults (Balliet, 2010; Riek & Mania, 2012), which

has implications for the maintenance of social relationships. In another meta-analysis, Sibley and Duckitt (2008) found that agreeableness was negatively associated with social dominance orientation (i.e., the belief that one's group is more dominant than other groups), which is associated with prejudice and may be counterproductive to forming positive relationships with out-group members. There is also some evidence that agreeableness is a resilience-promoting factor. For example, among adolescents from the United States and China, rejection sensitivity predicted higher social withdrawal and lower friendship satisfaction for those low – but not high – in agreeableness (Wang, Hartl, Laursen, & Rubin, in press). That is, it is likely that agreeableness helped reduce the negative effects of rejection sensitivity on social relationships. Similarly, the associations between a series of behavioral factors (e.g., internalizing, physical weakness, prosocial skills) and peer victimization were moderated by agreeableness among children in the United States (Jensen-Campbell et al., 2002). Specifically, the negative associations between prosocial skills or physical strength and peer victimization, and the positive association between child internalizing symptoms and peer victimization, were significant only for children low in agreeableness; among those with medium or high agreeableness, peer victimization was low and not predicted by the behavioral factors examined (Jensen-Campbell et al., 2002). These findings indicate that agreeableness mitigates the negative effects that risk factors might be expected to have on social relationships and that those high in agreeableness are able to sustain quality social relationships despite difficult circumstances (e.g., internalizing symptoms, rejection sensitivity, low prosocial skills).

Agreeableness and Academic Competence

Academic competence is multifaceted and involves regulation and cooperation in both academic and social tasks in school. Although conscientiousness has been more consistently

associated with academic achievement (O'Connor & Paunonen, 2007), agreeableness likely also plays a role in children's everyday experiences in school, in both academic and social capacities. Individuals who are more agreeable tend to be better regulated (McCrae & Löckenhoff, 2010). Thus, in school, agreeable individuals may better adjust to school demands and excel in academic tasks, as well as build positive relationships with teachers and peers in school.

There have been a number of studies examining the associations between agreeableness and academic adjustment, albeit a majority of studies have been conducted with college students. Meta-analyses have found that agreeableness has a small positive relation to academic achievement among mostly college-aged participants (McAbee & Oswald, 2013; O'Connor & Paunonen, 2007; Vedel, 2014), children in elementary school (Poropat, 2014), and students from elementary school to college levels (Poropat, 2009). There is also compelling longitudinal evidence; Shiner, for example, found that agreeableness in childhood predicted with academic attainment ten (Shiner, 2000) and twenty years later in adulthood (Shiner & Masten, 2012; Shiner et al., 2003).

However, some research findings do not support the significance of agreeableness on academic achievement. One meta-analysis did not find that agreeableness predicted academic success in college (Trapmann, Hell, Hirn, & Schuler, 2007). Various researchers have also reported null findings (Barthelemy & Lounsbury, 2009; Caprara, Barbaranelli, Pastorelli, & Cervone, 2004; Smrtnik-Vitulić & Zupančič, 2011; Spengler, Lüdtke, Martin, & Brunner, 2013; Trapmann et al., 2007; Zuffianò et al., 2013). Some studies have found that agreeableness, at best, has small effects on some academic measures. For instance, Barthelemy and Lounsbury (2009) found that agreeableness was associated with adolescents' grades, but when adolescent aggression was controlled for, agreeableness was no longer a significant predictor of grades.

Correspondingly, although agreeableness was positively associated with high school grade point average (GPA) in one sample of undergraduate students, agreeableness was negatively associated with SAT scores and college GPA (Nofle & Robins, 2007). Similar results have been reported among adolescents; Spengler et al. (2013) found that agreeableness was unrelated to academic grades and negatively associated with achievement in standardized tests. Together, these studies suggest that the association between agreeableness and academic achievement may be more nuanced, partly based on what measure of academic competence is being considered.

