RESEARCH IN PROGRESS

The Role of Self-Construal in Child Rearing: A Relational-Physical Comparison

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Abstract Three studies examined the link between physical and relational self-construal and their child-rearing choices. We predicted that the type of self-construal would positively correlate with the corresponding parenting intentions (Study 1) and practices (Study 2 and 3). Participants in Study 1 were undergraduate students ($n = 150$), and participants in Studies 2 and 3 were parents recruited from Mechanical Turk ($n = 173$ and 214). In all three studies, participants completed an online survey that assessed their self-construal and their parenting choices. All three studies showed that physical self-construal was positively correlated with physical parenting decisions. Studies 2 and 3 indicated that relational self-construal and relational parenting decisions were positively correlated.

Keywords Self-construal · Parents · Child-rearing

Abbreviations
MTurk   Mechanical Turk
PSC   Physical self-construal
RISC   Relational-interdependent self-construal

Parents are among the most influential people in a child's life. They are the primary source of love, support, and discipline for young children, but there are considerable variations in how parents exhibit these behaviors. Two examples are physical and relational styles of parenting. A physical style of parenting can be defined as an approach that focuses on engaging one's physical body, whereas a relational style is an approach that focuses on building and maintaining positive relationships. For example, when a family is at dinner and the child stands on his/her chair rather than sitting in it, a parent could react in a variety of ways. A physical approach of parenting may involve removing the child from the situation and spanking him/her. In contrast, a relational style of parenting may involve discussing the problem with the child and trying to negotiate with the child to make him/her behave. Also, if a child was being bullied by his/her friends, a parent with a physical approach to parenting may teach the child to fight and not seem inferior, whereas a relational parenting approach may instruct the child to try to rekindle the friendship.

These approaches are not mutually exclusive; parents may employ a combination of these approaches. The degree to which these practices are used, and how it relates to other factors, however, has yet to be examined. Although numerous theories suggest that parenting styles can be linked to individual difference variables, there are other that have so far been overlooked. Differences in parental decisions may be linked to how the parents define themselves. To date, however, no one has considered linking self-construal to parenting practices. The purpose of the current research is to examine the link between self-construal and child-rearing practices.

Individual Differences in Parenting Practices

A large body of research has examined the various ways in which parents react to situations (for review see

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Mackler et al., 2015). Baumrind's (1971) seminal longitudinal research resulted in a model with three distinct parenting styles: authoritative, authoritarian, and permissive. Recently, Gfroerer et al. (2011) showed that these three parenting styles involve key differences in how parents interact with their children, and the subsequent reactions from them. Authoritative parents are more comfortable with conflict than others, and adolescents who perceive their mothers as authoritative tend to feel a sense of belonging and connection to others and tend to be success-oriented. In contrast, authoritarian parents are perceived to be less warm or affectionate. Permissive parents make few demands for responsibility and orderly behavior and allow their child to regulate activities with little or no control. Gfroerer et al. (2011) noted that parents who view their parenting style as permissive also may feel a sense of isolation at times, avoid conflict, be less success-oriented, have difficulty getting feedback and pleasing others, lack of social skills, and not value rules.

Although parents may employ these styles to correspond with their child's needs, they are also linked to the parent's personality. Belsky et al. (1995) found that highly neurotic parents have less positive emotions, are less sensitive, and are less cognitively stimulating. They also express more negative emotions and are more intrusive than other parents. More recent research showed that highly neurotic fathers adopted a more forceful discipline style than fathers with lower scores (Kochanska et al., 2007). Extraverted and agreeable mothers and fathers, in contrast, are more positively affective, sensitive, and cognitively stimulating in their interactions with their children.

In most of these cases, past research focuses primarily on the parents' dispositions and less on the ways they resolve problems for their children. We suggest that parenting choices may extend beyond control and warmth and instead consist of five approaches: independent (i.e., the child is encouraged to solve the problem herself or himself), dependent (i.e., the parent solves the problem for the child), relational (i.e., child is encouraged to resolve the problem by seeking help from others), physical (i.e., the child is encouraged to resolve the problem by engaging her or his body in physical activity), and passive (i.e., neither the parent nor the child should do anything to address the situation).

