## Gender Role Identification as a Function of Sex and Grade Level in Some Selected Primary and Secondary Schools in Bahir Dar Town

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#### Abstract

The study was conducted on 80 ( 40 male and 40 female) grade 5, 7, 9 and 11 students from four different schools (20 from each) in Bahir Dar town. Its main purpose was to investigate gender role identification patterns among male and female students at different grade levels in Bahir Dar town. Data was collected from the respondents using a three option rating scale and analyzed using chi-square $\left(X^{2}\right)$ test for homogeneity. The result indicated that girls seem to have better gender role identification pattern than that of boys. In addition, it was found that grade 5 students have better gender role identification pattern followed by grades 7, 9 and 11 students respectively. However, there are still some occupations and activities deemed to be gendered, i.e., left only for males or for females. Thus to enhance on boys stereotypic or traditional gender role identification pattern and maintain girls androgynous gender role conception, programs should be designed at school level targeting boys especially the older ones.


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## Background of the Study

The often-controversial study of the development of gender is a topic that is inherently interesting to parents, students, researchers, and scholars for several reasons. First, one's sex is one of the most salient characteristics that is presented to other people. Second, whether one is a male or a female becomes a significant part of one's overall identity; it is one of the first descriptors people use about them. Third, gender is an important mediator of human experiences and the way in which individuals interact with each other and the physical environment. Individuals' choices of friends, toys, and vocation all are influenced by sex. Finally, the study of sex, gender development, and sex differences becomes the focal point of an age-old controversy that has influenced the field of developmental psychology: the nature-nurture controversy.

When discussing gender-role development, the definitions of the terms "sex" and "gender" need to be understood. Referring to the nature-nurture controversy, scholars have found it important to distinguish those aspects of males and females that can be attributed to biology and those that can be attributed to social influences. The term "sex" denotes the actual physical makeup of individuals that define them as male or female. Sex is determined by genetic makeup, internal reproductive organs, the organization of the brain (such as in the control of hormone production), and external genitalia. By contrast, the behavior of individuals as males or females, the types of roles they assume, and their personality characteristics, may be as much a function of social expectations and interactions as their biological makeup and referred as gender (Noppe, 2009).

Changing gender roles and vast differences in values in today's society have demonstrated the need to study whether there is a difference between gender role identification of students based on their difference in sex and grade level. In order to do this, an understanding of gender role development and theories of gender role development must first be addressed. Over the years, theorists have described characteristics of sex-role identities in
various ways. Each theorist has assigned different trait and behavior labels to masculinity and femininity. For instance, Parson and Bales as cited in Gadzella, Carvalho, and Masten (2008) associated masculinity with an instrumental orientation; that is, concerned with solving problems and femininity with an expressive orientation, i.e., concerned for others and group harmony. Bakan cited in Gadzella, Carvalho, and Masten (2008) described masculinity with an 'agentic' orientation, a concern for oneself as an individual, and femininity with a communal orientation, a concern for ones relationships with others; Erikson (1964) viewed male and female distinctions as anatomical, i.e., an analogue in psychological distinction between masculine fondnesses, for what a man can do, with a feminine ethical commitment, to keeping peace and healing; and Bem as cited in Gadzella, Carvalho and Masten (2008) associated masculinity with independence and femininity with nurturance.

Psychosocial developmental theorists have held contradicting views concerning gender-role identification and its role on the part of men and women healthy adjustment. For example, Spence and Helmreich cited in Gadzella, Carvalho, and Masten (2008) indicated that individuals who identified themselves with their biological sex-role were psychologically healthier and were able to function more effectively than people with other identities. However, Bem as cited in Lips (1997) proposed that individuals with a combination of both masculine and feminine gender-role characteristics (androgynous individuals) would be better prepared to meet the challenges in a diverse environment. Bem's concept of androgynous was based on the assumption that an individual (while performing different activities) could blend modalities from the masculine and feminine, instrumental and expressive, agentic and communal.

Over the past years, researchers have tried to understand why such sexbased stratification is so pervasive. Basic explanations fall in to one of the following three theoretical approaches: the biological, the sociological and psychoanalytic. As stated in Richardson (1988), the biological explanations are based on the idea that social behavior is biologically caused and
genetically based and contended that "Humans are the way they are because of their genetic inheritance." (P. 145). Accordingly, to the biologists, the behaviors of men and women are rooted in the sexual determination that is found in all species and argues that sex inequality and the natural superiority of male are inevitable and necessary for the survival of the species. Further, because of the biogenetic differences between males and females such as males have higher levels of androgens (the "aggressivity" hormone) whereas females have a monthly hormonal cycle, males on average taller and heavier than females; they argue that, a natural division of labor occurs. As a result, males are biologically suitable for hunting and fighting, for providing and protecting, for combat, leadership and executive roles and females biologically suitable to bear and nurture children (Richardson, 1988; Bussey and Bandura, 1999).

In sociological theories, gender is a social construction rather than a biological given. The sources of gender differentiation lie more in social and institutional practices than in fixed properties of the individual. The sociological approach argues that gender differences exists due to (i) the greater power and status accorded to males than to females in most societies and (ii) the division of labor between the sexes that get replicated through sociocultural practices contribute to gender role differences (Lips, 1997; Richardson, 1988; Eagly, 1987 cited in Bussey and Bandura, 1999). According to this approach men's greater control over economic resources, achieved through better jobs with higher salaries and through more continuous participation in the paid labor force, creates the expectation that women will depend on men for support (Lips, 1997).