Regulatory, motivational, and relationship factors have been implicated as mechanisms for the association between agreeableness and academic achievement (Komarraju, Karau, & Schmeck, 2009). For example, among undergraduate students in the United States, agreeableness was associated with GPA via effort regulation during academic tasks (e.g., persistent effort to tasks, dealing with failure in learning; Bidjerano & Dai, 2007). Relatedly, agreeableness was associated with academic adaptability among high school students (adaptability resembles resilience and coping in academic settings of novelty; Martin, Nejad, Colmar, & Liem, 2013). Regarding motivational processes, agreeableness was positively associated with commitment to one's education among college students (Klimstra, Luyckx, Germeijs, Meeus, & Goossens, 2012). Furthermore, agreeableness was negatively associated with teacher–student dependency and conflict, and positively associated with teacher–student closeness, which predicted higher motivational beliefs and achievement among children in the Netherlands (Zee, Koomen, & Van der Veen, 2013). Teacher-student relationship quality and motivational beliefs mediated the association between agreeableness and academic achievement. Although the aforementioned researchers tested mediation, Zhou (2015) found that autonomous motivation was a significant moderator: Agreeableness positively predicted academic performance for Chinese children low

in autonomous motivation, whereas, highly motivated students were academically adjusted regardless of their agreeableness levels.

Some of the disparate findings between agreeableness and academic achievement may also be due to varying assessments of agreeableness and not accounting for underlying facets of agreeableness that may promote or hinder academic achievement. For example, McAbee, Oswald, and Connelly (2014) estimated a bi-factor model of agreeableness based on the HEXACO scale and found that among college students in the United States, agreeableness was positively associated with GPA, adaptability and life skills (e.g., balance in personal, academic, and professional priorities), and persistence (e.g., pursuing goals despite difficulties), all key to academic achievement. However, some facets of agreeableness were either positively or negatively associated with academic outcomes. Flexibility and patience both uniquely predicted higher continuous learning (e.g., seeking opportunities to learn new ideas or skills). Notably, gentleness, another sub-factor of agreeableness, was negatively associated with GPA, adaptability and life skills, and persistence (McAbee et al., 2014), echoing findings on academic achievement among adolescents (Spengler et al., 2013) and college students (Nofle & Robins, 2007). Similarly, among inner city boys, compassion in preadolescence negatively predicted total years of schooling in adulthood even though compliance was associated with more years of schooling and a lower likelihood of dropping out or being expelled from school by adulthood (Kern et al., 2013). These findings highlight the nuanced role that agreeableness may have on academic outcomes, with attention to both broad and narrow personality traits, as well as different definitions of agreeableness (e.g., Big Five versus HEXACO). Furthermore, specific aspects of agreeableness (e.g., gentleness, compassion) may have negative effects on achievement, perhaps because these are more subtly associated with meek or compliant

behaviors and relate less to assertive agreeableness features. Future research examining both broad and narrow aspects of agreeableness will help clarify the role of agreeableness on academic achievement.

One notable limitation in this research area is that most of the empirical findings have been based on college students and rarely based on children and adolescents, perhaps because earlier temperament measures do not correspond well with agreeableness (Tackett et al., 2013). Thus, we know less about how agreeableness in childhood and adolescence relates to school functioning. Given that early markers of school functioning are strong predictors of academic attainment, examining early precursors of agreeableness and school functioning could clarify mediating and moderating mechanisms that link agreeableness to later academic achievement.

Conclusion

In sum, agreeableness is a personality trait that clearly emerges by childhood, yet has elicited less empirical attention earlier in life. When agreeableness has been studied in children, measurements often emphasize compliance and (reverse-coded) antagonism more heavily than do adult measures (although child measures frequently include aspects of prosocial functioning as well). When agreeableness has been measured in children, it often demonstrates psychometric properties equivalent to other major personality traits, indicating that it can be validly and reliably measured from childhood. Furthermore, agreeableness demonstrates robust associations with a host of relevant consequential behavioral constructs, including psychopathology, relational functioning, and academic performance. In particular, agreeableness emerges as a very strong indicator of (low) externalizing psychopathology from childhood to adulthood. Similarly, agreeableness in children and adolescents is associated with higher relational functioning (e.g., with parents and peers) and lower levels of conflict. Although much less studied in childhood

and early adolescence, there is some indication that agreeableness is associated with indicators of academic competence, although findings are mixed and more developmental research is needed. Overall, agreeableness is a robust and widely studied personality trait in adults, but the lack of empirical attention to early agreeableness points to many areas for future research development. The potential predictive value of early agreeableness for many life outcomes, including mental health and relational function, underscore the need for more research on agreeableness and related behaviors across the lifespan.

