THE NEXUS BETWEEN RECIPROCAL INTERACTIONS IN THE FAMILY AND SEX-ROLE SELF-CONCEPT AMONG SECONDARY SCHOOL STUDENTS IN KENYA

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#### Abstract

The study investigated the influence of reciprocal interactions in the family on sex-role self-concept among secondary school students in Siaya district. Stratified random sampling and purposive sampling techniques were used to select the study participants. The sample comprised a total of 243 students ( 154 boys and 89 girls) drawn from 27 public coeducational secondary schools in the district. Linear regression analysis and one way Analysis of Variance revealed significant relationship between reciprocal interactions in the family and sex-role self-concept of students. Student from families with healthy, average healthy, and unhealthy reciprocal interactions masculinity and femininity scores were significantly different. Parents' sex-role orientation, sex of the child, autonomy granting, time parents spent with children, sibling sex constellation, students' birth order strongly correlated with students' sex-role self-concept.


KEYWORDS: Reciprocal Interactions, Family, Sex-role Self-concept

## INTRODUCTION

The information that surround the child and which is internalized originates within the family through parent-child interactions, role modeling, and reinforcement for desired behaviours and approval or disapproval of the desired and undesired behaviour (Santrock, 1994). As children develop, these stereotypes become firmly entrenched and forms part of the child's self-concept and his or her first exposure to what it means to be male or female comes from parents (Bush \& Peterson, 2012; Kaplan, 1991). The process of gender socialization begins with the process of infant being labeled either male or female. The identification of the sex is often imagined normal and unproblematic event, yet this is the genesis of gender socialization

## LITERATURE REVIEW

The indoctrination into different socially based gender role behaviour in the family begins early in life for males and females with parents dressing infants in gender specific colours, giving gender differentiated toys and expecting different behaviours from them (Goldenberg \& Goldenberg, 2008; Thorne, 1993). The parental choice of gender-typed clothing, playing and activities is internalized by the children as the acceptable standard of behaviour in the family (Maccoby \& Jackline, 1980). Children live to parental expectations and between 3 and 5 years, many boys show preference for cars, trucks, balls, blocks, and riding toys while girls often prefer domestic based toys, dress-ups, and artistic activities (Globe, Martin, Hanish, \& Farbes, 2012). In a study of 98 Jewish boys and girls (Karnoil, 2011) the young children displayed rigidity on colours and images perceived to be appropriate for each gender.

Parents reveal strong gendered-beliefs about their newborns even when there are no objective differences in size or activity (Cook, 1985). Parents of newborn girls rate them as fine featured, weaker, soft, smaller and fragile than parents of newborn boys who view their sons as stronger, more coordinated, and alert (Bernes, 2004; Karraker, Vogel, \& Lake, 1995). Ganog and Coleman (1987) study indicated that the sex of the child, especially sons, appeared to have an effect on parents' femininity. Fathers with sons had lower femininity scores than fathers with daughters only, and mothers with sons had higher femininity scores than most mothers with daughters.

Whenever appropriate occasions arise, parents and others including siblings instruct children in the kinds of behaviour expected for girls and boys and provide evaluative feedback when it is performed (Murry, Mayberry, \& Berkel, 2012). Mothers respond more negatively when their children engage in gender atypical activities (Leaper, Leve, Strasser, \& Schwartz, 1995). Contrary to the observation, Kane (2006) study to explore parents' response to their children's gender nonconformity indicated that fathers were more likely to support clearly defined gender roles for boys and girls than were mother and more conscious of maintaining strict gender boundaries for sons than for daughters. However, both mothers and fathers were more comfortable with gender nonconformity among daughters. Consistent with the study results Feinman (1992) argues that parents approve their children engagement in gender typical activities, but they are likely to show and voice disapproval when their children take up gender atypical activities. The affective reactions, depending on their nature, create positive and negative orientations to gender linked objects and activities (Fagot \& Lienbach, 1991).