On the other hand, the psychoanalytic approach suggests that boys and girls develop their genders differently as a result of different kinds of interaction between their own biological natures and figures in their social world, namely their parents or parent figures. This theory depends upon the child being in an environment where differential sex-roles are already well established, traditionally in a nuclear family of feminine mother, masculine father and the child (Ross-Gordon, 1999).

As discussed above, there are inconsistencies and gaps in the existing literature concerning gender role identification, differences in the gender role identification patterns of boys and girls or men and women, the relevance of gender role identification for psychological and social wellbeing, the division of labor by sex among different cultures and at different points in time, etc. In addition, these days' gender issues are one of the most controversial and debating topics among researchers, educators, politicians, policy makers, and program designers as well as the media all over the world. A number of programs are designed and implemented to bring about gender equality and improve the lives of women by both governmental and nongovernmental organizations and private sectors. However, attempts to measure the impacts of these programs from the psychological perspective, i.e., the change in behavior, attitude and perception of the people especially among the younger ones, is rare and if present was done mainly in empowering woman's economical, social and political perspective. This indicates the need to conduct a research in this area is timely.

## Statement of the Problem

Gender-role development is one of the most important areas of human development. In fact, the sex of a newborn sets the agenda for a whole array of developmental experiences that will influence the person throughout his or her life. Throughout our lifetime, the ways that others think of us, and even the ways in which we view ourselves, are based to a large extent on whether we are labeled by society as a woman or a man - our gender (Feldman, 1996). The lives of adults are structured by their various roles as family members and workers. A key idea is that many important social roles are defined differently for the two sexes. Within the family, people often have quite different expectations for mothers and fathers, for husbands and wives, for sons and daughters. If men's and women's gender roles were equivalent, they would have only minor impact up on our lives. However, expectations about men and women differ significantly, which in turn may result in favoritism toward members of one of the sexes (Sprinthall, Sprinthall, and Oja, 1996).

These traditional social roles affect the behavior of males and females in several ways. They perpetuate a division of labor by gender, with women's as homemakers and childcare providers, and men as breadwinners. We may learn from experiences in the family and at work that men have higher status and are more authoritative than women (Sears et al, 1988).

With respect to power, privilege, and status, men have enjoyed advantages relative to women. Women possess less power over their communities and over human affairs than men, earn less money than men, and have more difficulty becoming eminent than men (Vander, 1987). The distributive question of who shall get what, when, and how has for the most part been answered in favor of males: It is males who enjoy top political office, who get the best jobs and who usually escape from menial household work. For example, in 1975, women accounted for 10.9 percent of MPs (members of parliament) worldwide. In 1985, women's representation had increased to an average 12 percent. In 1995, the number of women had actually decreased to 11.6 percent. In 2005, a new global high was reached, as 16.2 percent of the members of lower or single houses of parliament were women, and 14.8 percent in upper houses, bringing an overall total average of 16.0 percent in all parliaments (Inter-Parliamentary Union (IPU), 2006).

These roles, which are learned, e.g., those of parent, housekeeper, provider of basic needs, etc., largely determine the type of work men and women do (International Labor Organization (ILO), 2001) and substantial differences still exist regarding which occupations are deemed appropriate for men and for women, and members of each sex expect greater success when they enter a profession viewed as appropriate for their sex (Eccles, 1987; Bridges, 1988, all cited in Feldman, 1996).

Throughout the world, the presence of women in the world of work is increasing. An increasing proportion of the workforce is female -56 percent of the workforce worldwide is made up of women. Surveys from 2000 show that, despite the increasing number of women in the work force, the perception of the role of women remains clouded by traditional values.

People believe that women must first and foremost work in the home before going out to work (ILO and IPU, 2008).

Women continue to be seen as best suited to traditionally female jobs: secretaries, nurses, bookkeepers, cashiers, and other female - dominated professions that often feature low pay and low status. For example, in the United States, in 1991 women accounted for 99\% of all secretaries, $96 \%$ of all private household workers, and $94 \%$ of all registered nurses (Feldman, 1996). Similarly, in Nordic countries namely Finland, Norway, and Sweden, in 1990 women accounted for $99.9 \%$ of housekeepers in private services and childcare in the home; 99.1\% of home helps (municipal); 97.1\% of nurses; $96.8 \%$ of secretaries, typists and stenographers; $96.5 \%$ of directors and nursing staff at child day-care centers and nursery schools (Melkas and Anker, 1997). Concluding from such fact, Melkas and Anker (1997) said that "This stereotyping in the labor market is consistent with gender stereotypes in society at large and with the types of abilities and characteristics that are typically attributed to women" (p. 205). Such sex typed occupations places women's in occupations associated with caring (e.g. nurse, housekeeper and childcare, and teacher), manual dexterity (e.g. secretary), and typical household-related work which parallel the traditional gender role standard under which house wives "serve" their husbands.