The focus of our study will be on the last two forms of parenting approaches: relational and physical. Prior examinations of parenting approaches have shown that many parents focus on socializing their children to solve problems through a relational lens, such as developing social affective skills (Knafo, 2006; Koblinsky et al., 2006; MacCormack et al., 2020) and helping others (Roisman & Fraley, 2012). Many parents will also socialize their children through a physical lens, such as assigning physically demanding chores (Anderson et al., 2009), and engagement in youth sports (Gottzén & Kremer-Sadlik, 2012). To date, however, no one has examined these distinctions. In addition to investigating these types of parenting approaches, we will examine how these parenting decisions map onto individual difference variables that to date have been overlooked in the parenting literature: self-construals.

The Role of Self-Construal in Interpersonal Behavior

A person's self-construal refers to how one defines and makes meaning of oneself. Early work by Triandis (1989) and Markus and Kitayama (1991) proposed that people will draw upon specific social experiences to compose an understanding of the self that is primarily independent (or private) or interdependent (or public/collective), and that culture serves as an important guide as to how those experiences shape the self. Consequently, people will form either a highly independent self-construal (IndSC) or a highly interdependent self-construal (InterSC) based on the cultural grounding in either an individualized or group emphasis of social experiences.

These self-construals in turn influence the ways people respond to their social environments (see Cross et al., 2011 for a review). For example, people with a high IndSC are less sensitive to different social contexts (Cousins, 1989; Kanagawa et al., 2001; Rhee et al., 1995; Suh, 2002), engage in more contrast-based cognitive processing (Bry et al., 2008), emphasize self-consistency (Church et al., 2008), prefer socially disengaging emotions (Kitayama et al., 2004), engage in more self-promotion (see Heine et al., 1999 for a review), and emphasize primary control more (Lam & Zane, 2004) than people with a high InterSC. These cognitive, affective, and motivational differences then manifest in corresponding behavioral patterns, with highly independent people engaging in less group-oriented (Gardner et al., 2004), cooperative (Chen et al., 2001), and imitative behaviors (van Baaren et al., 2003) than highly interdependent people.

InterSC may be further distinguished as having relational and collective subcategories. A relational-interdependent self-construal (or relational self-construal, RelSC) refers to a tendency to define and understand the self as part of one's close relationships (Cross et al., 2000; Kashima et al., 1995). In contrast to the cultural grounding of IndSC and IntSC, RelSC may be used to explain several gender differences in attitudes and behaviors, especially in Western cultures (Cross & Madson, 1997). Rather than focusing on larger groups, people with a high RelSC define themselves and structure their social experiences around individual relationships (e.g., with one's spouse, friends, siblings). As a result, highly relational people are more inclined than others to

be sensitive to relational information (Cross et al., 2002), base their well-being on the quality of close relationships (Cross et al., 2003), focus on other enhancement (Gore & Cross, 2011), and pursue goals for the sake of their relationships (Gore & Cross, 2006). Their behavioral output in turn focuses on promoting their relationships, adjusting to the needs of their relationships, and focusing on joint gains.

Self-construals have been shaped and formed through normed social interactions, social roles, and expectations that are grounded in culture and gender. However, recent research suggests that interdependent and independent self-construals are not the only way that one can define the self. Physical self-construal (PhySC) is the tendency to define oneself based on one's physical body and its capabilities. Similar to Cross and Madson's (1997) seminal work on utilizing self-construal to explain gender differences, the development of PhySC as a variation of self-construal also stemmed from the extensive literature on gender differences (e.g., Ellis et al., 2008). While this literature is concordant with Cross and Madson's (1997) assertions regarding the relational basis of females' self-definitions, males' self-definitions are often both highly independent and physical (Gore et al., 2006).

