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# Teacher-child relational conflict and maladaptive social behaviors: The moderating role of children's values



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#### ABSTRACT

Beginning in the preschool years, it is well established that teacherchild conflictual relationships are likely to have detrimental effects on children's behaviors. However, to date little attention has been paid to how certain core child factors, such as young children's personal values, might act as risk or protective factors in this context. Accordingly, we examined the associations between teacher-child relational conflict and children's maladaptive behaviors and asked whether children's personal values, defined here as their broad motivations in life, moderate these associations. Our sample consisted of 120 kindergarten children (58 girls;  $M_{\text{age}}$  = 67.53 months, SD = 6.53) and their teachers. Children's values were examined in a one-on-one interview using an animated values instrument. Teachers reported the level of conflict in the teacher-child relationships and children's maladaptive behaviors. The findings supported our hypothesis that teacher-child relational conflict is positively associated with children's externalizing and internalizing behaviors. In addition, children's self-transcendence values acted as a protective factor by weakening the adverse associations between teacher-child conflict and children's externalizing behaviors. Conversely, children's conservation values acted as a risk factor by strengthening the associations between teacher-child conflict and children's internalizing behaviors. We discuss the theoretical and practical implications of our findings.

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#### Introduction

Having a conflictual relationship with the teacher is a risk factor strongly related to children's development of externalizing and internalizing behaviors (Hamre & Pianta, 2001; O'Connor et al., 2012; Varghese et al., 2019). This adverse social context has been observed across all academic levels (Baker et al., 2008; Longobardi et al., 2019; Roorda & Koomen, 2021). Yet, we know relatively little about the child factors that may act as moderators and, as such, may play an important role as risk or protective factors in the associations between teacher–child conflict and children's maladaptive behaviors.

Furthermore, from a developmental perspective, young children are likely to be particularly vulnerable when experiencing a relational conflict with their teachers. Compared with older school children, young children may rely more on their teachers as important nonfamilial caregivers and may have limited prior experience and knowledge of adaptively handling confusing and complex social situations (Hamre & Pianta, 2001; Lippard et al., 2018; Rimm-Kaufman et al., 2000; Sette et al., 2013; Ziv et al., 2017; Ziv & Elizarov, 2019).

Accordingly, the current study aimed to uncover child factors that may act as protective or risk factors by respectively weakening or strengthening the association between teacher-child conflict and children's maladaptive behaviors. Specifically, we examined young children's personal values—that is, the lenses through which young children observe, justify, and interpret social situations and interactions on a daily basis (Sagiv & Roccas, 2021)—as possible moderators in the associations between teacher-child conflict and maladaptive behaviors in kindergarten. Given that individuals prioritize values differently (Schwartz, 1992, 2012), we argue that kindergarten children who are driven by different values will also differ in the way they interpret a conflict with their teacher and its effects and, thus, may respond to it differently.

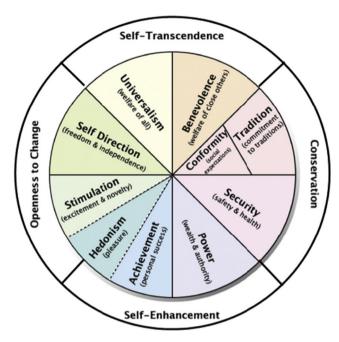
Lastly, over the past decade there has been significant research on the role of values in educational contexts, including studies on the influence of school values on key school characteristics, such as school violence and support for students (Daniel et al., 2013), as well as work on the impact of teachers' values on their agentic capacity and behaviors (e.g., Hadar & Benish-Weisman, 2019) and research on values expressions in the school curriculum using content analysis (e.g., Oeschger et al., 2022). Yet, there is a gap in the literature regarding the role of *students*' values in this important child context. We still have much to explore in this area to determine whether and how children's values intervene in important social contexts in which the children engage such as the kindergarten context.

# Values in early childhood

Values are relatively stable motivational cognitive structures that represent central features of the self (Schwartz, 1992). Specifically, values express individuals' trans-situational goals that define their life priorities, for example, to maintain friendships, to be powerful and control other people, to live in a secure environment, and to live a dynamic life rich in new experiences and learning opportunities (Bardi & Goodwin, 2011; Rokeach, 1973).

Schwartz's values theory aims to describe the entire range of human values, and its core assumptions have been supported by extensive research (see Sagiv & Schwartz, 2022; Schwartz 1992, 2012). The theory focuses on 10 basic values, each representing a broad motivational goal. These 10 core values can be grouped into four higher-order value categorizations divided into two orthogonal bipolar dimensions. The two poles in each of the two dimensions reflect opposing motivations (see Fig. 1 for a detailed description of Schwartz's model).

The first dimension illustrates the motivational conflict between *self-enhancement* values (power and achievement), which reflect concern for personal interests by excelling, being successful, and dominating others, and *self-transcendence* values (universalism and benevolence), which reflect concern for the interests of others and nature. The second dimension highlights the motivational conflict between *conservation* values (tradition, conformity, and security) and *openness-to-change* values



**Fig. 1.** Schwartz's circular model of values: The theoretical human values structure of relations between 10 core values and the 4 higher-order values. [From: Benish-Weisman, M., Daniel, E., Sneddon, J., & Lee, J. (2019). The relations between values and prosocial behavior among children: The moderating role of age. *Personality and Individual Differences*, 141, 241–247. https://doi.org/10.1016/j.paid.2019.01.019]

(self-direction and stimulation). The former focus on avoiding change by preserving the status quo and adhering to the formal and informal rules of family and wider society, and the latter advance the desire for excitement, challenges, and changes in life by generating new ideas and actions.

Our values play a significant role when we try to have a deeper understanding of the core aspects that shape who we are and influence our daily conduct as active agents in our own social world. That is, core aspects, such as individuals' social identity, self-esteem, attitudes, and social and academic behavioral tendencies, all have been found to relate to, interact with, and be influenced by individuals' personal values over the life span (Collins et al., 2022; Misgav et al., 2022; Sagiv & Roccas, 2021; Twito et al., 2019). The importance of values research conducted with individuals at different developmental stages (Benish-Weisman, 2015; Lee et al., 2017; Sagiv et al., 2011; Uzefovsky et al., 2016) and the abundant research showing that the preschool years are a sensitive developmental period that may underlie young children's social–emotional developmental paths years later (Burchinal et al., 2020; Horn et al., 2021) underscore the need to study values in young children.