Parents' and their adolescent children's expectations change over time as they anticipate more independence in decision making. Competent forms of autonomy for most adolescents develop with continuing bonds of relationships, connectedness, harmony and moderate conflicts with parents (Silverberg, 1996; Steinberg, 1990). The relevance of personal space provided to the adolescents has been emphasized in Wendell and Denver (2003) empirical study which observed that spatial distance between the parents and older adolescents was greater than the spatial distance between the parents and younger adolescents.Fathers encourage their sons to foster independence, competitiveness, and aggression while they encourage their daughters to be more gentle and expressive in their emotions (Bernes, 2004). The boys are given more opportunities to develop autonomous problem solving skills while girls are closely supervised and controlled in their experiences making them more affiliative. Concern about girls' sexual vulnerability may cause parents to monitor their behaviour more closely and ensure that they have been chaperoned (Murry et., al, 2012; Santrock, 2005). Parents believe that girls do not have qualities of independence, initiative and assertiveness (Maccoby, 1994; Orotho, 1990). The outcome of the children behaviour elicit parental response to treat the girls as vulnerable and boys as independent.

Parents are motivated to raise children who are well liked and socially acceptable (Ruddick, 1982), and socializing children to conform to display rules is one way to maximize the likelihood of reaching this goal. Parents accept the expression of sadness and fear for their daughters while expressions of fear, depression, sadness, shame and embarrassment are considered unmanly (Brody, 2004) Displays of aggressions are more accepted on boys while emotions that facilitate social relationships such as warmth, support, and cheerfulness are considered appropriate for girls (Kingsbury \& Caplan, 2012; Wallace, 2007; Fischer, 2000). Parents reinforce the display rules with mothers talking more about emotions and relationships with their daughters than with sons ((Maximo, et al., 2011; Wood, 2007).

Parental attitudes toward their children have a strong influence on their developing sense of self and self-esteem with parental warmth and support being key factors. Parents who espouse an egalitarian attitude regarding gender roles are more likely to foster androgynous attitude in their children (Weisner, 1990). The androgynous parents are found to be highly encouraging regarding achievement and development of a sense of self-worth in children (Sedney, 1987). The motivation provided by the androgynous parents initiates, energizes and sustains the children's feeling of self-worth.

Beaty (1995) studied 40 ethnically diverse, middle-school boys from father absent and father present homes. The researcher hypothesized that boys with father deprivation prior to age five would be more dysfunction with respect to self-concept development in adolescence. Father absent boys scored significantly lower on sociometric measures for perceived masculinity and peer group adjustment. Kurdek \& Siesky (1980) found that boys in mother-only homes are less masculine in their sex-role self-concept than boys from intact homes, however, nonmasculinity was found not to be equated with a trend towards femininity, but with a trend towards androgyny. Peters (1995) noted that Children from mother-only families spend more time on house chores while boys from two parent families are more likely to share the various household duties with the girls in the family.

A strong marital relationship provides harmonious and secure home environment (Kitzmann, 2000) and strengthens the parenting style and co-parenting ties (Gordis et. al, 2001) which is a necessity for successful child adjustment. Kitzmann (2000) study found correlation between couple negativity with family negativity regardless of the topic of discussion which s. uggests continuity in the affective quality of the two family systems. Marital schism is a disharmonious situation in which the parents undermine each other and compete for loyalty, affection, sympathy and support of the children (Herbert \& Irene, 2008). Exposure to inter-adult anger is associated with distressed, angry,and physically aggressive reactions in children (Lyod, 2012; Cummings, 1987). In marital skew the parent who is dependent and weak accepts the situation and goes so far as to imply to the children that the home situation is normal (Jaques, 1995). A skewed family usually has a father who cannot challenge the mother's child rearing practices or provide an adequate male role model. The children in such families may develop undifferentiated or feminine sex role concept. Children from pseudo mutual family setting fails to develop a strong sense of personal identity since the predominant family theme is fitting together even at the expense of developing separate identities (Herbert \& Irene, 2008).