By contrast, women are underrepresented in occupations historically defined as "men's jobs," which often carry much greater financial rewards and prestige than women's jobs do. For example, in the United States, in 1992 women's accounted only $9 \%$ of all engineers, $9 \%$ of all dentists, $20 \%$ of all physicians, and 21\% of all lawyers and judges (Schaefer and Lamm, 1995) Similarly, in Nordic countries, in 1990 women accounted for $10 \%$ of engineers, $24 \%$ of doctors/physicians, $30 \%$ of university teachers, $22.5 \%$ of chemists and physicists (Melkas and Anker, 1997). In addition to this one survey conducted by Glick, Nelson and Zion as cited in Feldman(1996) found that when women in their first year of college were asked to name the probable career choice, they were much less likely than men to choose
careers that have been traditionally male dominated, such as engineering or computer programming.

Anthropologist Murdock as cited in Vander (1987) analyzed the division of labor by sex in some 224 societies and found considerable differences in the types of activities assigned to each sex. He found that women are highly represented in feminine activities such as cooking and cleaning where as men represented in masculine activities such as hunting and fishing.

The application of such traditional gender roles leads to many forms of differentiation between women and men. Both sexes are physically capable of learning to cook and type, yet most societies determine that these tasks should be performed by women. Both women and men are capable of learning to weld and fly airplanes, but these functions are generally assigned to males (Schaefer and Lamm, 1995).

Hence, keeping all this in mind, the investigator of this study tried to study the gender role identification patterns of students as a function of sex and education. To this end, the following questions were raised.

1. Is there a significant difference between male and female students gender role identification?
2. Is there a significant difference between students of different grade levels on their gender role identification?
3. Are there gendered occupations and activities?

## Purpose of the Study

The main purpose of this study was to investigate gender role identification pattern of students at different schools in Bahir Dar town. Specifically it intends to:

- investigate whether there exists a difference in the gender role identification patterns of male and female students;
- investigate whether there exists a difference in the gender role identification patterns of students of different grade levels; and
- assess whether there are gendered occupations and activities.


## Significance of the Study

In general, the investigator of this study hopes that the results of the study will provide valuable information to researchers, teacher educators and curriculum experts, teachers and students, parents and communities, and help them in a variety of ways. The study, thus, will have a multidimensional significance.
i. Researchers (especially local) will be aware of gender role identification pattern in the local context and they may use it as a base for further research.
ii. Teacher educators would be able to make teacher education and inservice training programs gender sensitive and promote gender equality.
iii. Curriculum experts would be able to reform curricula to ensure attention to gender equality and fully incorporate gender perspectives.
iv. Teachers would also be able to provide equal opportunities for both sexes and ensure that the school environment is conducive to gender equality.
v. Parents and communities would be able to model non-stereotyped gender roles in their parenting styles and address gender inequalities.
vi. Students would be able to adopt non-stereotyped gender roles and become androgynous individuals.

## Scope of the Study

The main concern of this study was assessing gender role identification pattern of some selected primary and secondary school students in Bahir Dar town. Gender role identification can be studied from different angles and taking different perspectives. For example, Bem studied using personality
characteristics and traits and she developed the Bem's Sex Role Inventory (BSRI). However, in this study, a self-report questionnaire that requires respondents to rate the list of occupations and activities are male, female or both sex occupations and activities was used to measure gender role identification pattern. The study was done in Bahir Dar town (because it is the hometown of the researcher), but it might be good if it includes rural respondents too.

## Limitations of the Study

Since the sample was taken from four distinct schools in Bahir Dar town, school specific characteristics (the nature of the school) may affect the result of the study. In addition to this, since the sample size taken from each school is too small as compared to the general population, the findings may not be generalized to the large student population.

## Operational Definition of Terms

Sex - refers to the biological characteristics that categorize someone as either female or male.

Gender - refers to the societal integration of the codes of activity, dress, social relations, and societal status prescribed for individuals on the basis of their presumed sex.

Gender Role - refers to the set of social and behavioral norms that are considered to be socially appropriate for individuals of a specific sex in the context of a specific culture, which differ widely between cultures and over time.

Gender Role Identification (GRI) - refers to the mapping of objects, activities, roles, and traits onto biological sex such that they follow prescriptive cultural stereotypes of gender.

Note: In this study, GRI was measured by individual's perceptions of occupations and activities as male, female, or both sex occupation and activity. As a result, individuals GRI can be either egalitarian or traditional, i.e., an individual was said to have good/better GRI when s/he had an egalitarian or androgynous gender role conception and poor GRI when s/he had traditional form of gender role conception. If an individual, respond to the list of occupations such as secretary and nurse and activities such as cooking and cleaning (traditionally feminine occupations and activities) as female occupations and activities, then s/he is said to have a traditional GRI. Similarly, if an individual respond to the list of occupations such engineer and manager and activities such as hunting and operating machinery (traditionally masculine occupations and activities) as male occupations and activities, then s/he is said to have a traditional GRI. On the other hand, if an individual responds to the list of occupations and activities mentioned above and others as both sex occupations and activities, then s/he is said to have androgynous or egalitarian GRI.

## Review of Literature

## Theoretical Perspectives

Over the years several major theories have been proposed to explain gender development. The theories differ on several important dimensions. The first dimension concerned on the relative emphasis placed on psychological, biological, and socio-cultural determinants, the second on the nature of the transmission models, and the third on the temporal scope of the theoretical analyses. In the following sections, the cognitive developmental, the social cognitive, the gender schema and the sociological perspectives on gender role development are briefly reviewed.

