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ABSTRACT
The study examined the moderating role of child personality factors in the relation between mothers’ parenting style and child maltreatment in a sample of 330 children aged 7-10 years in Kenya. We found that mother’s parenting style was a predictor of child maltreatment $\beta=.25$, ($p=.01$). Mothers who are highly demanding and controlling were more likely to maltreat their children. Extraversion personality factor moderated this relation $\beta=.29$ ($p=.04$). Thus, children who scored high in extraversion were at a greater risk of child maltreatment by mothers who are highly demanding and controlling. The study highlights the need to train Kenyan parents on positive parenting.

Introduction
Studies indicate that parenting style can either safeguard or have potential harm to the child’s health, survival and development (Jonyniene & Kern, 2012). There are three parenting style dimensions; authoritarian, authoritative and permissive. The dimensions emanate from the level of demandingness and responsiveness of parents (Baumrind, 1971). Authoritarian parents have excessively high demands and are not responsive; authoritative parents balance demands and responsiveness while permissive parents are not demanding but overly responsive (Alzadeah, 2011). Documented literature suggests that high demanding and controlling parents are likely to maltreat their children (Rodriguez, 2010).

It is estimated that 25.3% of children experience some form of maltreatment every day, and almost one billion children are maltreated in the hands of their caregivers (Arnett, 2010; Aronson, 2011; UNICEF, 2012). For example, WHO (2006) reported that in the United States of America, 80% of child maltreatment was caused by parents. In Ireland, Halpenny, Nixon and Watson (2010) found that 67% of parents perceived that smacking of children did not cause harm and 59.6% of them reported that they had a right to smack their children if they wished. Only (28.4%) of the parents said that smacking is wrong and should never be used. Last (2000) indicated that in sub-Saharan Africa, power assertion, threats and physical punishment that are common practices in parenting. These practices that are consistent with authoritarian parenting style are believed to aide in learning. Unfortunately, this puts African children at risk of maltreatment as evidenced in a cross-cultural study in Kenya, Zambia and the Netherlands; Mbagaya (2010) reported that forms of child maltreatment were more likely in African countries (Kenya and Zambia) compared to the Netherlands. Findings of the study indicated that 31% and 40% of the participants in Kenya and Zambia respectively had experienced childhood physical abuse while only 3% of the participants in the Netherlands reported a history of childhood physical abuse.

Oburu (2004) reported that 57% of Kenyan caregivers used slapping, tying with a rope, hitting, beating and kicking as forms of discipline, 36% of the caregivers used both physical punishment and reasoning and only 7% used reasoning without accompanying it with any physical discipline.

Roskam and Meunier (2012) suggested that parenting practices depended on a child’s attributes. Thus, parents were likely to decrease their positive parenting practices and increase their controlling behavior in response to child’s characteristics. Using samples of children in Belgium, the authors found that parents of children with certain undesired personality traits may resort to high level of controlling strategies, discipline and punishment or ignore the child altogether. Kalat (2013) also noted that parenting strategies were determined by child characteristics. Thus, children with fearful temperament responded well to mild discipline and those with fearless temperament responded poorly to any kind of discipline but better to rewards. A child personality may therefore inadvertently put a child at risk of maltreatment from their parents. This study therefore, sought to examine the role of child personality factors on the relation between mothers’ parenting style and child maltreatment.

Many studies continue to treat children as passive recipients of parental socialization practices (Meunier, Roskam & Browne, 2011). The few documented studies on parenting and child maltreatment for example (Sidebotham, Golding, & the ALSPAC Study Team, 2001; Kleven, Bayon & Sierra, 2000) have considered the effects of parents’ and not children’s’ personality factors on child maltreatment. Other studies; (Rothbart et al., 2001; Alizadeh et al., 2011; Lee et al., 2012; Valles, 2012) have acknowledged that child temperaments can moderate parent-child relationship.