The sex of a child may have a bearing on marital stability or disruption. Morgan, Lye, and Condran (1988) found that sons reduce the risk of marital disruption by 9 percent more than daughters. The authors surmise that sons create stronger sense of attachment and obligation in fathers that keep them in marriages. Mizell and Steelman (2000) reports higher levels of marital satisfaction in marriages with sons than daughters and the children in such families develop androgynous and masculine sex-role self-concepts.

Distinct role asymmetries between older and younger siblings have been detected while same sex siblings played broad games together and during self-selected activities (Galambos, 2004). Older siblings tend to assume teacher and manager roles, while younger siblings assume less dominant learner-managee roles. In general, female sibling pair plays together more than males (McHale, Updegraff, \& Whiteman (2012). Among the same sex siblings, older girls assume the teacher role more than boys leading to feminine sex-role orientation. A study of adolescent siblings' interactions over a period of two years revealed that siblings become more similar to their older siblings in terms of gender role and leisure activity (McHale, Barto, Crouter \&

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Whitemann, 2003). Children in same sex sibling pairs should be the most stereotypically sextyped, while children from cross-sex sibling pair are more androgynous. Brody (2004) argue that in the relationship between two siblings, there is assimilation of roles in which elements of the role of the child are incorporated into the role structure of the other. Girls with brothers have more masculine traits but not fewer feminine traits (Marjoribank, 1997). Girls' acquisition of masculine traits when they have brothers adds to their overall behavioural repertoire, diluting but not displacing more feminine characteristics. Boys with sisters, however, seemed to have feminine traits replacing masculine ones.

There is likely to be gender differences in aggressive behaviour, boys are more physically aggressive in sibling relationships than girls, but girls can be aggressive in verbal ways (McDonald, 2009). Having a nurturing elder sister protects younger children from becoming aggressive but having an overly aggressive older brother has opposite effect. According to Deviancy Training Theory, negative exchanges between siblings provide opportunities for them to learn aggression (McDonald, 2009). However, the commonalities like genes and parents make it difficult to tease apart the influence of one factor over another.

In a study investigating verbal aggression in sibling relationships, Martin, Anderson, Burrant and Weber (2009) found negative correlation between verbal aggression and satisfaction trust. Teasing was found to be positively correlated to being verbally aggressive while sibling satisfaction was negatively associated to being hurt from receiving verbally aggressive messages. Women were more satisfied and reported using verbal aggression and teasing than the other siblings. Relational aggression is quite subtle but detrimental to developing selfconcepts of the siblings with those often ridiculed showing low self-esteem (Caspi, 2012).

Sibling gender constellation is associated with differences in activity choices (Stoneman, Brody, \& Mackinnon, 1986). Younger girls with older brothers and younger boys with older sisters are more gender stereotyped. Boys with sisters score higher on expressiveness than boys with brothers, and girls with brothers score higher on competitiveness and assertiveness (Sulloway, 1996). Boys with only brothers are more violent than boys with sisters (Strauss, Gelles, \& Steinmetz, 1980). Rivalry Defense Hypothesis predicts that same-sex siblings deidentify more than opposite-sex siblings, because of the heightened rivalry that accompanies the closeness in desires and interests that occur for children of the same gender (Scatchter 1992). The same-sex siblings tend to develop dissimilar interests and characteristics in order to decrease rivalry, competition and unfavourable social comparison. However, Samalin (1996) believes that rivalry fulfills a valuable role by allowing siblings to test limits, to assert themselves and to learn how to negotiate their wants and needs within the confines of their home.

A child's birth order in the family affects him or her, the siblings, parents, and the interactions among all family members. First born children are generally more adult-oriented, helpful, and self-controlled than their siblings (Zajonc \& Mullay, 1997). Older siblings in larger families are often assigned supervisory and disciplinary roles than in smaller families and girls are more likely than boys to fulfill such roles. The eldest child is often expected to assume some responsibility for the younger sibling and may function as a tutor, manager, and supervisors of his or her younger siblings' behaviours during social interactions (Hetherington, 1999). They may also act as gatekeepers who extend or limit siblings' opportunities to interact with other children outside the family. First born children are generally more conscientious than later borns, a difference that is exemplified by being responsible, ambitious, organized, and academically successful (Sulloway, 2007). Later borns emerge agreeable than first borns in
terms of being more tender-minded, accommodating and altruistic. They appear to be open to experience in domains of nonconformity, nonconventionality while first borns appear to be open in ways that reflect intellectuality (McHale, et., al, 2001). First borns are likely to be neurotic concerning temperaments and anxiety about their status while later borns are more extraverted in the sense of fun-loving and sociability.