The handful of studies examining values development in kindergarten children show that children as young as 5 years have a values system that resembles Schwartz's circular values model. That is, adjacent values share similar motivations, and opposing values in the circle have conflicting motivations (Abramson et al., 2018; Lee et al., 2017). This knowledge concerning the development of young children's values has been made possible partly because of new and promising measures of values in younger children (e.g., see Döring et al., 2015). A recent measure developed to examine the values system of 5-year-old children is the Animated Values Instrument (AVI; Collins, Lee, et al., 2017; Lee et al., 2017). We adapted this measure, translated it into Hebrew, and used it for the first time in Israel.

Teacher-child conflict and young children's maladaptive behaviors

Kindergarten teachers are significant and influential characters in their young students' lives (Hamre & Pianta, 2001; Sabol & Pianta, 2012). As opposed to children in the later years of school, kindergarten teachers stay with the children in their class for the entire school day. This means that they have the main responsibility for meeting children's physical, emotional, and psychological needs throughout the day. Hence, the quality of the relationship between kindergarten teachers and children in their class is likely to have a profound and long-term impact on the children's social experiences and subsequently on their social competencies (Camodeca & Coppola, 2019).

When teacher-child relationships are characterized by high levels of conflict, these relationships become significant stressors for young children (Pianta, 2001). Previous studies have found that relational conflict is linked to young children's difficulties in many domains, including emotional (Rucinski et al., 2018), academic (McCormick & O'Connor, 2015), and behavioral (Hamre & Pianta, 2001; Lippard et al., 2018).

On the behavioral level, teacher-child conflict strongly influences both young children's externalizing behaviors (e.g., aggressiveness, rule breaking, restlessness) and internalizing behaviors (e.g., psychosomatic complaints, expressions of anxiety and fears, moodiness, social withdrawal; see Goodman, 1997; e.g., Collins, O'Connor, et al., 2017; Lee & Bierman, 2018; Sette et al., 2013). At the same time, it is important to note that the relationship between teacher-child conflict and child behavior is bidirectional; that is, children's maladaptive behaviors, such as externalizing behaviors, can also have detrimental effects on the quality of teacher-child relationships (e.g., Shi & Ettekal, 2021; Zatto & Hoglund, 2019). Moreover, previous studies focusing on the ability of teacher-child relationships to affect children's behaviors demonstrated that such relationships can have long-term consequences (Jerome et al., 2009). For example, the longitudinal study of O'Connor and colleagues (2012) showed that teacher-child relational conflict in preschool may influence children's maladaptive behaviors in their elementary school years.

Given these findings, we hypothesized that teacher-child relational conflict would be positively associated with children's externalizing and internalizing behaviors. We also argued that children's values system would moderate these associations.

Values as possible moderators of human behaviors

Our social experiences and reactions are the products of a continuous interplay between individual factors, which define "who we are," and environmental factors, such as conflicts with significant others, that create the social context and circumstances to which we must adapt to live a socially competent life (Lewin, 1935; Neufeld et al., 2006). In this respect, an important individual factor is our personal values—the subjective ideal standards through which we outline our life desires and aspirations in terms of the ways in which we *should* live, act, and interact in our everyday lives. These desirable personal criteria guide us and affect how we subjectively process and respond to the social realities we confront as we continuously interact and communicate with others in our social surroundings (Sagiv & Roccas, 2021). In particular, our values affect our social experiences and reactions by affecting processes such as interpretation (Sagiv et al., 2011), goal setting (Schwartz, 2012), and decision making (Twito et al., 2019).

Ultimately, these mental processes affect individuals' ability (or inability) to deal adaptively with different social situations and interactions (Junge et al., 2020). For example, individuals who endorse self-enhancement values (e.g., the aspiration to dominate others, to be considered successful, to be treated with respect and honor) may tend to set situational goals that are more self-interested, with little or no consideration for others (Schwartz, 2012; Urien & Kilbourne, 2011). Given that these self-promoting values influence individuals' subjective experience of social situations, in certain cases the individuals may decide, for example, that it is justified to react in a more aggressive manner (Benish-Weisman, 2019; Magee & Langner, 2008).

Values have been found to moderate human behavior and conduct in several life domains, including consumer behaviors and consumption (e.g., Alniacik et al., 2020; Ma et al., 2020), social projection in ingroup/outgroup dynamics (e.g., Amit et al., 2010), managers' pro-environmental behaviors (e.g.,

Dalvi-Esfahani et al., 2017), and political participation behaviors (e.g., Ariza-Montes et al., 2018). Still, these findings are limited when we consider the vast number of contexts in which our values, as our guiding principles in life, may come into play. Furthermore, previous studies have concentrated on adults' personal values as moderators in adult-related contexts. To the best of our knowledge, ours is the first study to investigate the role of personal values as moderators in young children's lives.

Our theoretical framework is based on the organizing principles of the human values structure, as described by Schwartz (2012), and related findings for each of the four values categorizations. Schwartz (2012) identified two key principles that explain the values system's dynamic structure. The first principle distinguishes between *personal-focus* and *social-focus* values. Personal-focus values target the attainment of personal interests, concerns, desires, and benefits (self-enhancement and openness-to-change values). In contrast, social-focus values target the attainment of others' interests, necessities, and expectations (self-transcendence and conservation values). The second principle distinguishes between *anxiety-based* values (self-protection against threat) and *anxiety-free* values (self-expansion and growth). The first includes values that focus on one's wish to control or avoid uncertainties (self-enhancement and conservation values). The latter includes values that focus on self-development and the endorsement of life opportunities that encourage self-growth (self-transcendence and openness-to-change values) (see Schwartz's [2012] related model).