References

- Alessandri, G., Kanacri, B. P. L., Eisenberg, N., Zuffianò, A., Milioni, M., Vecchione, M., & Caprara, G. V. (2014). Prosociality during the transition from late adolescence to young adulthood: The role of effortful control and ego-resiliency. *Personality and Social Psychology Bulletin*, 40, 1451-1465. doi: 10.1177/0146167214549321
- Alessandri, G., Vecchione, M., Donnellan, B. M., Eisenberg, N., Caprara, G. V., & Cieciuch, J. (2014). On the cross-cultural replicability of the resilient, undercontrolled, and overcontrolled personality types. *Journal of Personality*, 82, 340-353. doi: 10.1111/jopy.12065
- Balliet, D. (2010). Conscientiousness and forgivingness: A meta-analysis. *Personality and Individual Differences*, 48, 259-263. doi: 10.1016/j.paid.2009.10.021
- Barthelemy, J. J., & Lounsbury, J. W. (2009). The relationship between aggression and the Big Five Personality Factors in predicting academic success. *Journal of Human Behavior in the Social Environment*, 19, 159-170. doi: 10.1080/10911350802687125
- Bidjerano, T., & Dai, D. Y. (2007). The relationship between the big-five model of personality and self-regulated learning strategies. *Learning and Individual Differences*, 17, 69-81. doi: 10.1016/j.lindif.2007.02.001
- Caprara, G. V., Alessandri, G., Di Giunta, L., Panerai, L., & Eisenberg, N. (2010). The contribution of agreeableness and self-efficacy beliefs to prosociality. *European Journal of Personality*, 24, 36-55. doi: 10.1002/per.739
- Caprara, G. V., Alessandri, G., & Eisenberg, N. (2012). Prosociality: The contribution of traits, values, and self-efficacy beliefs. *Journal of Personality and Social Psychology*, 102, 1289-1303. doi: 10.1037/a0025626

- Caprara, G. V., Alessandri, G., Tisak, M. S., Paciello, M., Caprara, M. G., Gerbino, M., & Fontaine, R. G. (2013). Individual differences in personality conducive to engagement in aggression and violence. *European Journal of Personality*, 27, 290-303. doi: 10.1002/per.1855
- Caprara, G. V., Barbaranelli, C., Pastorelli, C., & Cervone, D. (2004). The contribution of self-efficacy beliefs to psychosocial outcomes in adolescence: Predicting beyond global dispositional tendencies. *Personality and Individual Differences*, 37, 751-763. doi: 10.1016/j.paid.2003.11.003
- Caspi, A., Roberts, B. W., & Shiner, R. L. (2005). Personality development: Stability and change. *Annual Review of Psychology*, 56, 453-484. doi: 10.1146/annurev.psych.55.090902.141913
- Costa, P. T., & McCrae, R. R. (1992). Neo PI-R professional manual.
- Cumberland-Li, A., Eisenberg, N., & Reiser, M. (2004). Relations of young children's agreeableness and resiliency to effortful control and impulsivity. *Social Development*, 13, 193-212. doi: 10.1111/j.1467-9507.2004.000263.x
- De Clercq, B., Van Leeuwen, K., De Fruyt, F., Van Hiel, A., & Mervielde, I. (2008). Maladaptive personality traits and psychopathology in childhood and adolescence: The moderating effect of parenting. *Journal of Personality*, 76, 357-383. doi: 10.1111/j.1467-6494.2007.00489.x
- De Fruyt, F., Mervielde, I., Hoekstra, H. A., & Rolland, J. P. (2000). Assessing adolescents' personality with the NEO PI-R. *Assessment*, 7, 329-345. doi: 10.1177/107319110000700403
- de Haan, A. D., Prinzie, P., & Dekovic, M. (2010). How and why children change in aggression