First borns are bigger than their siblings and more likely to employ intimidation and physical aggression, and more inclined to boss and dominate others. Later borns tend to use low-power strategies, such as whining, pleading, social intelligence, reciprocal altruism and whenever expedient, appealing to parents for help (Sulloway, 2007). Middle children often respond to their Darwinian handicap by becoming peer oriented and independent of the family compared to last borns and first borns (Hertwig, Davis, \& Sulloway, 2001). They are less attached to their families, moderately attached to their parents, less likely to turn to their parents for help in case of emergency, and rarely report having been loved during childhood (Salmon, 1999). Only children experience no sibling rivalry, are not driven to occupy a specific family niche and like other first borns, they are generally achievement oriented, and conform to parental authority because these attributes are esteemed by parents.

The literature reviewed revealed that while biology undoubtedly plays a determining role in gender differences, most of the differences result from learning that is reinforced by the society and actualized by the family. Members of each sex develop distinct behavioural expectations and are granted disparate opportunities and privileges. Men and women grow up with different senses of entitlement, exercising different degrees of power and differing life experiences. Gender shapes individual identity and expectations, role status, real and perceived life choices.

## METHOD

## Sample

The study employed survey research design to investigate the influence of reciprocal interactions in the family on sex-role self-concept among secondary school students in Form 3. The independent variable was reciprocal interactions while dependent variable was sex-role self-concept. The study recruited 154 boys and 89 girls from 27 secondary schools in Siaya district. The sample size was determined using Raosoft (2004) sample size calculator $\mathrm{p}<.05$ and a representative sample of 243 students was attained.

## Measures

In this study, students' questionnaire and interview schedule for parents were used to collect data. The questionnaire was divided into four sections, ABC and D. Section A contained items that generated information on parent-child interactions, section $B$ generated information on parent-parent-child interactions, C sibling interaction, and D sex-role self-concept. The items were designed to assess the perception of students regarding the interactions within the family subsystems. The questionnaire considered factors such as parenting styles, family conflict, sibling birth order and support from family members. The items in the questionnaire were scored using a five point Likert scale. In the questionnaire, strongly agreed (SA), Agreed (A), Undecided (U), Disagree (D), and Strongly Disagree (SD) were scored as 5, 4, 3, 2, and 1 where the statement is positive: $1,2,3,4$, and 5 in negative statements. Reciprocal interactions were categorized as healthy, average healthy, and unhealthy. Students whose mean scores were
one standard deviation below the sample mean were considered to have unhealthy reciprocal interactions in their families while those whose scores were one standard deviation above the sample mean were considered to have healthy interactions in their families

Bem's Sex-role Inventory was used to assess students' sex-role self-concept. The students were classified as having masculine, feminine, androgynous and undifferentiated sex-role selfconcepts. The highest score that a student could obtain in masculine and feminine sex-role selfconcept was 100 , while the lowest was 10 . The sample mean for the students' score on masculinity was 33.58 while the sample mean for students' score on femininity was 33.56. Students who were less feminine and less masculine were considered as having undifferentiated sex-role self-concept while those who were neutral on femininity or masculinity were considered androgynous. Semi-structured interview schedule was used to collect data from 20 parents. The responses on the interview schedules were tape recorded consequently eliminating omissions of information. Tape recording made it possible to establish reliability, speed up data collection and limit interruptions in communication. To capture the non-verbal cues, the researcher observed the reaction of the parents during the interview.