How young children's values can moderate the expected associations between teacher-child conflict and children's maladaptive behavior

Self-enhancement and self-transcendence values, teacher-child conflict, and externalizing behaviors

Because self-enhancement values are *anxiety-based* and *personal-focus* values, young children who endorse them are likely to perceive a conflictual relationship with a powerful high-status figure (in this case the teacher) as a threat to their ability to attain their important self-interest-oriented motivations in life. In the schooling context, these children may find it important to gain high social status by investing effort in positive self-presentation so that others in the class will perceive and treat them as smart, strong, and dominant students or peers. At the same time, guided by self-protection motivations (Kurt & Paulhus, 2008; Schwartz, 2012), they are also likely to be overly defensive in response to others' comments and reactions (Niiya et al., 2013). In addition, they may also be more involved in social comparisons (Sagiv et al., 2011; Thyroff & Kilbourne, 2018) and, thus, may have the tendency to think of their social world more in terms of competition, where one person is the winner and another is the loser. Such children may perceive a relational conflict with the teacher as a situation that deeply undermines their ability to maintain their desired positive self-presentation by putting the spotlight on their faults (Brey & Shutts, 2018).

This way of experiencing conflict with the teacher, along with the tendency not to admit weaknesses (Niiya et al., 2013), can lead to children's social disengagement (e.g., by provoking resentment and angry feelings; see Feldman et al., 2015; Tamir et al., 2016) and might prompt their need to defend themselves by reclaiming parts of their perceived loss of others' respect and admiration. These individuals' tendencies, combined with a more egocentric perspective that disregards the well-being and interests of others (Schwartz, 1992; Urien & Kilbourne, 2011), support our suggestion that these children will act out their distress and anger. This hypothesis is also in line with previous research showing that self-enhancement values relate to aggressive behaviors (Benish-Weisman, 2015).

Conversely, self-transcendence values are *anxiety-free* and *social-focus* values, so children who endorse them are likely to prioritize helping and benefiting others while transcending their own self-interests (Caprara et al., 2012; Schwartz, 2010). Thus, they might hold more prosocial viewpoints that promote social engagement and other social-oriented outcomes such as a greater tendency to experience positive prosocial emotions (e.g., compassion, forgiveness, love; see Liu et al., 2022; Tamir et al., 2016) and to endorse socially oriented goals (e.g., Adell et al., 2019) and decision making that puts others' interests first (Heilman & Kusev, 2020; Paciello et al., 2013).

Therefore, as more caring and prosocial children, they may have fewer conflictual relationships with their teachers, and even if a conflict exists they may be motivated to take an action that aims to improve the relationship by reacting in a way that benefits the teachers' interests and the class climate (Paciello et al., 2013). For instance, they may avoid reactions and behaviors in the classroom that

lead to negative reactions from teachers. In fact, studies have found that children who endorse self-transcendence values display more prosocial behaviors (Daniel et al., 2020) and are less likely to exhibit problem behaviors.

Considering previous findings, we suggest that this axis will be mostly demonstrated in relation to children's *externalizing* behaviors. In this respect, we hypothesize that self-enhancement values will strengthen the positive associations between teacher-child conflict and externalizing behaviors, whereas self-transcendence values will weaken them. In Fig. 2, an adaptation of Schwartz's (2012) illustration of the organizing principles of the human values structure is presented. In Table 1, we demonstrate and summarize our suggested models of self-enhancement and self-transcendence values as moderators of the hypothesized associations.

Conservation and openness-to-change values, teacher-child conflict, and internalizing behaviors

Because conservation values are *anxiety-based* and *social-focus* values, children who endorse them are likely to perceive a conflictual relationship as a threat to their attempt to live a quiet and peaceful life by acting according to rules and norms and avoiding conflict. In fact, this may be even more disconcerting if the conflict occurs with their teachers given that teachers are key authority figures for very young children (Fridin, 2014; Ho et al., 2017). In contrast to children who endorse self-enhancement values (the other anxiety-based value dimension), children who endorse conservation values aspire *not* to stand out. It is important for them to live in an environment that gives them a sense of security and safety where they can anticipate what is coming next (Roccas & Amit, 2011). Therefore, guided by their conservation values, they are likely to care for others' interests; however, they will likely be driven by the fear of not living up to others' expectations because this may lead to social sanctions and punishments. Thus, for these children, not meeting their teachers' expectations can be very intimidating (Acar et al., 2018; Barni et al., 2016).

Conversely, because openness-to-change values are *anxiety-free* and *personal-focus* values, children who endorse them may perceive these same circumstances as a chance to fulfill their values-oriented aspiration to act more independently and to deal with new and different experiences creatively while also leaning on their sense of self-competence and self-esteem (Collins et al., 2022; Daniel et al., 2023; Roccas et al., 2010). Moreover, because they are guided by a relatively independent mindset and a tendency to seek more stimulation in life (Parks-Leduc et al., 2015), we suggest that they are likely to cope better with challenging experiences (see Firat, 2017; Schwartz et al., 2000) and will probably be less negatively affected by *interpersonal* conflicts in the schooling context.

Considering the above, we suggest that this values axis will be mostly demonstrated in relation to children's *internalizing* behaviors. Therefore, we hypothesized that conservation values will strengthen the positive associations between teacher-child conflict and internalizing behaviors and that openness-to-change values will weaken them (see Fig. 2 and Table 1).

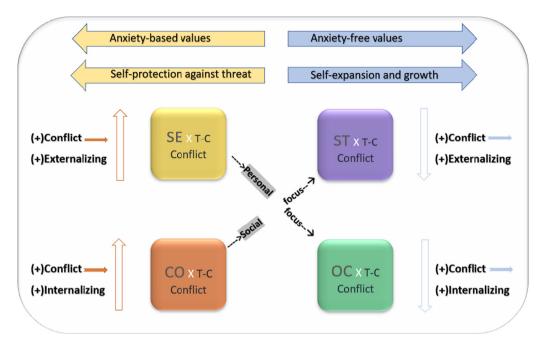
#### Method

Participants and procedures

Study participants were 120 Israeli kindergarten children (58 girls;  $M_{\rm age}$  = 67.53 months, SD = 6.53). Within this group, nearly all (98%) spoke Hebrew as their first language. Of the mothers, 85 (71%) had at least a college degree. Only 60 fathers provided information about their educational status, with 33 (55%) of them having at least a college degree. The mean monthly family income in this sample was slightly above the Israeli average and ranged from \$4000 to \$5400 (based on the 2014 census, the average monthly income per family in Israel was roughly \$4000). Data reported here are part of a larger study conducted from 2016 to 2019.