- and delinquency from childhood to adolescence: Moderation of overreactive parenting by child personality. *Journal of Child Psychology and Psychiatry*, 51, 725-733. doi: 10.1111/j.1469-7610.2009.02192.x
- de Haan, A., De Pauw, S., van den Akker, A., Dekovic, M., & Prinzie, P. (2016). Long-term developmental changes in children's lower-order big five personality facets. *Journal of Personality*. doi: 10.1111/jopy.12265
- De Pauw, S. S. W., & Mervielde, I. (2010). Temperament, personality and developmental psychopathology: A review based on the conceptual dimensions underlying childhood traits. *Child Psychiatry and Human Development*, 41, 313-329. doi: 10.1007/s10578-009-0171-8
- Decuyper, M., De Pauw, S., De Fruyt, F., De Bolle, M., & De Clercq, B. J. (2009). A meta-analysis of psychopathy-, antisocial PD- and FFM associations. *European Journal of Personality*, 23, 531-565. doi: 10.1002/per.729
- Denissen, J. J., van Aken, M. A., & Dubas, J. S. (2009). It takes two to tango: How parents' and adolescents' personalities link to the quality of their mutual relationship. *Developmental Psychology*, 45, 928-941. doi: 10.1037/a0016230
- Digman, J. M., & Shmelyov, A. G. (1996). The structure of temperament and personality in Russian children. *Journal of Personality and Social Psychology*, 71, 341-351. doi: 10.1037/0022-3514.71.2.341
- Eisenberg, N., Spinrad, T. L., & Eggum, N. D. (2010). Emotion-related self-regulation and its relation to children's maladjustment. *Annual Review of Clinical Psychology*, 6, 495-525. doi: 10.1146/annurev.clinpsy.121208.131208
- Ellis, L. K., & Rothbart, M. K. (2001, April). *Revision of the early adolescent temperament*

- questionnaire*. Poster presented at the Biennial Meeting of the Society for Research in Child Development, Minneapolis, Minnesota.
- Evans, D. E., & Rothbart, M. K. (2007). Developing a model for adult temperament. *Journal of Research in Personality, 41*, 868-888. doi: 10.1016/j.jrp.2006.11.002
- Evans, D. E., & Rothbart, M. K. (2009). A two-factor model of temperament. *Personality and Individual Differences, 47*, 565-570. doi: 10.1016/j.paid.2009.05.010
- Goldberg, L. R. (2001). Analyses of Digman's child-personality data: Derivation of big-five factor scores from each of six samples. *Journal of Personality, 69*, 709-743. doi: 10.1111/1467-6494.695161
- Gomez, R., & Corr, P. J. (2014). ADHD and personality: a meta-analytic review. *Clinical Psychology Review, 34*, 376-388. doi: 10.1016/j.cpr.2014.05.002
- Graziano, W. G., & Eisenberg, N. (1997). Agreeableness: A dimension of personality. In R. Hogan, J. Johnson, & S. Briggs (Eds.), *Handbook of personality psychology* (pp. 795-824). San Diego, CA: Academic Press.
- Graziano, W. G., Habashi, M. M., Sheese, B. E., & Tobin, R. M. (2007). Agreeableness, empathy, and helping: A person x situation perspective. *Journal of Personality and Social Psychology, 93*, 583-599. doi: 10.1037/0022-3514.93.4.583
- Haas, B. W., Ishak, A., Denison, L., Anderson, I., & Filkowski, M. M. (2015). Agreeableness and brain activity during emotion attribution decisions. *Journal of Research in Personality, 57*, 26-31. doi: 10.1016/j.jrp.2015.03.001
- Habashi, M. M., Graziano, W. G., & Hoover, A. E. (2016). Searching for the prosocial personality: A Big Five approach to linking personality and prosocial behavior. *Personality and Social Psychology Bulletin, 42*, 1177-1192. doi:

10.1177/0146167216652859

- Hagekull, B., & Bohlin, G. (1998). Preschool temperament and environmental factors related to the five-factor model of personality in middle childhood. *Merrill-Palmer Quarterly*, 44, 194-215.
- Hakulinen, C., Elovainio, M., Pulkki - Råback, L., Virtanen, M., Kivimäki, M., & Jokela, M. (2015). Personality and depressive symptoms: Individual participant meta - analysis of 10 cohort studies. *Depression and Anxiety*, 32, 461-470. doi: 10.1002/da.22376
- Halverson, C. F., Havill, V. L., Deal, J., Baker, S. R., Victor, J. B., Pavlopoulos, V., . . . Wen, L. (2003). Personality structure as derived from parental ratings of free descriptions of children: The Inventory of Child Individual Differences. *Journal of Personality*, 71, 995–1026. doi: 10.1111/1467-6494.7106005
- Havill, V. L., Besevegis, E., & Mouroussaki, S. (1998). Agreeableness as a diachronic human trait. In G. A. Kohnstamm, C. F. Jr. Halverson, I. Mervielde, & V. L. Havill (Eds.), *Parental descriptions of child personality: Developmental antecedents of the Big Five* (pp. 49-64). Mahwah, NJ: Lawrence Erlbaum Associates.
- Jensen-Campbell, L. A., Adams, R., Perry, D. G., Workman, K. A., Furdella, J. Q., & Egan, S. K. (2002). Agreeableness, extraversion, and peer relations in early adolescence: Winning friends and deflecting aggression. *Journal of Research in Personality*, 36, 224-251. doi: 10.1006/jrpe.2002.2348
- Jensen-Campbell, L. A., Gleason, K. A., Adams, R., & Malcolm, K. T. (2003). Interpersonal conflict, agreeableness, and personality development. *Journal of Personality*, 71, 1059–1086. doi: 10.1111/1467-6494.7106007
- Jensen-Campbell, L. A., Graziano, W. G., & Hair, E. C. (1996). Personality and relationships as