## Cognitive Developmental Theory

According to cognitive developmental theory, gender identity is postulated as the basic organizer and regulator of children's gender learning (Kohlberg,

1966 cited in Bussey and Bandura, 1999). Children develop the stereotypic conceptions of gender from what they see and hear around them. Kohlberg (1966) as cited in Martin, Ruble and Szkrybalo (2002) emphasized the importance of children's growing understanding of gender categories and their permanent placement into one of them.

Cognitive developmental theory proposes that gender, like other concepts, cannot be learned until a child reaches a particular stage of intellectual development. As cited in Lips (1997), Slabey and Frey (1975) said that gender development proceed through three stages: an awareness that two sexes exist (identity), followed by an understanding that gender does not change over time (stability), followed in turn by an awareness that gender remains unchanged across situations and behaviors (constancy). Gender identity requires the simple ability to label oneself as a boy or girl and others as a boy, girl, man, or woman. Gender stability is the recognition that gender remains constant over time. Children are not expected to adopt gendertyped behaviors consistently until after they regard themselves unalterably as a boy or a girl, which usually is not achieved until about six years of age. According to the cognitive developmental approach, once the child has categorized herself or himself with some certainty as female or male, she or he will use this self-categorization as an organizing focus for attaching value for behaviors. The child will attach higher value to gender appropriate behaviors, and thus will find the performance of gender appropriate behaviors more reinforcing than gender inappropriate behaviors (Lips, 1997).

Although Kohlberg's theory attracted much attention over the decades, its main tenets have not fared well empirically. Studies generally have failed to support the link between children's attainment of gender constancy and their gender-linked conduct (Huston, 1983 cited in Bussey and Bandura, 1999). Moreover, growing awareness of gender constancy does not increase children's preferences for same-gender roles and activities (Marcus and Overton, 1978; Smetana and Letourneau, 1984).

## Social Cognitive Theory

Social cognitive theory is a development of the social learning theory developed by Albert Bandura. As a derivative of the social learning theory, it asserts that the child develops both gender identity and gender role through a learning process that involves modeling, imitation and reinforcement (Bussey and Bandura, 1999). Lips (1997) stated, "Children learn which behaviors are gender role appropriate by observing and imitating adult and peer models, as well as through trial and error in their own behavior." (p. 59). The theory suggests that parents and other socializing agents map out gender roles for the child, and then the child is differentially reinforced for following the appropriate one (Bussey and Bandura, 1999). According to this viewpoint, parental models, particularly the same-sex parent, are the most effective in influencing the child's behavior. Social learning theory rests on the assumption that boys learn to be masculine and girls to be feminine because gender-role-appropriate behavior is rewarded while gender-roleinappropriate behavior is punished or ignored.

Social learning theory underwent modifications over time to incorporate a view of the child as an active participant in the social process and implies that cognitive abilities are important in this process and termed differently as social cognitive theory (Lips, 1997). Social cognitive theory suggests that although children may initially learn gender roles through external rewards and punishments, as they mature they begin to regulate their own actions through internal rewards and punishment. According to Bussey and Bandura (1992) as cited in Lips (1997), children learn at very young age to discriminate between conduct that is appropriate for girls and for boys, and then begin to evaluate and self-regulate their own behavior based on this knowledge. Furthermore, according to this theory, the external approval and disapproval that children use to shape their personal internal standards of behavior do not come just from parents or other specific important adults, but from peers.

There are many evidences that indicate social learning theory is insufficient to explain the development of gender roles and gender identity. In the first place, direct reinforcement does not play as such strong part because, first, young children are apparently resistant to reinforcement from certain sources, and second, parents do not treat their male and female children differently enough to account for gender - role differences (Lytton and Romney, 1991; Maccoby and Jacklin, 1974, cited in Lips (1997)). Third, a review of more than 20 studies, by Maccoby and Jacklin's (1974) cited in Bussey and Bandura (1999) indicated that same-sex modeling is unlikely to account for sex differences in behavior.

## Gender Schema Theory

According to this theory, the ability of children to label themselves and others as males or females is considered necessary for gender schema development to begin (Martin and Halverson, 1981; cited in Martin, Ruble and Szkrybalo, 2002). Once the gender schema is formed, it expands to include knowledge of activities and interests, personality and social attributes, and scripts about gender-linked activities (Martin and Halverson, 1981 cited in Bussey and Bandura, 1999). The motivating force guiding children's gender-linked conduct, as in cognitive developmental theory, relies on gender-label matching in which children want to be like others of their own sex.

According to Bussey and Bandura (1999) and Martin, Ruble and Szkrybalo (2002), gender schema theory has the following three core tenets. First, cognitions about gender are central to gender development. Specifically, children form gender schemas that influence information processing and behavior. Second, the theory assumes that the child plays a very active role in his or her own gender development. Children's active role is obvious in their constructive information processing as well as in their motivation to adhere to gender-related behaviors. Third, schema theories emphasize the active guidance of schemas through two major mediating processes linking gender schemas to behaviors. One is through schema-directed memory.