## RESULTS

The null hypothesis 'there is no significant relationship between reciprocal interactions in the family and sex-role self-concepts of students' was tested by correlating students' scores on reciprocal interactions and scores on masculinity and femininity. The results of the data analysis between reciprocal interactions in the family and students' masculinity scores indicated that the type of reciprocal interactions in the family significantly predicted the students' score on masculinity, $\boldsymbol{\beta}=.91, \mathbf{t}(241)=34.5 \mathbf{p}<.05$. Reciprocal interactions in the family also explained a significant proportion of variance in masculinity scores, $\mathbf{R}^{2}=.83, \mathbf{F}$ (1, $241)=1190.26 \mathbf{p}<.05$. The mean scores on masculinity of students from families with healthy, average healthy, and unhealthy reciprocal interactions were compared using One Way ANOVA. The frequencies and means of their responses are presented on Table 4.1.1 and Table 4.1.2. The results of the analysis showed that there was significant difference in the students masculinity among the three types of reciprocal interactions in the family, $\mathbf{F}(2,240)=207.44$, $\mathbf{p}<.05$. It was concluded that reciprocal interactions in the family affects masculinity of students in Siaya district. Students from families with healthy reciprocal interactions had the highest mean score in masculinity.

Table 1 Frequencies of Students on Sex-role Self-concepts

| Reciprocal <br> Interaction | Androgynous | Masculine | Feminine | Undifferentiated |
| :--- | :---: | :---: | :---: | :---: |
| Unhealthy | 3 | 5 | 34 | 76 |
| Average | 1 | 8 | 6 | 1 |
| Healthy | 73 | 28 | 8 | 0 |
| Total | 77 | 41 | 48 | 77 |

The mean scores on femininity of students from families with healthy, average healthy, and unhealthy reciprocal interactions were compared using One Way ANOVA. The frequencies and means of their responses are presented in Table 4.3.1 and 4.3.2. The results of the analysis showed that there was statistically significant difference in the students femininity scores in the three reciprocal interactions in the family, $\mathbf{F}(2,240)=30.25, \mathbf{p}<.05$. It was concluded that reciprocal interactions in the family affects femininity of students in Siaya district. Most students from families with healthy reciprocal interactions had the highest mean score in femininity enabling them to be androgynous. The bivariate linear regression of reciprocal interactions in the family and sex-role self-concept indicated that reciprocal interactions significantly predicted the scores of students on femininity, $\boldsymbol{\beta}=.66, \mathbf{t}(241)=13.7, \mathbf{p}<.05$. Reciprocal interactions in the family also explained a significant proportion of variance in femininity scores, $\mathbf{R}^{\mathbf{2}}=.44, \mathbf{F}(1,241)=187.56, \mathbf{p}<.05$.

Table 2 Means of Students' Scores on Masculinity and Femininity

| Reciprocal <br> Interactions | Mean <br> Masculine | Standard <br> Deviation | Mean <br> Feminine | Standard <br> Deviation |
| :--- | :---: | :---: | :---: | :---: |
| Healthy | 40.11 | 4.22 | 34.69 | 4.58 |
| Average | 33.5 | 2.88 | 33.25 | 4.2 |
|  |  |  |  |  |
| Unhealthy | 27.54 | 5.17 | 31.55 | 4.31 |
| Total | 33.58 | 7.65 | 33.56 | 4.56 |

## DISCUSSION

The study investigated the nexus between reciprocal interactions in the family and sex-role self-concept. Reciprocal interactions in the family significantly predicted sex-role selfconcepts of students with most androgynous students perceiving healthy interactions in their families and most feminine and undifferentiated students indicating unhealthy interactions in their families. The result implies the importance of interactions in the family system in shaping children behaviour and beliefs consistent with the sex-roles. The findings are in line with the Social Learning Theory, which explains that a child's gender identity is learnt in a reciprocal influence between the child and the significant others such as parents and older sibling who provide the models (Caspi et al., 1993).