After obtaining the required approvals (see below), we contacted kindergarten supervisors, teachers, and parents (in that order) to obtain their consent. Once we received consent, the research team visited the kindergarten classes and conducted one-on-one interviews with participating children,

<sup>&</sup>lt;sup>1</sup> In Israel, kindergarten is considered a preschool environment (the school system is 1–12, not K–12).



**Fig. 2.** Values as moderators of teacher–child relational conflict and preschoolers' maladaptive behaviors: Using the organizing principles of the values structure model. The illustration of the moderation models' hypotheses demonstrates how each of the high-order values categories may moderate the association between teacher–child conflict and preschoolers' maladaptive behaviors. For example, it demonstrates our hypothesis that the interaction between self-enhancement (SE) values, operationalized here as anxiety-based and personal-focus values, and teacher–child relational conflict (T-C Conflict) will strengthen the positive associations between teacher–child conflict and externalizing behaviors. ST, self-transcendence; CO, conservation; OC, openness-to-change. [Adapted from: Schwartz, S. H. (2012). An overview of the Schwartz theory of basic values. *Online Readings in Psychology and Culture*, *2*(1), Article 11. https://doi.org/10.9707/2307-0919.1116]

asking them about their personal values using the AVI measure (a 20-min playful interview). During the same visits, teachers completed several questionnaires, including those about their relationships with the children and the children's behavior in class. Relevant consents and this study's data collection were obtained as part of a larger study conducted by the third author. The complete study protocol received approval from the university's institutional review board and from the Ministry of Education's chief scientist office.

#### Measures

#### Children's personal values

Personal values were examined using the Animated Values Instrument (Collins, Lee, et al., 2017; Lee et al., 2017). This 20-min web survey examines children's values system by using the best-worst scaling method in a multiple-choice situation (see Louviere et al., 2015). The web survey includes 21 subsets and a total of 21 value-expressive animations reflecting different aspects of the basic values within Schwartz's circular values model (see Fig. 1 above). For example, "I want to care for the natural environment" is a statement depicted in one of the universalism value-expressive animations. The survey was originally developed in English, but we adapted it to Hebrew and Israeli culture. The adaptation process included a translation from English to Hebrew and then a back-translation from Hebrew to English to confirm the translation. Then, to ensure that the children understood the essence of both the animations and the audio and related to the content, a focus group with 6 kindergarten children was initiated to assess their response to the animations without the audio, followed by the

**Table 1**Children's values expressed in the kindergarten context: A brief description of the proposed moderation models

		Children's values expressions in the kindergarten class: "It is important to me"	A conflict with the teacher
Self-enhancement	Personal focus Anxiety-based to actively control uncertainties	<ul> <li>To be "the best" in class and be admired by the teacher and classmates</li> <li>To be very popular and dominant among my classmates</li> <li>To have my peers act as I wish</li> </ul>	<ul> <li>Is more likely to exist</li> <li>May promote social disengagement (e.g., by provoking resentment and angry feelings)</li> <li>May encourage children to regain their sense of control and dominance in the classroom</li> </ul>
Self-transcendence	Social focus Anxiety-free, other-oriented growth	To initiate and maintain warm and caring relationships with my teacher and classmates     To be able to make things better for those that I daily interact with, such as my teacher, but also with unfamiliar others, animals, and nature	Is less likely to exist     May increase the need to have better interactions with the teacher and benefiting her or him     May promote proactive attempts to make things better with the teacher and class (e.g., by behaving in more considerate ways in class and increasing behaviors eliciting positive reactions from the teacher)
Conservation	Social focus Anxiety-based to avoid uncertainties	To obey the teacher's rules and to act as expected in class by my teacher and classmates  To be part of the peer group rather than stand out (especially negatively)  To avoid any situation that may interrupt my safe and quiet environment and my ability to anticipate what comes next	Cause stress and concern that not living up to the teacher's expectations may lead to social sanctions and punishments     Promote considerable feelings of frustration, fear, and anxiety
Openness-to-change	Personal focus Anxiety-free, self- oriented growth	<ul> <li>To initiate and search for new and interesting experiences in class</li> <li>To do things on my own while being less dependent on my teacher and classmates</li> <li>To deal with challenges while being creative and relying on my own sense of self-competence and esteem</li> </ul>	Promote a belief in children's competence and ability to do well even when facing a challenging situation with the teacher     Help children to be less upset and worried about the situation, also based on their more independent mindset and their tendency to seek stimulation



**Fig. 3.** Screenshot of Subset 3 of 21 from the Animated Values Instrument. The main screen shows the tradition value animation: "I want to follow the religious traditions of my family." (We adapted this animation for Jewish culture. It originally featured a picture of a church, not a synagogue.)

audio without the animations. Later, the final translation was approved by the developer of the values theory, Shalom Schwartz (personal communication, July 2018). As a final step, the Hebrew audio was recorded and sent to a programmer, who incorporated the Hebrew audio and script and also edited the tradition-value animation by replacing the picture of a church with a synagogue (see Fig. 3). The entire process was carried out in collaboration with the AVI developers.