Young children attend to and remember more script-like information about same-sex, self-relevant activities and thus know more about how to perform behaviors consistent with gender norms (Ruble and Stangor, 1986 cited in Martin, Ruble and Szkrybalo (2002)). Second children are motivated to behave in accordance with gender norms as a means of defining themselves and attaining cognitive consistency.

Gender schema theory has its own weaknesses. First, gender schemas are elusive constructs difficult to define and measure (Bussey and Bandura, 1999). Second, it neither devotes much attention to the mechanisms by which gender-linked conceptions are acquired and translated to genderlinked conduct nor specifies the motivational mechanism for acting in accordance with a conception (Martin, Ruble and Szkrybalo, 2002). Third, as cited in Bussey and Bandura (1999), knowledge of gender stereotypes is unrelated to gender-linked conduct and does not necessarily mean that one strives to behave in accordance with it.

## Sociological Theories

According to sociological theory, many gender differences in social behavior are viewed as products of division of labor between the sexes that get replicated through sociocultural practices governed by disparate gender status and power (Lips, 1997; Richardson, 1988; Eagly, 1987 all cited in Bussey and Bandura, 1999). The exaggeration of the nature and extent of gender differences, theorists argue promotes the social ordering of gender relations and serves to justify gender inequality, occupational stratification and segregation, and the situating of women in positions of predominately lower status. Viewed from this sociological perspective, the pattern of opportunity structures and formal and informal constraints shape gendered styles of behavior and channel men and women into different life paths (Bussey and Bandura, 1999).

## Impact of Educational Practices on Gender Development

The school functions as another primary setting for developing gender orientations. As cited in Bussey and Bandura (1999) and Department of Economic and Social Affairs of the United Nations (DESA-UN) (2008), teachers' attitudes and practices in the classroom may condone or reinforce gender inequality, both explicitly and implicitly, in several ways.

1. Teachers criticize children for engaging in play activities considered inappropriate for their gender.
2. Teachers pay more attention to boys than girls and interact with them more extensively.
3. Boys receive more praise as well as criticism from teachers than girls. Boys are more likely to be praised for academic success and criticized for misbehavior, whereas girls tend to be praised for tidiness and compliance and criticized for academic failure.
4. Teachers often convey, in many subtle ways, that they expect less of girls academically.
5. Teachers are inclined to attribute scholastic failures to social and motivational problems in boys but to deficiencies of ability in girls.
6. Girl students experience fewer academic opportunities and less support and have fewer female academic models and mentors

These differential patterns of social sanctions, which can enhance the perceived self-efficacy of boys but undermine that of girls, continue throughout the school years. School is the place where children expand their knowledge and competencies and form their sense of intellectual efficacy essential for participating effectively in the larger society. The selfbeliefs and competencies acquired during this formative period carry especially heavy weight because they shape the course of career choices and development. Stereotypic gender occupational orientations are very much in evidence and closely linked to the structure of efficacy beliefs (Bussey and Bandura, 1999).

## Intervention Strategies

Formal educational systems, structures and processes as discussed earlier can reinforce discrimination but they can also be powerful forums for promoting gender equality and a setting where gender equality is promoted through encouraging discussion of gender equality issues and establishing a culture and climate of mutual respect.

As cited in DESA-UN (2008), Connel suggests that to ensure that the school environment is conducive to gender equality, all aspects of school functioning should be reviewed and reassessed from a gender perspective, using a "whole school" approach. To address gender inequalities in schools, efforts should be made to reform curricula to ensure attention to gender equality and fully incorporate gender perspectives. Reversing gender segregation in the education system and damaging stereotypes requires the redesign of curricula and institutions, as well as encouragement to girls and boys to enter non-segregated and non-traditional areas of learning.

Research has highlighted the importance of starting gender equality work with boys from a young age to facilitate the early development of positive perceptions about gender relations (UNESCO, 2006 cited in DESA-UN (2008)). Spaces and opportunities must be provided for boys to talk about gender/gender equality in their lives in order to help them to question supposed natural or essential differences between girls and boys and enlist them in work to promote gender justice (Mills and Keddie, 2007; cited in DESA-UN (2008)).

## Research Methodology

## Population of the Study, Sample and Sampling Design

The population of this study was primary and secondary school students of Atse Sertse Dingle and Yekatit 23 Primary Schools, Fasilo secondary and Bahir Dar preparatory school students in Bahir Dar town.

Both probability and non-probability sampling designs were used at different stages of the sampling procedure. First, one section was randomly selected from grade 5, 7, 9, and grade 11 from the above-mentioned schools using a lottery system. The grade levels $5,7,9$, and 11 were selected purposively considering the following criteria. One, the two years gap in each grade level help to see maturational differences as a result of more years of education than taking continuous grade levels, for example, grades 5 and 6, the difference among students will be higher if we take grades 5 and 7 . In addition, from my experience, since students at grade 8, 10 and 12 are preparing themselves for their regional/national examination; they are not usually willing to fill questionnaires. Following this, 10 male and 10 female students were taken from each of the four selected sections using convenience-sampling design (based on their willingness to fill the questionnaire and participate in the study). Thus, using these procedure 80 students, 40 male and 40 female ( 10 male and 10 female a total of 20 students from each grade level) were taken as the sample of the study.