Students who indicated that their parents do not allow them to behave like boys had a higher mean score on femininity than masculinity while those who indicated that their parents openly criticize behaviours that are girl type scored higher on masculinity than femininity. The implication is that parents' sex-role orientation influences sex-role self-concept of children. The results replicate studies that show positive relationship between parental sex-role attitude and sex-role self-concept of children (Murry, Mayberry, \& Berkel, 2012). Most girls indicated that their parents encourage them to engage in masculine activities. The parents' sex-role orientation towards girls has been more dynamic than for boys perhaps the girls adjust to the modern socio-economic and political demands of gender equity. The observation is consistent with Kane (2006) study which found that both mothers and fathers are comfortable with gender nonconformity among daughters. However, Bem (1993) argued that gender polarization creates two mutually exclusive scripts for being female and male; and problematizes any person
who deviates from the mutually exclusive scripts. The parents are therefore keen to help their children meet societal standards and avoid the negative labels.

Most parents interviewed agreed that the sex of a child has a bearing on children's sex-role self-concepts. The results support Gender Polarization Theory in which girls are expected to be feminine and boys masculine however; there were also inconsistencies in their responses with many parents recognizing that dynamics of life skills require that a child is competent in feminine and masculine roles. During interview, parents agreed that some chores may be too strenuous requiring strength that is rare in girls making them biologically predisposed to femininity. The observation recognizes the importance of biological perspective in determining sex-roles beside socialization process.

The extent to which parents allow their children to exercise their decision making ability, independence, and assertiveness are associated with sex-role self-concept of children. Students who indicated that their parents allow them to make own decision, to be independent, and encourage them to be assertive were masculine and androgynous than feminine and undifferentiated. These children lack decision making skills, are less assertive and value obedience than autonomy. Consistent with the results Grotevant and Cooper (1985) that in families where mutual support and agreement are emphasized but individuality is discouraged, the adolescents tend to score low on measures of identity exploration while in families that encourage self-assertion, permit disagreement, are responsive, and respect others' views they tend to score high on identity exploration.

According to Standard Family Perspective, dysfunctional two-parent families are less than optimal settings for children socialization (Amato \& Cheadle, 2008) and therefore exposure to these environments increase the risks of problems for the children. In line with the argument, students who indicated that the parents often have conflicts scored high on aggression confirming parents as models where the aggression in the marital subsystem transcends to the children. However, there is reciprocity in the interactions as assumed by Child Affect Model in which children's behaviour and emotional problems are a cause of discord between parents (Crouter \& Booth, 2003). Marital conflicts affect boys than girls (Block, 1982) however, in the present study, more girls than boys reported marital discord in their families perhaps due to high status accorded to boys among the Luo community.

Most students especially girls reported that they spend more time with their mothers than fathers. The scenario had no relationship with scores on masculinity or femininity of the respondents. It is likely that enculturation as proposed by Bem (1993) could be the explanation with children acknowledging the societal expectation that males engage in chores outside the home and females do house chores. The absence of most fathers as indicated by the students could be explained by marital disharmony in most families owing to the patriarchal status of the Luo community. The results contradict Beaty (1995) observation that father absence in adolescents' lives results to low masculinity scores. The multifactor influence such as the extended family concept that is highly valued among the Luo community may have mediated the influence of father absence. The extended family members sometimes provide the resources that the nuclear family is unable to secure including male role model where uncles can as well be father figures. The children rarely designate uncles as 'uncles' and instead they are equally looked upon and referred to as fathers.

Traditionally males were the breadwinners but women have assumed this role for various reasons; the absence of a father figure, husbands forfeiting their roles, fathers being too afraid
to assume their roles, or fathers being indifferent to their duties (Jodi, 2012). The results explicate the aforementioned since most students (157) indicated that their mothers are the primary breadwinners in the family. Male absence may help a woman to be independent but still his absence may have negative effects on the family life as the children tend to lose male model in the family that negatively influence their sex-role self-concept. The children may turn aggressive and fail to comply with family rules, may feel lack adequate of attention, and forced work in order to contribute to the family income.