Each of the 21 subsets included in the AVI contains five different value-expressive animations. During the interview, in each subset the examiners presented to children all five value animations and then asked which animation was the most (and then the least) like them (see Fig. 3). Children's value importance scores were calculated for each value by subtracting the number of times a value was chosen as "least like me" from the number of times it was chosen as "most like me." These were standardized by dividing them by 5, that is, the total number of times each animation appeared. This resulted in scores ranging from -1 to +1, where 0 represents the midpoint of the scale. Because we aimed to have only positive scores, we changed the scale to be from 1 to 11; the higher the score, the greater the importance of the value. To obtain the final scores, we first averaged the scores of items representing each of the 10 basic values in Schwartz's model. Most studies examining young children's values have reduced the 10 basic values to the four higher-order value categories, largely because of the young age of the participants (e.g., Abramson et al, 2018; Benish-Weisman et al., 2019). We calculated the values as follows: Self-enhancement values were calculated by averaging power, achievement, and hedonism values; self-transcendence values were calculated by averaging universalism and benevolence values; conservation values were calculated by averaging conformity, security, and tradition values; and openness-to-change values were calculated by averaging stimulation and self-direction values. We decided to include hedonism values within the self-enhancement category based on theory (Schwartz, 1992) and on the multidimensional scaling (MDS) results (discussed in Results) we obtained.

The AVI's reliability is tested by assessing the consistency of the children's choices. This examination includes both the frequency by which the children chose the value-item that was most important to them (chosen as "most like me" most frequently) and the frequency with which the children chose the value-item that was least important to them (chosen as "least like me" most frequently) (see Collins, Lee, et al., 2017). The most important value choice was considered to be highly consistent when it was chosen 4 or 5 times. Given that each value-item appeared 5 times during the interview,

when a value-item was chosen 5 times it meant that the child chose it (over 4 other value-items) each time it appeared. The value choice was still considered consistent when it was chosen 3 of 5 times. A value choice was considered inconsistent if no value-item was chosen 3 or more times. The same applied to the value choice of the "least like me" value-item. Considering the most important value choice, in our sample 62% of the children were highly consistent in their value choices and 32% were consistent. Inconsistency was found in only 6% of the children. In terms of the least important value choice, 57% of the children were highly consistent and 36% were consistent. Inconsistency was found in only 7% of the children. As compared with previous AVI scores of 5-year-old children (see Collins, Lee, et al., 2017), these consistency results were very good.

#### Teacher-child relational conflict

Relational conflict was measured using the conflict subscale of the Student–Teacher Relationship Scale (STRS; Pianta & Steinberg, 1992). The measure has 12 items (e.g., "This child and I always seem to be struggling with each other", "This child easily becomes angry at me"). These items are rated by teachers to evaluate the extent to which they experience conflict and discord within their relationship with a specific student. The items are measured on a 5-point scale ranging from 1 (*does not apply*) to 5 (*definitely applies*). This widely used measure already has a Hebrew translation (e.g., Granot, 2014). The conflict subscale has been successfully used in research with preschoolers and young children, and its internal consistency has been found to be very good ( $\alpha$  = .83–.94; e.g., Acar et al., 2018; McCormick & O'Connor, 2015; Sette et al., 2013; Varghese et al., 2019). The internal consistency in our study was also good ( $\alpha$  = .85).

# Maladaptive behaviors

Children's maladaptive behaviors were measured using the externalizing and internalizing behaviors subscales in the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997). The SDQ was originally designed with four subscales to measure maladaptive behaviors in children: hyperactivity and conduct problems characterized as more externalized behaviors and peer problems and emotional problems characterized as more internalized behaviors. Each subscale has 5 items. However, given our focus on children's externalizing and internalizing behaviors in a general low-risk population, as outlined in Goodman and colleagues (2010), we combined the hyperactivity and conduct problems subscales into one broader indicator of externalizing behaviors and combined the peer problems and emotional problems subscales into one broader indicator of internalizing behaviors. This is a common practice used in previous studies (e.g., Huber et al., 2019; Prino et al., 2019). Ultimately, the externalizing and internalizing indicators have 10 items each such as "Often fights with other children" for externalizing behaviors and "[Has] many worries" for internalizing behaviors.

Teachers rated these indicators to evaluate the extent to which a specific child displayed each of the described behaviors in the kindergarten class. The items were scored on a 3-point scale where  $0 = not \ true$ ,  $1 = somewhat \ true$ , and  $2 = certainly \ true$ . This widely used measure has been translated into Hebrew and successfully implemented in Israel (e.g., Knafo-Noam et al., 2015; Ziv & Arbel, 2021). The externalizing and internalizing subscales were previously found to have satisfactory internal consistency ( $\alpha = .78 - .85$  for externalizing behaviors,  $\alpha = .65 - .84$  for internalizing behaviors; e.g., de Jong et al., 2018; Huber et al., 2019; Lonigro et al., 2018; Prino et al., 2019). The internal consistencies in our study were also acceptable ( $\alpha = .83$  for externalizing behaviors,  $\alpha = .70$  for internalizing behaviors). Materials and analysis codes for this study are available by e-mailing the corresponding author.

# Results

Preliminary analysis: Values structure in kindergarten children

We conducted a confirmatory multidimensional scaling (Borg & Groenen, 2005) to examine the children's values structure. This is a common and well-established method to examine Schwartz's values model at all ages (e.g., Bilsky et al., 2010). The MDS provides an illustrated description wherein the 10 basic values are represented as distinct points in a two-dimensional space. These points are located

after considering the intercorrelations between all the added items; the higher the correlation of two values, the closer they are located in space, whereas negatively correlated values will be located in opposite directions in space. We employed a theory-based MDS approach for our analysis using the ideal location of each value in Schwartz's (1992) model as a starting point. This approach is recommended for examining Schwartz's values structure, as noted by Borg and Groenen (2005) and Döring and collegues (2010). We performed the MDS using the PROXSCAL process in SPSS 23 and applied Kruskal's Stress 1 measure to examine the goodness of fit of the data. The Stress 1 scores range from 0 to 1, with lower values signifying a better fit.

We found the values structure in our sample to closely resemble Schwartz's initial model. Results showed that self-enhancement values opposed self-transcendence values. In a similar way, openness-to-change values opposed conservation values. We did not observe any misplacements of the 10 basic values. This study's Stress 1 value was .11, considerably lower than the maximum score for a two-dimensional, 12-item MDS analysis on random data (.225; Spence & Ogilvie, 1973). Hence, the MDS configuration had a good fit to the data. In addition, the results were in line with previous studies with children around the same age (Abramson et al., 2018; Benish-Weisman et al., 2019; Lee et al., 2017).