- moderators of interpersonal conflict in adolescence. *Merrill-Palmer Quarterly*, 42, 148-164.
- Jones, S. E., Miller, J. D., & Lynam, D. R. (2011). Personality, antisocial behavior, and aggression: A meta-analytic review. *Journal of Criminal Justice*, 39, 329–337. doi: 10.1016/j.jcrimjus.2011.03.004
- Kern, M. L., Duckworth, A. L., Urzua, S., Loeber, R., Stouthamer-Loeber, M., & Lynam, D. R. (2013). Do as you're told! Facets of agreeableness and early adult outcomes for inner-city boys. *Journal of Research in Personality*, 47. doi: 10.1016/j.jrp.2013.08.008
- Klimstra, T. A., Luyckx, K., Germeijs, V., Meeus, W. H., & Goossens, L. (2012). Personality traits and educational identity formation in late adolescents: Longitudinal associations and academic progress. *Journal of Youth and Adolescence*, 41, 346-361. doi: 10.1007/s10964-011-9734-7
- Kochanska, G., Friesenborg, A. E., Lange, L. A., Martel, M. M., & Kochanska, G. (2004). Parents' personality and infants' temperament as contributors to their emerging relationship. *Journal of Personality and Social Psychology*, 86, 744-759. doi: 10.1037/0022-3514.86.5.744
- Komarraju, M., Karau, S. J., & Schmeck, R. R. (2009). Role of the Big Five personality traits in predicting college students' academic motivation and achievement. *Learning and Individual Differences*, 19, 47-52. doi: 10.1016/j.lindif.2008.07.001
- Kotov, R., Gamez, W., Schmidt, F., & Watson, D. (2010). Linking “big” personality traits to anxiety, depressive, and substance use disorders: A meta-analysis. *Psychological Bulletin*, 136, 768–821. doi: 10.1037/a0020327
- Laursen, B., Hafen, C. A., Rubin, K. H., Booth-LaForce, C., & Rose-Krasnor, L. (2010). The

- distinctive difficulties of disagreeable youth. *Merrill-Palmer Quarterly*, 56, 80-103. doi: 10.1353/mpq.0.0040
- Laursen, B., Pulkkinen, L., & Adams, R. (2002). The antecedents and correlates of agreeableness in adulthood. *Developmental Psychology*, 38, 591-603. doi: 10.1037/0012-1649.38.4.591
- Lodi-Smith, J., & Roberts, B. W. (2007). Social investment and personality: A meta-analysis of the relationship of personality traits to investment in work, family, religion, and volunteerism. *Personality and Social Psychology Review*, 11, 68-86. doi: 10.1177/1088868306294590
- Malouff, J. M., Thorsteinsson, E. B., & Schutte, N. S. (2005). The relationship between the five-factor model of personality and symptoms of clinical disorders: A meta-analysis. *Journal of Psychopathology and Behavioral Assessment*, 27, 101-114. doi: 10.1007/s10862-005-5384-y
- Malouff, J. M., Thorsteinsson, E. B., Schutte, N. S., Bhullar, N., & Rooke, S. E. (2010). The Five-Factor Model of personality and relationship satisfaction of intimate partners: A meta-analysis. *Journal of Research in Personality*, 44, 124-127. doi: 10.1016/j.jrp.2009.09.004
- Martel, M. M., Nigg, J. T., & Lucas, R. E. (2008). Trait mechanisms in youth with and without attention-deficit/hyperactivity disorder. *Journal of Research in Personality*, 42, 895-913. doi: 10.1016/j.jrp.2007.12.004
- Martin, A. J., Nejad, H. G., Colmar, S., & Liem, G. A. D. (2013). Adaptability: How students' responses to uncertainty and novelty predict their academic and non-academic outcomes. *Journal of Educational Psychology*, 105, 728-746. doi: 10.1037/a0032794
- McAbee, S. T., & Oswald, F. L. (2013). The criterion-related validity of personality measures for