The current study adopted a different strategy of using the Big Five personality factors to explore the relationship between parenting style and child maltreatment. According to Haslam (2007), these personality factors are; extraversion or interpersonal relationship (talkative, assertive, energetic, sociable, assertive, self conscious and none tolerance to new
and unfamiliar experience); agreeableness (good natured, cooperative, trustful, nurturance, and friendliness in order to avoid conflict); conscientiousness (orderly, responsible, dependable, precision); neuroticism (easily upset, anxiety, depression, irritability, self-conscious and lack of emotional regulations and is associated with threat to punishment) and openness (curiosity, appreciating other cultures, openness to experience-intellectual independence).

Although the Big Five personality factors have been found to be stable from childhood to adulthood (Giao, 2012), not much has been done to determine whether the Big Five personality factors moderate the relation between parenting style and child maltreatment

**Present Study**

The current study examined the association between mothers’ parenting style and child maltreatment and how child personality factors influenced the relation. We focused on the mother-child dyad because it has been argued that mothers engage more in frequent interaction with their children and are more responsive than fathers (Meunier et al., 2011). We hypothesized that the level of maltreatment would increase with mothers’ high level of control and demand which is consistent with authoritarian parenting style. We also expected that children who scored low on conscientiousness and agreeableness personality factors were more likely to be maltreated by their mothers. In addition, we expected that those who scored high on extraversion, neuroticism and openness would also be maltreated. We supposed that mothers who balanced control and demand (authoritative parenting style) would report less incidences of maltreatment compared to authoritarian mothers. Mothers who were overly responsive and not demanding (permissive parenting style) would be the least maltreating.

**Method**

**Participants**

A total of 330 mother-child dyads participated in the study. The children were aged between 7 and 10 years (middle childhood); boys= 129(46%) and girls =154(54%). Sixty six percent (209) parents had elementary education. The study was carried out in Bungoma County which is located in Western Kenya.

**Measures**

This study used Parenting Style and Dimensions Questionnaire, Parent-Child Conflict Tactics Scale and the Big Five Questionnaire for children. The instruments were piloted and validated for use in the study. In order to make the instruments useful, they were translated into Kiswahili language. This is the national language of the people of Kenya. Hence, the Kiswahili versions of these instruments were administered to the participants. The psychometric properties of these instruments are provided below.

**Parenting Styles and Dimension Questionnaire:**

Parenting style was measured by the 32-item Parenting Styles and Dimension Questionnaire (PSDQ-Short Version, Robinson, Mandleco, Olsen & Hart, 1995). This questionnaire assessed three dimensions of parenting styles: authoritarian, authoritative and permissive. Mothers rated how well the descriptions on the questionnaire fitted their parenting practices. The rating was done on a 5-point scale ranging from 1= never to 5= every time. Example of items on the questionnaire are; I use physical punishment as a way of disciplining my child (authoritarian parenting style), I explain to my child’s how I feel about my child’s good and bad behavior (authoritative parenting style), I find it difficult to discipline my child (permissive parenting style).

**Parent-Child Conflict Tactics Scale:**

Child maltreatment was measured using the 28 items Parent-Child Conflict Tactics Scale. This scale measures parenting practices associated with physical assault, child neglect and psychological maltreatment (Merbert, & Straus, 2002). Parents reported their maltreatment levels based on a 5-point scale ranging from 1= never to 5= every time. For the Conflict Tactics Scales, the alpha levels were; physical assault/maltreatment α =.75, psychological aggression subscale α =.72 and neglect subscale α =.57. Examples of the items include; when my child does something wrong I shake him/her (physical maltreatment), when my child does something wrong I yell, scream or shout at him/her (psychological maltreatment), I fail to ensure my child get food (neglect). This is not the only study that has found a low alpha level for neglect scale, Straus et al. (1998) who are the authors of this questionnaire found internal consistency of (α=.22) for the neglect scale and attributed the low reliability coefficient to the diverse behaviors included in the measure so that, parents who engaged in one of the acts did not engage in the others.