## Data Collection Instrument

Data were collected from respondents using a questionnaire. The questionnaire consists of a three - option-rating scale and background information about the respondents, such as sex and grade level. The scale was composed of 40 items a list of twenty occupations and twenty activities. Examples of occupations include engineer, manager, nurse, secretary, etc.; whereas activities include cooking, operating machinery, hunting, cleaning, etc. The scale was developed based on Murdock's (cited in Vander, 1987) division of labor by sex scale by selecting twenty activities that were found to be appropriate to the local context and by including twenty occupations. The
scale was pilot tested to determine the relevance and appropriateness (content validity) of the instrument. Based on the responses obtained during the pilot administration and feedbacks from the peer reviewers, some items were improved. The reliability of the instrument was computed using Cronbach alpha and found to be $\alpha=0.76$. Finally, the GRI questionnaire was translated to Amharic and reviewed by peers to ensure the correctness of the translation, and ready for administration.

## Procedure of Data Collection

Data were collected from the respondents using the above-mentioned questionnaire. The questionnaire was presented to the respondents in person at their classrooms in their respective school by the researcher and collected in the same fashion same day when they finish responding to all items. During the delivery of the questionnaire, the objectives of the questionnaire and/or the study, and instructions on how to fill the questionnaire were clearly communicated. In addition, respondents were informed that their responses would be confidential and it would be used only for research purpose.

## Methods of Data Analysis

First, responses to each item were coded as $1=$ male occupation/activity, 2 = female occupation/activity, and 3 = both sex occupation/activity. Then, the frequencies of the responses of all (eighty) respondents to each of the forty items were counted and calculations were made based on it. The data were then presented using a table to indicate frequency differences among the different groups and percentages were used to indicate the prevalence of gendered items. Finally, chi-square test ( $\mathrm{X}^{2}$ ) for homogeneity was used to determine whether there exists a significant difference in the gender role identification patterns of male and female students as well as students of different grade levels. Alpha level of $\alpha=.05$ was used for all tests of significance.

## Results

Results are presented in two sections. First, results of the GRI data by sex and grade level are presented. Second, the analysis of gender role identification as a function of sex and grade level followed.

Table 1: Summary of response reactions of all respondents to all items by sex

| Sex of | Response Reactions to all Items (80) |  |  | Total |
| :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Both Sexes |  |
| Respondents (40) | 272 | 190 | 1138 | 1600 |
| Female (40) | 169 | 124 | 1307 | 1600 |
| $\quad$ Total | $\mathbf{4 4 1}$ | $\mathbf{3 1 4}$ | $\mathbf{2 4 4 5}$ | $\mathbf{3 2 0 0}^{\star}$ |

* Refers to the total number of response reactions of all participants (80) to all items (40), i.e., $80 \times 40=3200$

As Table 1 above shows, there are less number of male/female responses and more number of both sex responses among female respondents than males. It seems that females have egalitarian or androgynous form of gender role identification and males have traditional form of gender role identification.

Table 2: Summary of response reactions of all respondents to all items by Grade Level

| Grade Level of Respondents | Response Reactions to all Items (80) |  |  | Total |
| :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Both Sexes |  |
| Grade 5 (20) | 60 | 19 | 721 | 800 |
| Grade 7 (20) | 88 | 46 | 666 | 800 |
| Grade 9 (20) | 116 | 93 | 591 | 800 |
| Grade 11(20) | 177 | 156 | 467 | 800 |
| Total | 441 | 314 | 2445 | 3200* |

[^1]The above table shows that there are less number of male/female responses and more number of both sex responses among lower grade level respondents than higher-grade level ones. It seems that grade 5 and grade 7 students have a better (egalitarian/androgynous) gender role identification than grade 9 and grade 11 students who have more of traditional form of gender role identification.

Table 3: Chi-square Summary Table for GRI by Sex

| Cell | $\mathrm{O}_{\mathrm{ij}}$ | $\mathrm{E}_{\mathrm{ij}}$ | $\mathrm{O}_{\mathrm{ij}}-\mathrm{E}_{\mathrm{ij}}$ | $\left(\mathrm{O}_{\mathrm{ij}}-\mathrm{E}_{\mathrm{ij}}\right)^{2}$ | $\left(\mathrm{O}_{\mathrm{ij}}-\mathrm{E}_{\mathrm{ij}}\right)^{2} / \mathrm{E}_{\mathrm{ij}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Male/Male | 272 | 220.5 | 51.5 | 2652.25 | 12.03 |
| Male/Female | 190 | 157 | 33 | 1089 | 6.94 |
| Male/Both Sex | 1138 | 1222.5 | -84.5 | 7140.25 | 5.84 |
| Female/Male | 169 | 220.5 | -51.5 | 2652.25 | 12.03 |
| Female/Female | 124 | 157 | -33 | 1089 | 6.94 |
| Female/Both Sex | 1307 | 1222.5 | 84.5 | 7140.25 | 5.84 |
| Column Sums | $\begin{array}{r} \sum \mathbf{O}_{\mathrm{ij}}= \\ 3200 \end{array}$ | $E_{i j}=3200$ | $\begin{array}{r} \sum\left(\mathrm{O}_{\mathrm{ij}}-\mathrm{E}_{\mathrm{ij}}\right) \\ =0 \end{array}$ |  | $\mathrm{X}^{2}=49.61^{*}$ |

$$
{ }^{*} X^{2}(2)=49.61, P<.05
$$

The result of the chi-square test for homogeneity revealed that there is a significant difference among males and females gender role identification. The significant chi-square value obtained indicates that female students are significantly better in their gender role identification than male students are. On the other hand, this means that female students are more egalitarian in their gender role identification than male students and male students are more traditional in their gender role identification as compared to female students. As mentioned earlier, this can be confirmed by visual inspection of Table 1, which reveals that there are more number of both sex responses among female respondents than male respondents and there are more number of male and female responses among male respondents than female respondents.