- predicting GPA: A meta-analytic validity competition. *Psychological Assessment*, 25, 523-544. doi: 10.1037/a0031748
- McAbee, S. T., Oswald, F. L., & Connelly, B. S. (2014). Bifactor models of personality and college student performance: A broad versus narrow view. *European Journal of Personality*, 28, 604-619. doi: 10.1002/per.1975
- McCrae, R. R., & Löckenhoff, C. E. (2010). Self-regulation and the five-factor model of personality traits. In R. H. Hoyle (Ed.), *Handbook of personality and self-regulation*. Oxford, UK: Wiley-Blackwell.
- Mervielde, I., & De Fruyt, F. (1999). Construction of the Hierarchical Personality Inventory for Children (HiPIC). In *Personality psychology in Europe. Proceedings of the Eight European Conference on Personality Psychology/I. Mervielde, I. Deary, F. De Fruyt, & F. Ostendorf (Eds.)*.-Tilburg: Tilburg University Press, 1999 (pp. 107-127).
- Miller, J. D., & Lynman, D. (2001). Structural models of personality and their relation to antisocial behavior: A meta-analytic review. *Criminology*, 39, 765-798. doi: 10.1111/j.1745-9125.2001.tb00940.x
- Mund, M., & Neyer, F. J. (2014). Treating personality-relationship transactions with respect: Narrow facets, advanced models, and extended time frames. *Journal of Personality and Social Psychology*, 107, 352-368. doi: 10.1037/a0036719
- Neyer, F. J., & Lehnart, J. (2007). Relationships matter in personality development: Evidence from an 8 - year longitudinal study across young adulthood. *Journal of Personality*, 75, 535-568. doi: 10.1111/j.1467-6494.2007.00448.x
- Nofhle, E. E., & Robins, R. W. (2007). Personality predictors of academic outcomes: Big Five correlates of GPA and SAT scores. *Journal of Personality and Social Psychology*, 93,

- 116-130. doi: 10.1037/0022-3514.93.1.116
- O'Connor, M. C., & Paunonen, S. V. (2007). Big Five personality predictors of post-secondary academic performance. *Personality and Individual Differences*, 43, 971-990. doi: 10.1016/j.paid.2007.03.017
- Oshri, A., Rogosch, F. A., & Cicchetti, D. (2013). Child maltreatment and mediating influences of childhood personality types on the development of adolescent psychopathology. *Journal of Clinical Child and Adolesc Psychology*, 42, 287-301. doi: 10.1080/15374416.2012.715366
- Parker, P. D., Ludtke, O., Trautwein, U., & Roberts, B. W. (2012). Personality and relationship quality during the transition from high school to early adulthood. *Journal of Personality*, 80, 1061-1089. doi: 10.1111/j.1467-6494.2012.00766.x
- Poropat, A. E. (2009). A meta-analysis of the five-factor model of personality and academic performance. *Psychological Bulletin*, 135, 322-338. doi: 10.1037/a0014996
- Poropat, A. E. (2014). A meta-analysis of adult-rated child personality and academic performance in primary education. *British Journal of Educational Psychology*, 84, 239-252. doi: 10.1111/bjep.12019
- Prinz, P., Stams, G. J., Dekovic, M., Reijntjes, A. H., & Belsky, J. (2009). The relations between parents' Big Five personality factors and parenting: a meta-analytic review. *Journal of Personality and Social Psychology*, 97, 351-362. doi: 10.1037/a0015823
- Riek, B. M., & Mania, E. W. (2012). The antecedents and consequences of interpersonal forgiveness: A meta-analytic review. *Personal Relationships*, 19, 304-325. doi: 10.1111/j.1475-6811.2011.01363.x
- Roberts, B. W., Kuncel, N. R., Shiner, R., Caspi, A., & Goldberg, L. R. (2007). The power of