**The Big Five Personality Factor Questionnaire for Children:**

Child personality was measured by 63 items of the Big Five Personality Factor Questionnaire for Children (Barbaranelli, Caparra & Pastorelli, 2003). The questionnaire has been used in personality assessment for children from as early as 6 years to 19 years (Bilalic et al., 2006; Muris, Mayer, Render, 2009; Vreeke & Muris, 2012; Serra-Negra et al., 2013). Parents rated how well the items described their children’s personality attributes related to the Big Five Personality factors: openness, extraversion, neuroticism, conscientiousness and agreeability. Parents responded to items such as; my child gets angry easily (neuroticism), would like to know many things (openness), respects and follows the rules and order (agreeableness). Internal consistency reliabilities (Cronbach’s alpha) were calculated for all the parenting dimensions. The alpha levels for authoritarian parenting style was α =.78; authoritative α =.78 and permissive α =.28. The low alpha level for the permissive scale could be attributed to the variety of items which measured different behaviors that were nonetheless indicators of permissiveness (see Straus et al, 1998).

**Procedure**

Maseno University Ethical and Review Committee approved the study. Permission to carry out the study was also granted by the office of the County Director of Education, Bungoma County. Children were given the opportunity to give or not give assent to participation. In view of the fact that children have many gate keepers, heads of schools, teachers and parents of participating understand the study and to make decisions on consent or assent. All information obtained was treated with confidence and identities of participants were concealed. Dates for data collection were agreed upon with the head teachers, class teachers and parents of sampled children.
Analysis

Data from the questionnaires was coded and organized for analysis using IBM SPSS Version 21. Dimensional approach was used to classify subscales of parenting styles (authoritarian, authoritative and permissive), child maltreatment (physical assault, emotional maltreatment and neglect) and child personality factors (extraversion, openness, agreeableness, conscientiousness and neuroticism). Data was analyzed using descriptive statistics (means and standard deviations) and hierarchical regression analysis. Parents were categorized based on their dominant parenting style dimensions. Thereafter, the parenting style variable was transformed into ordinal scale in which authoritarian parenting was ranked high on demanding and control, followed by authoritative parenting style and the least on the scale was permissive parenting style and means derived for each dimension of parenting style.

Children’s scores on the forms of child maltreatment; physical assault, psychological aggression and neglect were computed by summing up their scores on individual items of the subscales and means derived for each form of maltreatment. Similarly, children’s scores on the Big Five personality factors; neuroticism, openness, conscientiousness, agreeableness and extraversion were summed up on the basis of subscales and means derived for each factor. Both child maltreatment and personality factor scores were standardized.

Baron and Kenny’s (1986) analytical strategy was used to determine the moderating role of the Big Five personality factors on the relation between mothers’ parenting style and child maltreatment. In this analytical strategy, hierarchical regression analysis was used. In the first step of the regression model, main effects of parenting style and each of the personality factors on child maltreatment were tested. In the second step, interaction effects of parenting style and the personality factors were determined. According to Barron and Kenny (1986) and Holmbeck (2002) there is a moderation effect when the interaction effect is a significant predictor of outcome variable after controlling for independent moderator variable. In this case therefore, personality factors would be said to moderate the relation between parenting style and child maltreatment if the interaction between parenting style and the personality factor was a significant predictor of child maltreatment. In each of the analyses, parenting style and child personality factors were entered in first step. In the second step, the interaction between parenting styles and the child’s personality factors were added. Further, PROCESS macro method developed by Hayes (2013) was used to draw visual presentations of the moderating effect of child personality on the associations.

Results

Table 1 presents descriptive statistics of parenting styles, child maltreatment and child personality scales used in the study.

The mean scores indicated that authoritative (M =2.69, SD = .62) parenting was most used and permissive was the least (M =1.19, SD =.70) used by mothers. Children were highly psychologically (M =1.98, SD =.91) maltreated compared to physical assault (M =1.71, SD =.47) and neglect (M =1.33, SD =.55). In addition, children were scored highest on conscientiousness personality (M =3.10, SD =.73) and low on neuroticism (M =1.38, SD =.95) by their mothers (see Table 1).

We computed regression analyses to determine the moderating role of child personality factors on the relation between mothers’ parenting style and child maltreatment.

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<th>Measures</th>
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Table 1. Mean and Standard Deviation of the Variables in the Study (n=283).