Sibling interactions facilitate the development of emotional bonds of love, hostility, and thoughtfulness and have a strong influence on sex-role self-concepts of children. Boys with sisters are competent on expressiveness while boys with only brothers are likely to be more violent than boys with sisters (Sulloway, 1996). This is in line with the study results which indicated that boys with more than one brother scored high in aggressiveness and assertiveness. Possible explanation for the aggression could be sibling competition for the family resources which is likely to be higher when the siblings are of the same sex. Most students who strongly agreed and agreed that their siblings are aggressive scored highly on aggression item in the Bem's Masculinity scale. The results explicate Deviancy Training Theory which proposes that negative exchanges between siblings provide opportunities for them to learn aggression and the training is reciprocal and not unidirectional (McDonald, 2009).

Birth order is a powerful proximate source of sibling strategies used to compete for parental favour. Only children were more masculine, followed by middle born children while first born children had the lowest score on masculinity. On femininity, middle born children had the highest mean score, followed by only children while first born students had the lowest mean score. The results suggest that most first born children in the district have undifferentiated sexrole self-concept while most only children and middle born children are androgynous. Because of limited resources, first borns are likely to be burdened with responsibility of caring for the younger siblings, and contributing to the family economic resources by offering their labour. The parents may have high expectations about the child and set unrealistic standards of behaviour which eventually confuses the first born child and denies him or her chance to develop a sense of identity.

In the present study, students who had three brothers and those without a brother were less masculine while those with one brother and two brothers were more masculine and Students who have three brothers were more feminine while those with more than three brothers were least feminine. The results are mixed; however, they demonstrate that children who have no brother are more feminine while those with brothers are more androgynous or masculine. The study observation implies that sibling sex constellation is a factor that mediates interactions in the family and the resulting sex-role self-concepts of children. Brody (2004) argue that in the relationship between two siblings there is assimilation of roles. The finding of Lamke, et al. (1980) that the number of brothers is related to androgynous sex-role development for females confirms the results of the current study.

Girls who had one sister had the highest scores on femininity while those with no sisters were masculine. The results is consistent with Scatcher (1985) Rivalry Defense hypothesis which predicts that same sex siblings deidentify more than opposite sex siblings, because of the heightened rivalry that accompanies the closeness in desires and interests that occur for children of the same sex. Students who have one sister attempts to develop dissimilar interests and characteristics in order to reduce competition for the family resources while those with no sister have limited female models to look up to for feminine characteristics.

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## LIMITATIONS

The study had some limitations that could suggest alternative explanation of the result. First, the study relied on socialization to explain the differences in sex-role self-concepts without considering biological perspective which is equally critical. For example, girls with Congenital Adrenal Hyperplasia (CAH) tend to be masculinized (Berenbaum \& Synder, 1995). Certain hormones such as testosterone and serotonin have been implicated for aggression and nonaggression respectively. The research focused on adolescents and not younger ages when gender cognitions and behaviours emerge (Zosuls, et al. 2009). The influence of peer process was not emphasized in the current study and it is difficult to discern whether the sex-role selfconcepts are as a result of interactions within the family or other social contexts. Future studies should focus on the interplay of biological and socialization processes, younger children, and include peer influence on sex-role self-concepts of children.

The survey research design simply establishes correlation and not cause-and-effect and the study cannot explicitly conclude that reciprocal interactions in the family cause differences in sex-role self-concepts of students. Future studies should explore the use of different methods such as meta-analysis, experimental, videotaping, and real time observations allows for more micro-analytic examination of the dynamics of behavioural interactions than self-report.

## CONCLUSION

In conclusion interactions in the family are bidirectional and all members in the system have influence on one another. The parents are powerful models but children also impact on the parents' sex-role orientation and attitude. Siblings can influence one another through direct interaction or implicitly by virtue of their impact on the whole family system. The findings underline the value of social dynamics in the family in developing identity of the child. The results can be used to educate parents on bidirectional interactions to enable them appreciate the contribution of each member of the family in shaping the behaviour one another.

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