These differences are evident across behaviors, cultures, and age groups. From an early age, male children have more physically active and less fearful temperaments than females (Cosentino-Rocha et al., 2014; Gagne et al., 2013), they engage in more rough-and-tumble play (DiPietro, 1981; Humphreys & Smith, 1987) and are more likely to utilize physicality as a primary method for establishing dominance over same-sex peers (see Rose & Rudolph, 2006 for a review). Later, males and females' body compositions show distinct differences, particularly in terms of muscle mass (Wells, 2007). PhySC and RelSC may therefore explain in part gender differences in a variety of domains, such as aggression (Azam & Aftab, 2012; Burr et al., 2005; Crapanzano et al., 2010; Risser, 2013), cognitive abilities (Feingold, 1988; Hyde & Linn, 1988; Linn & Peterson, 1995), motor performance (Thomas & French, 1985), goals in romantic relationships (Asayama, 1975; Bech-Sørensen & Pollett, 2016; Buzwell et al., 1996; Chivers et al., 2004; Sitton et al., 1986), and activities with friends (Caldwell et al., 1982; Campball, 1990; Pitcher et al., 1983; Rose & Rudolph, 2006).

Up until recently, PhySC was not a recognized variation of self-construal, but Gore et al. (2006) demonstrated that it is an orthogonal construct from the other forms of self-construal. They also showed that men and athletes have a higher physical self-construal than women and non-athletes, and that both PhySC and IndSC uniquely predict variance in masculine gender role characteristics, even while controlling for sex. This preliminary work suggests that PhySC is indeed an important variant of self-construal, particularly

in explaining gender-typical outcomes, and it can predict variance in these outcomes over and above gender.

Despite the extensive research linking self-construals to cognitive, affective, motivational and behavioral outcomes, no one has examined their link to parenting practices. The only exception involved the development of self-construals specific to parenting (i.e., efficacy, burden, and growth), and their relationship to the parents' nurturance, stress and explanatory style (Oyserman et al., 2004), but to date, no research has examined approaches to parenting using the tripartite model described above, much less so with the inclusion of PhySC. This omission led us to the development of the current research.

Overview and Hypotheses

Previous research has not yet studied the link between self-construal and child-rearing practices. Studies also have not investigated the extent to which physical self-construal can guide a person's attitudes, emotions and behaviors. In three studies, we sought to provide some insight into how relational and physical self-construals relate to child-rearing decisions among parents. In Study 1, we asked college students to read several hypothetical parenting scenarios and possible solutions for each scenario. They were then asked to select which solution they would be most likely to choose if they were the parent. In Study 2, we asked parents to read the same scenarios and select the solution that was the closest match to what they would typically do. In Study 3, we asked another group of parents to read the scenarios and then generate their own solution to the scenario based on how they typically respond to similar situations. Across all three studies, we hypothesized that physical self-construal will be positively correlated with physical practices in child rearing, and relational self-construal will be positively associated with interpersonal practices in child-rearing. To demonstrate the explanatory association between self-construal and parenting practices beyond gender and age differences, we also tested these hypotheses while controlling for participant gender and age.

Study 1

In Study 1, we aimed to test the link between self-construal and hypothetical parenting choices. This study was completed online among a group of college students, some of whom were parents and some were not. It was hypothesized that physical self-construal and physical parenting choices would be positively correlated, and relational self-construal and relational parenting practices would be positively associated. We also hypothesized that these associations would

remain significant after controlling for age, gender and parent status.

Method

Participants

One hundred-twenty psychology students ($n = 120$) at Eastern Kentucky University, a rural state university, participated in the study. All of the students were over the age of 18 in order to give informed consent. Participants' age ranged from 18 to 49 ($M = 23.39$; SD $= 7.42$). The majority of participants were female ($n = 92$, 77%), Caucasian ($n = 111$, 92%), and not parents ($n = 89$, 74%). The student participants received course completion credit.

Materials

Relational Self-Construal The 11-item Relational Interdependent Self-Construal (RISC) scale (Cross et al., 2000) was used to measure an individual's tendency to include close relationships in one's self-definition. The scale correlates moderately with the Clark et al. (1987) Communal Orientation Scale ($r = 0.41$), Singelis' (1994) Interdependent Self-Construal Scale ($r = 0.41$), and Davis' (1980) Empathic Concern Scale ($r = 0.34$) (Cross et al., 2000). Cross et al. (2000) also found the RISC scale to have acceptable test–retest reliability (r's > 0.70 over one month, r's > 0.60 over two months), and discriminant validity with other measures, such as the Marlowe–Crowne Social Desirability Scale (Crowne & Marlowe, 1960). Previous research using the RISC scale showed positive correlations with measures of social support and relationship closeness, but little or no association with measures of self-esteem and psychological well-being (Cross & Morris, 2003; Cross et al., 2003). Although the RISC is related to other measures of collectivism, it is not identical to the measures. It only shows moderate correlations with other scales and appropriate discriminant validity with other measures. The response format involved a 5-point Likert scale ($1 = strongly\ disagree$, $5 = strongly\ agree$; $M = 3.79$, SD $= 0.58$, Cronbach's $\alpha = 0.86$).