Moderating Role of Child Personality Factors on the Relation between Mothers’ Parenting Style and Child Maltreatment

Because there are five personality factors, five regression models were performed. These results are summarized in Table 2. In all the regression models, parenting style was a positive and significant predictor of child maltreatment. Of the five personality factors, extraversion was a negative and significant predictor of child maltreatment ($\beta = -0.30$ (p =.03) while neuroticism was a positive and significant predictor of child maltreatment ($\beta = .35$, (p =.02)).

The results implied that children with higher scores on extraversion had lower scores on maltreatment and those with higher scores on neuroticism had higher scores on maltreatment. Thus, neuroticism was a risk factor to child maltreatment while extraversion was a protective factor against maltreatment.

Parenting style and neuroticism together accounted for 19% of the variance in child maltreatment while extraversion and parenting style together accounted for 8% of the variance in child maltreatment. Openness to experience, conscientiousness and agreeableness were not significant predictors of child maltreatment.

Table 2 shows that only the interaction between extraversion and parenting style was a positive and significant predictor of child maltreatment ($\beta = 0.29$ (p =.04). The interaction between the other personality factors and parenting style were not significant predictors of child maltreatment. This suggests that mothers who are highly controlling are more likely to maltreat their extraverted children than those who are less extraverted. It can be concluded that it is only extraversion that affected the strength of the association between mother’s parenting style and child maltreatment (see Table 2).

We conducted simple slope analysis to ascertain how the levels of child extraversion affected the association between mothers’ parenting style and child maltreatment. Low level of extraversion was represented by one standard deviation below the mean, mean was average levels, and high extraversion was one standard deviation above the mean. Visual presentation of the slope is shown in Figure 1.

Fig 1. Moderating Role of Extraversion on the Relation between Parenting Style by Mothers and Child Maltreatment.
Besides parenting style, extraversion and neuroticism personality factors were predictors of child maltreatment. Neurotic children are easily upset, have high anxiety, irritable, lack self-consciousness and emotional regulations (Haslam, 2007). We contend that this puts them at risk of maltreatment. Less extraverted children were not likely to be maltreated. This was an unexpected association. We submit that extraverted children are likeable and may not be prone to maltreatment.

Although there was no significant main effect of extraversion on child maltreatment, this study found that child extraversion moderated the relation between mothers’ parenting style and child maltreatment. This was expected especially for mothers who are highly demanding and controlling. These mothers may want their authority to be felt and may not approve of behaviors associated with extraversion. These behaviors include; high energy levels, sociable, forceful, talkativeness and assertiveness (Haslam, 2007). Children who posses these characteristics are likely to question and challenge parental authority that is highly controlling and demanding. This may put them at risk of maltreatment as mothers assert their parental control. Halpenny et al. (2010) found that children in Ireland are more likely to receive corporal punishment from their authoritarian mothers for having hyperactive behavior. Kalat (2013) also noted that parenting style depends on the child. Children with fearful temperament responded well to mild discipline and those with fearless temperament responded poorly to any kind of discipline but better to rewards. Similar to Kalat (2013), this study concluded that mothers may adjust their parenting behavior on the basis of child’s extraversion levels.

Openness, agreeableness, conscientiousness and neuroticism were not moderators of the relation between parenting style and child maltreatment. We did not expect this. The results could be attributed to the fact that parenting behavior is less affected by these personality factors.

**Conclusion**

This study found that apart from high demand and control by parents, high scores on neuroticism and low scores on extraversion were risk factors to child maltreatment. Similarly, extraversion personality factor moderated the relation between mothers’ parenting style and child maltreatment. This implies that generally, mothers who are high demanders and controllers will likely maltreat their children especially if they show highly extraverted behaviors.

**Limitations and Suggestions for Future Studies**

This study focused on children in middle childhood. Therefore, findings cannot be generalized to all children. There is need to conduct a similar study on children in early childhood and adolescence. This study used a cross-sectional survey design and adopted a correlational analytic strategy which could not establish causal relationships between parenting style, child personality factors and child maltreatment. Despite this limitation, the study shed light on possible explanatory factor in the relation between parenting style and child maltreatment. Future studies should use longitudinal designs to determine the causal effect of parenting style and child maltreatment and the possible moderating role of child personality factors.

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Declaration of interest statement  

The authors declare no conflict of interest

References