### Associations between teacher-child relational conflict and maladaptive behaviors

The means and standard deviations and the intercorrelations between all study variables are presented in Table 2. Supporting our hypotheses, teacher–child relational conflict was positively associated with both externalizing and internalizing behaviors. Teacher–child relational conflict was also negatively associated with conservation values. Self-enhancement values were positively associated with externalizing behaviors and were negatively associated with gender; that is, boys had higher self-enhancement values scores than girls. Self-transcendence values were positively associated with gender (boys = 0, girls = 1); that is, girls had higher self-transcendence values scores than boys. In addition, conservation values had a marginally significant negative association with externalizing behaviors, r(120) = -.18, p = .05. Furthermore, openness-to-change values were negatively associated with internalizing behaviors and had a marginally significant negative association with externalizing behaviors, r(120) = -.16, p = .08. Finally, externalizing behaviors were positively associated with internalizing behaviors.

Children's values as moderators of the association between teacher-child relational conflict and maladaptive behaviors

To examine kindergarten children's personal values as possible moderators, we applied Hayes's (2012) PROCESS Model 2, which involves two-way moderation analyses, one in which self-enhancement and self-transcendence values were defined as moderators between teacher-child conflictual relationships and children's externalizing behavior and another in which conservation and openness-to-change values were defined as moderators between teacher-child conflictual relationships and children's internalizing behaviors. That is, the two-way moderation model was applied twice, first to test the moderating role of both self-enhancement and self-transcendence values and second to test the moderating role of both conservation and openness-to-change values. This enabled pointing more specifically to the unique effect of the specific value after accounting for the opposing value's effect, thereby avoiding misinterpretations. It is important to state that we also tested the hypotheses in four simple moderation models to examine the exclusive effect of each of the values separately and received similar results (see Supp. Table S1 and S2).

Table 3 (top) shows the main and interaction effects of the hypothesized moderation models, which included externalizing behaviors as a dependent variable, teacher-child conflict and values (moderators; self-enhancement and self-transcendence) as independent variables, and gender as a control variable. Table 3 (bottom) shows the main and interaction effects of the hypothesized moderation models, which included internalizing behaviors as a dependent variable, teacher-child conflict and values (moderators; conservation and openness-to-change) as independent variables, and gender as a control variable.

Table 2 Means, standard deviations, and correlations between study variables

Variable	М	SD	1	2	3	4	5	6	7
1. T-C conflict	1.30	0.43							
2. Self-enhancement values	5.96	1.33	.09						
3. Self-transcendence values	6.29	0.81	.02	60 <sup>***</sup>					
4. Conservation values	6.24	0.82	21*	47 <sup>***</sup>	.01				
5. Openness-to-change values	5.88	1.14	11	06	19*	28*			
6. Externalizing behaviors	0.33	035	.56***	.19*	08	$18^{+}$	$16^{+}$		
7. Internalizing behaviors	0.26	0.23	.30***	.01	.03	.08	23*	.41***	
8. Gender			15	21*	.22*	.14	11	12	02

Note. T-C conflict, teacher-child relational conflict. Gender: 0 = boys, 1 = girls.

Table 3 Summary of main and interaction affects for two-way moderation models, with SE and ST values as moderators of the associations between T-C conflict and externalizing behaviors and CO and OC values as moderators of the associations between T-C conflict and internalizing behaviors

	Externaliz	zing behaviors							
Variable	β	В	95% CI	SE β	t	р			
T-C conflict	.63	.52	[.47, .80]	.08	7.63	<.001			
SE values	.12	.03	[07, .30]	.09	1.25	.21			
ST values	01	01	[20, .17]	.09	-0.15	.88			
SE Values × T-C Conflict	10	06	[28, .08]	.09	-1.15	.25			
ST Values × T-C conflict	28	28	[46,09]	.09	-2.92	<.01			
Gender	04	01	[19, .11]	.08	-0.51	.61			
	Internalizing behaviors								
	β	В	95% CI	SE β	t	P			
T-C conflict	.42	.25	[.20, .65]	.11	3.70	<.001			
CO values	.10	.03	[08, .29]	.09	1.12	.26			
OC values	17	04	[35, .02]	.09	-1.81	.07			
CO Values × T-C Conflict	.20	.14	[.02, .37]	.09	2.25	<.05			
OC Values × T-C Conflict	02	01	[29, .25]	.14	-0.16	.87			
Gender	01	00	[19, .17]	.09	-0.12	.91			

Note. CI, confidence interval; T-C conflict, teacher-child relational conflict; SE, self-enhancement; ST, self-transcendence; CO, conservation; OC, openness-to-change. Gender: 0 = boys, 1 = girls.

In line with our hypotheses, we found that self-transcendence values moderated the positive associations between the level of conflict within teacher-child relationships and children's externalizing behavior, thereby indicating that children's externalizing behaviors were predicted by the interaction between children's self-transcendence values (moderator) and teacher-child relational conflict. The slopes were calculated for 1 standard deviation (high score), mean level (moderate score), and -1standard deviation (low score); the higher the children prioritized self-transcendence values, the weaker the correlations between teacher-child relational conflict and externalizing behaviors. Specifically, the strongest positive associations between teacher-child relational conflict and externalizing behaviors were found among those with low self-transcendence values:  $\beta$  = .91, t(113) = 6.14, p < .001; when self-transcendence values were average, the associations between teacher-child relational conflict and externalizing behaviors were weaker:  $\beta$  = .63, t(113) = 7.64, p < .001. The associations between teacher-child relational conflict and externalizing behaviors were the weakest for children with high self-transcendence values:  $\beta$  = .36, t(113) = 3.60, p < .001. We did not find that self-enhancement values moderated the associations between teacher-child relational conflict and externalizing behaviors.

<sup>&</sup>lt;sup>+</sup> p < .10.

p < .05.

p < .001.