Physical Self-Construal The 20-item Physical Self-Construal (PSC) scale was used to measure an individual's tendency to define oneself based on the physical body and its capabilities (Gore et al., 2006). This scale has acceptable reliability and is distinct from the other forms of self-construal. The response format involved a 5-point Likert scale ($1 = strongly\ disagree$, $5 = strongly\ agree$; $M = 3.17$, SD $= 0.50$, Cronbach's $\alpha = 0.82$).

Parenting Practices This measure consisted of 10 hypothetical parenting scenarios in which the participant chose a relational, physical, or other option for each question (see Appendix). The number of Physical, Relational, and Other choices were summed to create total scores for each category ($M = 3.43$; SD $= 1.35$ for Physical Choices, $M = 3.33$; SD $= 1.51$ for Relational Choices, $M = 3.23$; $SD = 1.24$ for Other Choices).

Procedure

Participants voluntarily completed the survey online. They read 10 hypothetical scenarios and then selected one of three options that best described how one would approach the situation. Then, participants were given both self-construal measures. The participants were given a debriefing statement on the final screen.

Results

Preliminary independent samples t tests examined gender differences in self-construal and scenario choices. Males had higher PSC scores ($M = 3.34$, SD $= 0.51$) compared to females ($M = 3.12$, SD $= 0.48$), $t(118) = 2.06$, $p < 0.05$. Males also selected more physical choices in the parenting scenarios ($M = 3.89$, SD $= 1.47$) than females ($M = 3.29$, SD $= 1.28$), $t(118) = 2.09$, $p < 0.05$. Females selected more relational choices in the parenting scenarios ($M = 3.53$, SD $= 1.43$) than males ($M = 2.64$, SD $= 1.61$), $t(118) = -2.80$, $p < 0.01$. Another independent samples t test was conducted to examine the differences between parents and nonparents on self-construal and scenario choices. Nonparents had higher PSC scores ($M = 3.24$, SD $= 0.50$) compared to parents ($M = 2.98$, SD $= 0.40$), $t(117) = 2.62$, $p < 0.01$. Nonparents also selected more physical choices in the parenting scenarios ($M = 3.62$, SD $= 1.34$) than parents ($M = 2.93$, SD $= 1.26$), $t(117) = 2.46$, $p < 0.05$.

To test the first hypothesis, bivariate correlation analyses were conducted among the four variables. The results showed that PSC was positively linked to Physical Choices ($r = 0.40$, $p < 0.01$), whereas PSC was negatively correlated with Relational Choices ($r = -0.15$, $p < 0.05$). Although we hypothesized that relational self-construal would be correlated with relational choices, we found that it was not ($r = 0.08$, *ns*). Both PSC and RISC were negatively associated with Other Choices ($rs = -0.24$ and -0.34, $ps < 0.01$).

To test the hypothesis that physical self-construal is positively associated with physical choices controlling for age, gender and parent status, a partial correlation analysis was conducted among the self-construal and parent choice variables, controlling for age, gender and parent status. The results showed that the association between PSC and Physical Choices remained significant ($r = 0.34$, $p < 0.01$); the RISC and Relational Choices association remained non-significant ($r = 0.07$, *ns*).

Discussion

Study 1 only supported one of the hypotheses; there was a positive relationship between physical self-construal and physical parenting choices. Therefore, participants who defined themselves higher based on their body and its capabilities were more likely to choose parenting options that promote their children's use of their physical body as a way to guide themselves in the world. However, this study used college students as its sample, and most of them were not parents. We found that nonparents were more likely to choose physical parenting options compared to actual parents, which may account for some of the results. Therefore, we conducted Study 2 to correct this limitation.

Study 2

Study 2 addressed the main limitation of Study 1 by recruiting a sample of parents. Again, we hypothesized that physical self-construal and physical parenting choices would be positively correlated, and relational self-construal and relational parenting practices would be positively associated.