- personality: The comparative validity of personality traits, socioeconomic status, and cognitive ability for predicting important life outcomes. *Perspectives on Psychological Science*, 2, 313-345. doi: 10.1111/j.1745-6916.2007.00047.x
- Robins, R. W., John, O. P., Caspi, A., Moffitt, T. E., & Stouthamer-Loeber, M. (1996). Resilient, overcontrolled, and undercontrolled boys: Three replicable personality types. *Journal of Personality and Social Psychology*, 70, 157-171. doi: 10.1037/0022-3514.70.1.157
- Rothbart, M. K., Ahadi, S. A., & Evans, D. E. (2000). Temperament and personality: Origins and outcomes. *Journal of Personality and Social Psychology*, 78, 122-135. doi: 10.1037/0022-3514.78.1.122
- Rothbart, M. K., Ahadi, S. A., Hershey, K. L., & Fisher, P. (2001). Investigations of temperament at three to seven years: The Children's Behavior Questionnaire. *Child Development*, 72, 1394-1408. doi: 10.1111/1467-8624.00355
- Rothbart, M. K., & Bates, J. E. (2006). Temperament. In N. Eisenberg (Vol. Ed.) and W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality development* (6th ed., pp. 105-176). Hoboken, NJ: Wiley.
- Sameroff, A. (2009). The transactional model. In A. Sameroff (Ed.), *The transactional model of development: How children and contexts shape each other* (pp. 3-21). Washington, DC: American Psychological Association.
- Shiner, R., & Caspi, A. (2003). Personality differences in childhood and adolescence: Measurement, development, and consequences. *Journal of Child Psychology and Psychiatry*, 44, 2-32. doi: 10.1111/1469-7610.00101
- Shiner, R. L. (2000). Linking childhood personality with adaptation: Evidence for continuity and change across time into late adolescence. *Journal of Personality and Social Psychology*,

- 78, 310-325. doi: 10.1037/0022-3514.78.2.310
- Shiner, R. L., & Masten, A. S. (2012). Childhood personality as a harbinger of competence and resilience in adulthood. *Development and Psychopathology*, 24, 507-528. doi: 10.1017/S0954579412000120
- Shiner, R. L., Masten, A. S., & Roberts, J. M. (2003). Childhood personality foreshadows adult personality and life outcomes two decades later. *Journal of Personality*, 71, 1145-1170. doi: 10.1111/1467-6494.7106010
- Sibley, C. G., & Duckitt, J. (2008). Personality and prejudice: A meta-analysis and theoretical review. *Personality and Social Psychology Review*, 12, 248-279. doi: 10.1177/1088868308319226
- Slobodskaya, H. R., & Akhmetova, O. A. (2010). Personality development and problem behavior in Russian children and adolescents. *International Journal of Behavioral Development*, 34, 441-451. doi: 10.1177/0165025409352825
- Smrtnik-Vitulić, H., & Zupančič, M. (2011). Personality traits as a predictor of academic achievement in adolescents. *Educational Studies*, 37, 127-140. doi: 10.1080/03055691003729062
- Soto, C. J. (2016). The little six personality dimensions from early childhood to early adulthood: Mean-level age and gender differences in parents' reports. *Journal of Personality*, 8, 409-422. doi: 10.1111/jopy.12168
- Soto, C. J., & John, O. P. (in press). The Next Big Five Inventory (BFI-2): Developing and assessing a hierarchical model with 15 facets to enhance bandwidth, fidelity, and predictive power. *Journal of Personality and Social Psychology*. Advance online publication. doi: 10.1037/pspp0000096

- Soto, C. J., John, O. P., Gosling, S. D., & Potter, J. (2008). The developmental psychometrics of big five self-reports: Acquiescence, factor structure, coherence, and differentiation from ages 10 to 20. *Journal of Personality and Social Psychology*, *94*, 718-737. doi: 10.1037/0022-3514.94.4.718
- Soto, C. J., & Tackett, J. L. (2015). Personality traits in childhood and adolescence: Structure, development, and outcomes. *Current Directions in Psychological Science*, *24*, 358-362. doi: 10.1177/0963721415589345
- Spengler, M., Lüdtke, O., Martin, R., & Brunner, M. (2013). Personality is related to educational outcomes in late adolescence: Evidence from two large-scale achievement studies. *Journal of Research in Personality*, *47*, 613-625. doi: 10.1016/j.jrp.2013.05.008
- Tackett, J. L., Herzhoff, K., Kushner, S. C., & Rule, N. (2016). Thin slices of child personality: Perceptual, situational, and behavioral contributions. *Journal of Personality and Social Psychology*, *110*, 150-166. doi: 10.1037/pspp0000044
- Tackett, J. L., Herzhoff, K., Reardon, K. W., De Clercq, B., & Sharp, C. (2014). The externalizing spectrum in youth: Incorporating personality pathology. *Journal of Adolescence*, *37*, 659-668. doi: 10.1016/j.adolescence.2013.10.009
- Tackett, J. L., Krueger, R. F., Iacono, W. G., & McGue, M. (2008). Personality in middle childhood: A hierarchical structure and longitudinal connections with personality in late adolescence. *Journal of Research in Personality*, *42*, 1456-1462. doi: 10.1016/j.jrp.2008.06.005
- Tackett, J. L., Kushner, S. C., De Fruyt, F., & Mervielde, I. (2013). Delineating personality traits in childhood and adolescence: Associations across measures, temperament, and behavioral problems. *Assessment*, *20*, 738-751. doi: 10.1177/1073191113509686