Table 4: Chi-square Summary Table for GRI by Grade Level

| Cell | $\mathrm{O}_{\mathrm{ij}}$ | $\mathrm{E}_{\mathrm{ij}}$ | $\mathrm{O}_{\mathrm{ij}}-\mathrm{E}_{\mathrm{ij}}$ | $\left(\mathrm{O}_{\mathrm{ij}}-\mathrm{E}_{\mathrm{ij}}\right)^{2}$ | $\left(\mathrm{O}_{\mathrm{ij}}-\mathrm{E}_{\mathrm{ij}}\right)^{2} / \mathrm{E}_{\mathrm{ij}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Grade 5/Male | 60 | 110.25 | -50.25 | 2525.063 | 22.90 |
| Grade 5/Female | 19 | 78.5 | -59.5 | 3540.25 | 45.10 |
| Grade 5/Both Sex | 721 | 611.25 | 109.75 | 12045.06 | 19.71 |
| Grade 7/Male | 88 | 110.25 | -22.25 | 495.0625 | 4.49 |
| Grade 7/Female | 46 | 78.5 | -32.5 | 1056.25 | 13.46 |
| Grade 7/Both Sex | 666 | 611.25 | 54.75 | 2997.563 | 4.90 |
| Grade 9/Male | 116 | 110.25 | 5.75 | 33.0625 | 0.30 |
| Grade 9/Female | 93 | 78.5 | 14.5 | 210.25 | 2.68 |
| Grade 9/Both Sex | 591 | 611.25 | -20.25 | 410.0625 | 0.67 |
| Grade 11/Male | 177 | 110.25 | 66.75 | 4455.563 | 40.41 |
| Grade 11/Female | 156 | 78.5 | 77.5 | 6006.25 | 76.51 |
| Grade 11/Both Sex | 467 | 611.25 | -144.25 | 20808.06 | 34.04 |
| Column sums | $\sum \mathbf{O}_{\mathrm{ij}}=3200$ | $\mathrm{E}_{\mathrm{ij}}=3200$ | $\Sigma\left(\mathrm{O}_{\mathrm{ij}}-\mathrm{E}_{\mathrm{ij}}\right)=0$ |  | $\begin{array}{r} \mathrm{x}^{2}= \\ 265.1741^{*} \end{array}$ |

$$
{ }^{*} X^{2}(6)=265.17, P<.05
$$

The result of the chi-square test for homogeneity revealed that there is a significant difference among grade 5, 7, 9, and grade 11 students' gender role identification. The significant chi-square value obtained indicates that grade 5 students are significantly better in their gender role identification than grade 7 students, grade 7 students are significantly better in their gender role identification than grade 9 students, and grade 9 students are significantly better in their gender role identification than grade 11 students. On the other hand, this means that lower grade level students are more egalitarian or androgynous in their gender role identification than higher grade level students and higher grade level students are more traditional in their gender role identification as compared to lower grade level students. This can be confirmed by a significant moderate negative correlation ( $r=-$ .53) between grade level and gender role identification (taking both sex response as the second variable) at $\alpha=.05$, that reveals as students progress towards higher grade levels they become more traditional in their gender role identification pattern.

Finally, analysis was made to identify which occupations and activities are gendered or gender stereotyped the most. As a result, it was found that Mechanic (33\%), Driver (32\%), Manager (20\%), and Community leader ( $20 \%$ ) were the occupations rated by respondents as male occupations; and Embroidery (41\%), Secretary (38\%), Janitor (29\%), and Nurse (18 \%) were occupations rated by respondents as male occupations. It was also found that hunting (66\%), stone making (65\%), plowing (51\%), carrying heavy things (48\%), metalworking (34\%) and operating machinery (31\%) were the activities rate by respondents as male activities and lighting fire (38\%), fetching water ( $30 \%$ ), cleaning ( $30 \%$ ), cooking ( $26 \%$ ), caring for children ( $25 \%$ ), and washing ( $21 \%$ ) were the activities rated by respondents as female activities. This finding indicates that significant number of respondents believed that there are occupations and activities left for males or females. It indicates the presence of gendered occupations and activities.

## Discussion

The purpose of this study was to assess gender role identification as a function of sex and grade level. The discussion was described as follows.