Method

Participants

One hundred seventy parents ($n = 170$) participated in the study. All of the participants were over the age of 18. The majority of participants were in middle adulthood ($M = 36.78$; $SD = 9.26$), female ($n = 117$, 69%) and Caucasian ($n = 140$, 82%), and all participants had at least one child, with most parents having more than one child ($M = 2.15$; $SD = 1.20$). The participants were recruited through MTurk, and each one was given \$0.50 for completing the study.

Materials

The same measures for relational self-construal ($M = 3.80$, $SD = 0.65$, $\alpha = 0.89$) and for physical self-construal ($M = 3.28$, $SD = 0.59$, $\alpha = 0.90$) from Study 1 were used in Study 2. The same 10 hypothetical parenting scenarios were used from the previous study, but instead, the participants were instructed to choose the option that they would most likely use with their own children. Total scores were obtained by adding the number of choices they selected within each category ($M = 2.49$; $SD = 1.20$ for Physical Choices, $M = 3.41$; $SD = 1.43$ for Relational Choices, $M = 4.06$; $SD = 1.37$ for Other Choices). Participants were also asked to indicate how many of their children were boys and girls.

Procedure

Participants voluntarily completed the survey online through MTurk. The procedure was otherwise identical to Study 1, except the parents were asked to select the option they would most likely engage in if they experienced the scenario with their own children.

Results

Analyses involved separate independent samples t tests for males and females compared to self-construal, and scenario choices. In contrast to Study 1, females had higher PSC scores ($M = 3.34$, $SD = 0.58$) compared to males ($M = 3.15$, $SD = 0.61$), $t(168) = -2.01$, $p < 0.05$.

To examine the relationship between relational and physical self-construal, and relational and physical choices, bivariate correlation analyses were conducted among the four variables. PSC was positively correlated with Physical Parenting Choices ($r = 0.13$, $p < 0.05$), whereas RISC was positively correlated with Relational Parenting Choices ($r = 0.26$, $p < 0.001$), and negatively correlated with Physical Parenting Choices ($r = -0.15$, $p < 0.05$) which supported both hypotheses. Additional bivariate analyses were conducted to examine the relationship between RelSC, PhySC, parenting choices, and number of male and female children. These results revealed that RISC was negatively correlated with the number male children they had ($r = -0.13$, $p < 0.05$). It also indicated that Physical Parenting Choices were positively correlated with the number of male children they had ($r = 0.14$, $p < 0.05$). There were no other significant correlations.

To test the hypothesis that self-construal is positively associated with corresponding parenting choices controlling for participant gender and age and the number of children they have that are boys and girls, a series of linear regression analyses were conducted among the self-construal and parenting choice variables while controlling for the covariates. The results showed that physical self-construal and physical choices remained positively associated ($\beta = 0.11$, $p < 0.05$), and relational self-construal remained positively associated with relational choices ($\beta = 0.20$, $p < 0.01$), which supported both hypotheses.

Discussion

Study 2 supported both hypotheses; parents selected parenting options that corresponded to their own self-definition. This information adds to Study 1 because it used a more representative sample of parents, but there are still some methodological limitations. The parenting practices questionnaire gave the participants limited options, some of which they may not choose in a real situation. In addition,

the Other Choice category was composed of options that involved either independent, dependent, or passive parenting. The purpose of Study 3 was to allow for a wider array of solutions generated by the parent, and a wider array of categories to allow for more distinctions to be made for the Other Choice category of solutions.

Study 3

For Study 3, we wanted to gain more insight into parents' choices. To allow for more variation in responses, we changed the response format to open-response questions, in which the participant had to type an answer to the response. This way, the participants would be able to respond to each situation with a response that they typically use with their children. Our hypotheses were otherwise the same as in Studies 1 and 2.

Method

Participants

Two hundred fourteen ($n = 214$) parents participated in the study. All of the participants were over the age of 18. The majority of the sample was in middle adulthood ($M = 39.32$; $SD = 10.29$), female ($n = 177$, 82%) and Caucasian ($n = 190$, 88%). All participants had at least one child, and most had more than one ($M = 2.21$, $SD = 1.09$). The participants were recruited through MTurk, and each was given \$0.50 for completing the study.