Next, in line with our hypotheses, we found that conservation values moderated the positive associations between teacher–child relational conflict and internalizing behaviors, thereby indicating that children's internalizing behaviors were predicted by the interaction between children's conservation values (moderator) and teacher–child relational conflict; the higher the children prioritized conservation values, the stronger the significant positive correlations between teacher–child relational conflict and internalizing behaviors. Specifically, the weakest positive associations between teacher–child relational conflict and internalizing behaviors were found among children with low conservation values:  $\beta = .22$ , t(113) = 2.30, p < .05. When conservation values were average, the associations between teacher–child relational conflict and internalizing behaviors were stronger:  $\beta = .42$ , t(113) = 3.70, p < .001. The associations were the strongest for high conservation values:  $\beta = .62$ , t(113) = 3.47, p < .001. Openness-to-change values did not moderate the associations between teacher–child relational conflict and internalizing behaviors.

Lastly, as part of our analyses, we evaluated alternative models to verify the robustness of the findings obtained from the hypothesized two-way moderation models. First, we conducted separate moderation models for each of the values and found that the results were similar to those for the two-way moderation models. That is, self-transcendence values moderated the positive associations between the level of conflict within teacher-child relationships and children's externalizing behaviors, whereas self-enhancement values did not show significant moderation effects on the associations between teacher-child conflict and externalizing behaviors. Furthermore, conservation values moderated the positive associations between teacher-child conflict and children's internalizing behaviors, but opennessto-change values did not exhibit significant moderation effects on these associations. Despite not assuming significant results, we also tested additional moderation models, including conservation and/or openness-to-change as moderators of teacher-child relational conflict and externalizing behaviors and self-enhancement and/or self-transcendence as moderators of teacher-child relational conflict and internalizing behaviors, both in two-way moderation models and in separate moderation models for each value. All alternative moderation models yielded insignificant results. The results of all the alternative models we tested are shown in Supplementary Tables S1 to S6 of the online supplementary material.

# Discussion

Teacher-child relationships play an essential role in young children's social development. Given that conflictual relationships may have long-lasting negative effects, it is essential to expand our knowledge of child factors that may moderate adverse developmental paths (Varghese et al., 2019). To shed light on this issue, we examined whether young children's personal values moderate the associations between teacher-child relational conflict and children's externalizing and internalizing behaviors. Because values research on kindergarten children is scarce (e.g., Abramson et al., 2018; Lee et al., 2017), we first examined whether children's values system in these early years accords with Schwartz's (1992) values model. Indeed, we found that young children's values structure closely resembled what has been found in older children, adolescents, and adults (Schwartz, 2012). Specifically, for the four higher-order values categorizations, we found that children who attributed more importance to self-enhancement values attributed less importance to self-transcendence values and vice versa. By the same token, children who preferred conservation values were less likely to prefer openness-to-change values and vice versa.

With respect to our main research questions, first, we found teacher–child relational conflict to be positively associated with externalizing and internalizing behaviors. These findings are consistent with previous research demonstrating that these associations start in preschool and extend across the academic life span (e.g., O'Connor et al., 2012). Kindergarten teachers are important caregivers in that they are responsible for meeting their young students' social, emotional, and psychological needs during the school day. When these relationships are characterized by conflict, they are likely to affect children's ability to feel worthy, loved, appreciated, and supported. These unmet needs may cause children to engage in externalizing and/or internalizing behaviors in response to the adversity and as a way in which to cope with distress.

Second, we found that self-transcendence values weakened the positive association between teacher-child relational conflict and children's externalizing behaviors in children. Thus, selftranscendence values acted as a protective moderator in this relationship. The finding is consistent with Schwartz's (1992) theory on the prosocial mindset of individuals who endorse selftranscendence values. Children guided by other-focused and self-growth motivations are likely to perceive a relational conflict with their teachers (or others in their close social circles) as an opportunity to do better and to attempt to preserve a warm and trustworthy relationship. For example, they may act more thoughtfully by trying to be more aware of the ways in which their behaviors might negatively affect their teachers or their classmates. It is also possible that because of their values system, children who endorse self-transcendence values have more people in their lives with whom they share close and loving relationships and on whom they can lean in challenging times. They may be less negatively affected by a conflict with the teacher because they have enough "others" who help them to meet their basic needs, such as their relatedness needs (Deci & Ryan, 2000), by making them feel loved, worthy, and accepted. However, it is worth noting that although our values serve as guiding motivations in life, they might not always be reflected in our social behaviors. In relation to the example above, children who prioritize self-transcendence values aspire to maintain warm and loving relationships with others, but various factors such as social constraints and personality traits like shyness could impede their ability to put these values into practice in their daily interactions.

We did not find self-enhancement values to moderate the association between teacher-child relational conflict and children's externalizing behaviors. Within the self-enhancement values dimension, there are two types of values that are theoretically related to different needs during stressful relational situations, including with influential figures like kindergarten teachers (Bouckenooghe et al., 2005). Achievement values may motivate children to make their teachers perceive them in a positive light (e.g., as "best students"), and power values may motivate them to try to regain their perceived loss of control and dominance over the situation and others by increasing behaviors that make them feel like they have regained power. These diverse motivations may cancel out each other's effects on the association between conflict and externalizing behaviors, resulting in a nonsignificant moderation model. Furthermore, even if not always consciously, children guided by self-enhancement values may tend to avoid and deny situations that threaten their positive self-image; this also may result in a nonsignificant moderation effect.

Third, conservation values moderated the association between teacher–child relational conflict and children's internalizing behaviors by strengthening the positive associations between these two variables. These findings were in line with our expectations. For children who endorsed conservation values, a relational conflict with the teacher may be perceived as a threat that greatly undermines their ability to attain their values-oriented goals, which include avoiding conflict by "being good." Thus, they are likely to perceive conflict as an unexpected, undesired, and disturbing situation (Schwartz, 2012). The desire to avoid conflict was also evident in our finding of a negative association between children's conservation values and teacher–child relational conflict (see Table 2). Although these children try not to negatively stand out (as reflected in the negative associations between conservation values and externalizing behaviors), the conflictual relationship can induce intense feelings of anxiety about what is to come. In turn, these negative feelings may result in increased internalizing behaviors, children's maladaptive way of dealing with conflict.