As we have seen from Table 3 above, the Chi-square test for homogeneity revealed that there is a significant difference among males and females gender role identification at $\alpha<0.05$. That means gender role identification of boys and girls differ significantly. Girls seem to have egalitarian (androgynous) form of gender role identification while boys exhibit traditional gender role identification. Different studies also reported similar findings. Williams and Best as cited in Santrock (1998) stated that "women were more likely to perceive similarity between the sexes than men" p. 245. The International Labor Organization (2001) reported that "Women have been considerably more eager to cross gender barriers between occupations than men who have generally preferred to stay in traditional "male" occupations." p. 96. Furthermore, Bussey and Bandura (1999) stated that identification with the same-sex parent is stronger for boys than girls and boys are expected to be more strongly sex-typed. The researcher thought that this
difference might be attributed to the efforts made by different parties in the schools (e.g. girls club), in the community, and at different levels to bring gender equality through exclusive education and empowerment of girls. School is the place where children expand their knowledge and competencies and form their sense of personal efficacy essential for participating effectively in the larger society. The self-beliefs and competencies acquired during this formative period carry especially heavy weight because they shape the course of career choices and development (Bussey and Bandura, 1999). The researcher would like to point out the necessity of further studies to uncover the reasons that brought this difference in the gender role identification of males and females.

Similarly, as we have seen from Table 4, the Chi-square test for homogeneity revealed that there is a significant difference among different grade level students gender role identification at $\alpha<0.05$. It seems that grade 5 students have better gender role identification followed by grade 7, grade 9 and grade 11 students respectively. This means that as students' grade level increase their gender role identification become more traditional or old-fashioned. This finding was surprising, unexpected and seems odd. However, it is not in short of support as well as opposition from literature, different studies reported similar and contradicting findings. Bussey and Bandura (1999) reported that rules of gender-role conduct vary to some degree across social contexts and at different periods in life. For example, as cited in Meece (1997), Huston stated that boy's interests in masculine activities increases with age, but girl's interests in feminine activities gradually decline and shift more to masculine interests, because these traits are more highly valued by society. As cited in Lips (1997), studies indicate that knowledge about gender stereotypes increases and becomes more complex with age from preschool to college and the trend toward same-sex modeling increases again with age from preschool to college (Bussey and Bandura, 1999). Further Schuster and Ashburn (1992) reported a positive correlation between chronological age and endorsement of gender desirable traits in their cross - sectional study of seventh grade, twelfth grade, and adult males and females. On the other hand, Bigler et al as cited in Santrock
(1998) reported a contradicting result to this finding. They said that stereotypic gender beliefs increase during the preschool years, peak in the elementary school years and decrease in the late elementary school years.

The researcher believed that this finding might come because of one or more of the following reasons. In the first place, different organizations have many programs targeting children as well as the entire population on gender equality issues these days and transmit their messages using the media, schools, music, gender clubs, etc. As a result, the younger generation might bring behavioral as well as perceptual changes and revealed egalitarian or nontraditional form of gender role identification. Second, psychosocial development theories stated that adolescence is a period of identity formation. In the process of their identity formation, adolescents mainly follow adult role models to coin their identity and might adopt older people's (adults) traditional gender role identification. Ethiopia is a traditional society where the majority of its population (84\%) resides in the rural area. As a result, relatively older students (grades 9 and 11) might conform to their parents' as well as other adults' way of life, may adopt traditional gender role identification. Other reasons such as the improvement of gender role classification at the family level, the curriculum might incorporated more gender issues and might be more gender fair at lower grade levels than at the higher grade levels, etc. In fact, further research should be done to confirm these justifications or find out many other reasons.

## Conclusion and Recommendations

## Conclusion

The study makes it clear that boys and girls as well as students at different grade levels differ in their patterns of gender role identification. Boys and secondary school students found to be old fashioned in their gender role identification and traditional in their perception of the division of labor. In addition, a number of occupations and activities are still gendered that conform to the traditional labor division by sex. It indicates the need to
design programs that address issues of gender equality and division of labor by sex targeting the entire school population in general and boys and older students in particular.

## Recommendations

The researcher of this study, therefore, would like to suggest the following points:

1. Programs should be designed at school level targeting at changing the stereotypic gender role attitude of boys especially the older ones. The following strategies might help to achieve this.

- Create a classroom setting that promotes gender equality through encouraging discussions on division of labor by sex, gender equality issues, assigning similar tasks to boys and girls, establishing a culture and climate of mutual respect, and providing interactive and experiential learning opportunities that allow experimenting roles and activities that are assumed for the other sex.
- Challenge gender stereotypes and encourage girls and boys to enter non-segregated and non-traditional areas of learning.
- Design gender-neutral and non-segregated school programs.
- Exposing children to non-stereotyped models who are less traditional in their beliefs and behaviors, for example, fathers who do the cleaning and cooking.
- Establishing clubs in schools that create an opportunity for boys and girls as well as younger and older students interact, debate, share ideas, etc.

2. People with androgynous gender role conceptions tend to have high self esteem, coping skills, and life satisfaction and generally have good psychological development (Meece, 1997; Grusec and Lytton, 1988).

Thus, parents and teachers should encourage children to develop androgynous gender role conceptions.
3. Further research should be made to uncover the reasons that attribute to the findings of this research, particularly why high school students have stereotyped gender role attitudes than primary school students in the local context and why girls have a better (egalitarian) gender role identification than boys.

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[^1]:    * Refers to the total number of response reactions of all participants (80) to all items (40), i.e., $80 \times 40=3200$