Materials

The same measures for relational self-construal ($M = 3.83$, $SD = 0.60$, $\alpha = 0.89$) and for physical self-construal ($M = 3.29$, $SD = 0.55$, $\alpha = 0.89$) were used for Study 3.

Parenting Practices The same 10 parenting scenarios were used from Study 2, but the participants were instructed to type a response that they would be most likely to implement with their own children rather than selecting from a list of options. Because of the qualitative nature of these responses, the responses were coded on a scale from 1 to 6 by one of the researchers and another rater. The coding scheme was as follows, with examples in parentheses: 1 = *physical* (physical contact, exertion, labor, chores, or activity), 2 = *relational* (positive communication with someone else, cooperation, starting or maintaining relationships, "work it out together"), 3 = *independent* (child does it alone, no other physical/relational component), 4 = *dependent* (parent does it for them, no other component mentioned), 5 = *passive* (leave it alone, don't worry about it), 6 = *other*. For example, one of the scenarios was "Your child is being

bullied by a friend at school. You recommend him/her to…" An example of a *physical response* was, "Fight back." A *relational response* example was, "Be kind to the bully. Talk to them." An *independent response* example was, "Stand up for yourself and be assertive, but don't hurt them." A *dependent response* example was, "Let me talk to the teachers." A *passive response* example was, "Ignore them." The *other response* example was, "I will homeschool so this wouldn't happen." An interclass correlation coefficient with absolute agreement was calculated between the two raters across all responses and scenarios and yielded acceptable agreement (ICC = 0.90). Disagreements were discussed and resolved to produce perfect agreement. Total scores were calculated by adding the number of choices within each category ($M = 2.10$, $SD = 1.38$ for Physical Choices, $M = 2.95$, $SD = 1.79$ for Relational Choices, $M = 2.76$, $SD = 1.81$ for Independent Choices, $M = 0.66$, $SD = 0.66$ for Dependent Choices, $M = 0.16$, $SD = 0.43$ for Passive Choices, and $M = 0.15$, $SD = 0.47$ for Other Choices).

Similar Parenting For each scenario, participants also rated the degree to which their choice was similar to how they were treated by their own parents. Participants rated each choice on a 5-point scale (1 = *not at all similar*, 2 = *mostly dissimilar*, 3 = *neutral*, 4 = *mostly similar*, 5 = *completely similar*). A total similarity rating was calculated by taking the mean response across all scenarios. Participants generally reported that their own parenting practices were similar to their own parents' practices ($M = 3.60$, $SD = 0.94$), and a one-sample t test showed that this was significantly different from the midpoint of the scale, $t(223) = 9.49$, $p < 0.01$.

Child Information Participants were also asked to indicate how many of their children were boys and how many were girls.

Procedure

Participants voluntarily completed the survey online through MTurk. The participants were first exposed to the 10-item parental practices and typed a response that best described his/her parenting actions for each. Participants were then asked to complete both self-construal measures. They read a debriefing statement for the final screen.

Results

To examine the relationship between relational and physical self-construal, and relational and physical choices, bivariate correlation analyses were conducted among the variables. PSC was positively correlated with physical parenting choices ($r = 0.10$, $p = 0.05$), which supported the hypothesis. RISC was positively correlated with Relational Parenting Choices ($r = 0.11$, $p = 0.05$). RISC was also negatively

correlated with Independent Parenting Choices ($r = -0.10$, $p = 0.05$). There were no other significant associations between self-construal and the number of parenting choices within each category. Unlike Study 2, none of the variables were associated with the number of children the participant had who were boys or girls.

To test the hypothesis that self-construal is positively correlated with corresponding parenting choices while controlling for participant age and gender and the number of children they have that are boys and girls, a series of linear regression analyses were conducted among the self-construal and parenting variables while controlling for the covariates. The results showed that, while accounting for participant age and gender and the number of their children who are boys and girls, PSC and Physical Choices remained positively associated, but the association was marginally significant ($\beta = 0.09$, $p < 0.10$). RISC also remained positively associated with Relational Choices ($\beta = 0.11$, $p = 0.05$) while controlling for participant age and gender and the number of their children who are boys and girls.