Tackett, J. L., Slobodskaya, H. R., Mar, R. A., Deal, J., Halverson, C. F., Baker, S. R., . . .

Besevegis, E. (2012). The hierarchical structure of childhood personality in five countries: Continuity from early childhood to early adolescence. *Journal of Personality*, 80, 847-879. doi: 10.1111/j.1467-6494.2011.00748.x

Tamis-LeMonda, C. S., Wang, S., Koutsouvanou, E., & Albright, M. (2002). Childrearing values in Greece, Taiwan, and the United States. *Parenting: Science and Practice*, 2, 185-208. doi: 10.1207/S15327922PAR0203_01

Tellegen, A., & Waller, N. G. (1992). *Exploring personality through test construction: Development of the multi-dimensional personality questionnaire (MPQ)*. Department of Psychology. University of Minnesota.

Trapmann, S., Hell, B., Hirn, J. W., & Schuler, H. (2007). Meta-analysis of the relationship between the big five and academic success at university. *Zeitschrift für Psychologie / Journal of Psychology*, 215, 132-151. doi: 10.1027/0044-3409.215.2.132

Van den Akker, A. L., Deković, M., Asscher, J., & Prinzie, P. (2014). Mean-level personality development across childhood and adolescence: A temporary defiance of the maturity principle and bidirectional associations with parenting. *Journal of Personality and Social Psychology*, 107, 736–750. doi: 10.1037/a0037248

Vedel, A. (2014). The Big Five and tertiary academic performance: A systematic review and meta-analysis. *Personality and Individual Differences*, 71, 66-76. doi: 10.1016/j.paid.2014.07.011

Wang, J. M., Hartl, A. C., Laursen, B., & Rubin, K. H. (in press). The high costs of low agreeableness: Low agreeableness exacerbates interpersonal consequences of rejection sensitivity in U.S. and Chinese adolescents. *Journal of Research in Personality*. Advance

online publication. doi: 10.1016/j.jrp.2016.02.005

Zaninotto, L., Solmi, M., Toffanin, T., Veronese, N., Cloninger, C. R., & Correll, C. U. (2016).

A meta-analysis of temperament and character dimensions in patients with mood disorders: Comparison to healthy controls and unaffected siblings. *Journal of Affective Disorders, 194*, 84-97. doi: 10.1016/j.jad.2015.12.077

Zee, M., Koomen, H. M., & Van der Veen, I. (2013). Student-teacher relationship quality and academic adjustment in upper elementary school: The role of student personality. *Journal of School Psychology, 51*, 517-533. doi: 10.1016/j.jsp.2013.05.003

Zhang, R., & Tsingan, L. (2013). Extraversion and neuroticism mediate associations between openness, conscientiousness, and agreeableness and affective well-being. *Journal of Happiness Studies, 15*, 1377-1388. doi: 10.1007/s10902-013-9482-3

Zhou, M. (2015). Moderating effect of self-determination in the relationship between Big Five personality and academic performance. *Personality and Individual Differences, 86*, 385-389. doi: 10.1016/j.paid.2015.07.005

Zuffianò, A., Alessandri, G., Gerbino, M., Luengo Kanacri, B. P., Di Giunta, L., Milioni, M., & Caprara, G. V. (2013). Academic achievement: The unique contribution of self-efficacy beliefs in self-regulated learning beyond intelligence, personality traits, and self-esteem. *Learning and Individual Differences, 23*, 158-162. doi: 10.1016/j.lindif.2012.07.010