Finally, the openness-to-change values moderation model was not significant. Although openness-to-change values were negatively associated with children's internalizing behaviors (see Table 2), we did not find a weakening effect when we focused on the role of openness-to-change values as a moderator of teacher-child relational conflict and children's internalizing behaviors. Arguably, children who endorse openness-to-change values—that is, *self-focus* and *anxiety-free* values—care less about the quality of their relationship with their teachers. Children who search for opportunities to express their independence tend to believe in their capabilities to overcome challenging situations and embrace learning and change, and they are prone to engage in more adaptive feelings such as interest and excitement (Schwartz 1992, 2012; Tamir et al., 2016); thus, they may be more focused on having new experiences and excitement in life than on their relationships with others (Schwartz et al., 2000).

In general, the results support our claim that *anxiety-based* values act as risk factors in the context of a relational conflict with the teacher, whereas *anxiety-free* values act as protective factors. Yet, this was

the case only for the *social-focus* values, whereas the models involving *personal-focus* values were not supported. It might be that relational conflicts threaten or are more relevant to social-focus values, whereas other situations may be more directly related to oneself and thus more relevant to personal-focus values (e.g., when individuals are asked to deal with their own health impairments; see *losifyan* & *Arina*, 2021).

#### Limitations and future directions

Despite the importance of our findings, there are a number of limitations that should be considered. First, this was a correlational study; thus, we cannot make definite conclusions about cause and effect in the associations we found. Although we assume that teacher–child relational conflict affects children's behaviors in class, it is very likely that these links are bidirectional. For example, higher levels of children's externalizing behavior may result in higher levels of conflict in teacher–child relationships (e.g., Horn et al., 2021). Research would benefit from studies applying a longitudinal research design to examine these associations.

Second, our ability to generalize from our findings is limited. The sample size was relatively small. In addition, the participating children were mainly from middle-class families living in Israel, which is considered to be a mostly Western society. To increase confidence in the generalizability of the findings as well as the applicability of Schwartz's values model in young children from diverse cultures, future studies should be conducted with larger and cross-cultural samples.

Third, both teacher-child relational conflicts and children's maladaptive behaviors were reported by the teachers. Even though values were measured in an interactive interview conducted in a one-on-one session with each of the participating children, we suggest that future studies should use other reporters, in addition to the teachers and children (multi-informants; e.g., parents), and other measurements, in addition to teacher reports and child direct assessments (multi-method; e.g., observations, peer nominations), to obtain information on children and their relationships with others.

Finally, we based our assumptions about the ways in which children who are guided by different values differentially experience conflict with their teachers on previous findings concerning the central characteristics of each value category and the two organizing principles. Future studies can expand our theoretical model by developing measures addressing these assumptions more directly; they could, for example, ask children how they perceive and interpret a conflictual relationship with a teacher and how they think it may or may not affect their ability to obtain their values-oriented goals in class. Furthermore, because our main objective in the current study was to examine the values of young children, we did not include the values of teachers. To add to this study's findings, future studies should investigate how teachers' values interact with children's values and affect their conflictual relationships, among other important social and academic aspects.

#### Implications and conclusions

The study's results support the recent contention that 5-year-old children are capable of reporting their values orientations and that their values structure is similar to the Schwartz values model (see Abramson et al., 2018; Lee et al., 2017). Furthermore, to the best of our knowledge, this is one of the first indications of the essential role of personal values in young children's social world, specifically in the kindergarten environment. Moreover, with respect to the adverse associations between teacherchild relational conflict and children's maladaptive behaviors, as far as we know this study is one of the first to show how children's core aspects, such as their values, protect them from or put them at greater risk of being negatively affected in this context.

Our findings should be informative for early childhood educators. Teachers and other important child caregivers and practitioners can benefit by considering children's values orientations when interacting and working with them. As implied by this study's findings, the motivations behind young children's perceptions and justifications of their reactions to their own and others' social conduct have implications for the daily work and practices of child practitioners and also for the implementation of child intervention programs. First, the results show that in certain contexts one group of values may help children adapt to challenging situations, whereas another may have the opposite effect. Child

practitioners should use this knowledge to address children's values as a means to avoid negative consequences as well as to empower and support children's growing "self." For example, teachers may initiate class activities that lead to discussions about the different broad motivations that guide children in their daily lives and how these motivations can be expressed in their everyday activities and interactions with classmates and teachers. This can inspire children to reflect on their values and support them in thinking about how they can *adaptably* express themselves and behave based on their most important motivations and goals. Individuals conceive their values as reflecting the authentic self (Gecas, 1982; Sherman, 2013). Hence, behaving according to their central values can be a rewarding experience for children, one that may reinforce their sense of self-consistency (Bardi & Schwartz, 2003).

Second, the findings regarding conservation values highlight the need for teachers to be aware of children's specific characteristics and how challenges in their relationships with them may affect them differently. Whereas some children are more able to handle everyday difficulties between themselves and their teachers, others are more likely to perceive these challenges as serious threats that can harm their sense of security and well-being. Detecting and sensitively addressing such characteristics, which can place children at risk in certain situations (e.g., conservation values in contexts where teachers and children share conflictual relationships), becomes even more important when they lead to children's internalizing behaviors that are more difficult to recognize and therefore are more difficult to address (Huber et al., 2019).

Lastly, previous studies show that self-transcendence values relate to more positive social outcomes, including among young children (see Abramson et al., 2018; Daniel et al., 2020). Our findings support this claim by demonstrating that self-transcendence values weaken the association between teacher-child relational conflict and children's maladaptive behaviors, arguably by providing children with more adaptive prosocial-oriented ways in which to interpret and react to interpersonal challenges. As early as kindergarten, educators can promote children's endorsement of self-transcendence values by emphasizing the importance of being more attentive to and considerate of others, being more proactive in helping not only friends but also unfamiliar others, animals, and nature, and being willing to compromise and share. This is likely to promote a better class environment and support children's social development.

# Data availability

Data will be made available on request.

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# Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.jecp.2023. 105689.

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