Discussion

This study aimed to rectify the previous limitations of the previous studies. This study is the most externally valid because it allowed parents to provide their own responses to the given scenarios. Both of the hypotheses were supported, but the strength of the correlations was lower compared to previous studies. This provides further support that parents choose to interact and discipline their children in ways that correspond to their own self-construal.

General Discussion

Three studies examined the association between self-construal and child-rearing practices. The studies examined the relations between both types of self-construal and both types of parental choices on a newly formed measure. Consistent with our hypothesis, analyses from this study found that physical self-construal was positively associated with physical parenting choices. The associations were still significant when controlling for gender and parenthood of the participant. This means that people with a high PhySC interact with and encourage their children to engage the world using a physical approach. For example, people with a high PhySC recommend that their child participates in a physical chore, such as raking leaves, rather than a relational chore, such as setting the table for the family dinner, as a way to contribute to the family. In contrast, relational self-construal was positively linked with relational parenting choices. Thus, parents with a high RelSC advise their children to rekindle

a friendship with a friend after a fight than advise them to engage in physical violence against the friend.

Implications

Our studies are the first to provide some important insights into how variations in self-construal explain variations in parenting practices. To chronically activate one's close relationships or one's physical body as a way to understand oneself creates a tendency to relate to one's social world in a way that allows self-definition to be reinforced. For highly relational people, who define themselves based on their close relationships, their thoughts, feelings and behaviors are centered around the development, maintenance and enhancement of their social bonds with others (see Cross et al., 2009 for a review). Consequently, high relationals' parenting involves maintaining and enhancing their children's ability to form social bonds. Thus, when asked to state how they would resolve typical parenting scenarios, highly relational parents chose or generated options that involved cooperation between the child and another person.

For highly physical people, who define themselves based on their body and its capabilities, the social world exists based on the interplay of physical creatures coming into contact with each other, so solutions to problems should utilize one's physical body to interact with a physical world. Thus, when asked to state how they would resolve typical parenting scenarios, highly physical parents chose or generated options that involved the child engaging with the problem through the placement of physical objects, physical contact with others, or exertion through physical labor. Such variations in parenting practices are not explained by gender differences necessarily, but rather, differences in how people understand themselves and their social world. Thus, these outcomes are better explained by the parent's self-construal than by being the mother or father.

Our results also suggest an alternative approach to studying parenting practices. Much of the literature has focused on warmth and control as the two primary dimensions of parenting styles and behaviors (see Mackler et al., 2015 for a review), but our results showed that further distinctions can be made based on dimensions that parallel those for self-construals. If people create a foundational understanding of themselves as highly independent, interdependent, relational, or physical, then they will interact with their social world in a way that builds upon that foundation. Self-construal may be particularly important to examine in cultures with less clearly defined gender roles for behavior, or what Hofstede (1984, 1998) defined as feminine cultures. As opposed to masculine cultures, which stress clear roles for men and women, feminine cultures exhibit more overlapping roles among men and women and behaviors may therefore be better predicted by definitions of the self.

Our results show that this extends into parenting practices, which seemed to typically incorporate independent, interpersonal, or physical approaches when they were allowed to generate their own solutions in Study 3. Thus, we suggest that future research expands upon these studies by examining these links between self-construal types and corresponding parenting practices to better understand when and why parents choose one solution over another. Future research should also address some of the limitations of the current studies.

Limitations and Future Directions

The present research had several methodological limitations that should be resolved in future studies. All three studies were posted online and were anonymous, so some participants could have falsified their responses or misinterpreted the questions. Data that are self-reported present a problem for empirical research because of potential misrepresentations, so it would be best to collect observational data. This also presents a potential issue with common method variance, although none of the three studies yielded common method variance above the 50% threshold (16.8% for Study 1, 20.3% for Study 2, 18.9% for Study 3) from the Harman single factor score technique (see Podsakoff et al., 2012). Nevertheless, future researchers should address this issue with a more objective assessment of parenting approaches.

It should also be noted that the effect sizes for these associations are small and therefore require large sample sizes to yield enough statistical power. Considerations should also be made regarding whether the focus is on expected parenting practices (as in Study 1) or actual parenting practices (as in Studies 2 and 3). Based on the results across the three studies, the link of self-construal with expected parenting practices is much stronger than with actual practices. Taken together, these suggest that there are several other factors at work in parenting approaches.

There are some other distinctions among parents and children that should therefore be noted in future studies. Parenting styles can differ based on the age (e.g., Kashahu et al., 2014), gender (e.g., McKinney & Renk, 2008), education level (e.g., Kim et al., 2018; Zervides & Knowles, 2007), culture (e.g., Varela et al., 2004), and socioeconomic status (Yujun & Lachman, 2019) of the parent. Their approaches can also differ based on the age (e.g., Rosen et al., 2008) and gender (Vyas & Bano, 2016) of the child. Some of these factors may have a particularly important role in how much parents utilize relational and physical approaches (Wong & Yeung, 2019). Although we accounted for some of these factors and found that they did not explain the link between self-construal and parenting approaches, future research should address whether other parental and child

demographic factors influence the associations between self-construals and the types of parenting approaches we examined.

Another limitation was that we focused primarily on relational-physical distinctions in self-construals and parenting practices, but we did not focus on independent–interdependent distinctions. It is likely that similar correspondence exists between these self-construals and parenting behaviors, but we were more interested in utilizing self-construal types that are more closely linked to gender differences (Cross & Madson, 1997; Gore et al., 2022) rather than to cultural differences (Markus & Kitayama, 1991). Future applications of this research should include all four self-construal types and a wider array of scenarios to allow for an analysis across genders and across cultures. This is especially important when considering the constrained diversity of our samples.

Conclusion

In conclusion, the current research contributes to the existing literature by demonstrating that one's self-construal can be linked to corresponding child-rearing practices. The degree to which a parent sees himself or herself as a relational entity leads them to encourage their children to create, enhance, or repair relationships with others. In contrast, the degree to which a parent sees himself or herself as a physical entity leads them to encourage their children to use their physical body to engage with the world. Thus, a parent's self-definition may be one of the keys to understanding how and when they will encourage their children to solve problems.

Data Availability   The materials and data for the three studies can be found on the Open Science Framework page https://osf.io/nm6tr/.

Code Availability   The code and data are available at the Open Science Framework page https://osf.io/nm6tr/.

Declarations

Appendix

Hypothetical Parental Practices

Please select the option that best fits how you would respond to each hypothetical statement. This may not necessarily be exactly what you would choose in the situation, but choose the option that best fits you.

1. Your child fell off of the playground at school and slightly hurt his/her leg, you:

   a. Tell him/her to rest until full recovery
   b. Hold and comfort him/her
   c. Tell him/her to keep playing

2. Your child is hungry and incessantly asks when dinner will be ready, you:

   a. Ask him/her to set the table for the family
   b. Ask him/her to work on homework
   c. Ask him/her to rake the leaves in the yard

3. Your child is throwing a tantrum inside of a restaurant, you tell him/her to:

   a. Calm down immediately
   b. Stop or you will give him/her a spanking
   c. Explain his/her problem, and negotiate with you

4. Your child has misplaced his/her shoes before school, you:

   a. Help him/her find them
   b. Buy him/her new ones

   c. Tell him/her to walk around the house to the place that s/he last saw the shoes

5. Your child is being bullied by a friend at school recommend him/her to:

   a. Ignore the friend
   b. Try to rekindle the friendship
   c. Fight back

6. Your child is bored, you advise him/her to:

   a. Write a letter to grandma
   b. Play on the computer
   c. Play on the trampoline

7. Your child is having trouble making friends, you encourage him/her to:

   a. Join a sport
   b. Invite two classmates to your house
   c. Not worry about it, s/he will make friends soon

8. One of the most important values you want to teach your child is:

   a. Cherishing the relationships with others
   b. Honesty, and integrity
   c. His/her body should remain healthy to carry out activities

9. Your child is having trouble with his/her homework you advise him/her to

   a. Search the Internet for the answer
   b. Ask a friend for help
   c. Manipulate the problem with his/her hands to help him/her understand

10. Your child has recently joined the soccer team at school, you inspire him/her to:

    a. Treat the team as a family
    b. Pushing to reach his/her body's full potential
    c. Have fun

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