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**Keywords:** *conduct disorder, aggression, destruction, deceitfulness, violence of rule, student, second cycle primary school.*

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# Prevalence of Conduct Disorder among Primary School Students in West Shewa Zone, Oromia Region, Ethiopia

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**Abstract-** The purpose of this research is to assess the prevalence rate of students' conduct disorder in primary schools. Mixed method explanatory research design was used. Simple random sampling was employed to recruit 287 5<sup>th</sup> - 8<sup>th</sup> graders from 16 primary schools at five towns in West Shewazone, Oromia region, Ethiopia during the second semester of 2015/2016 academic year. Proportional number of students from each school, gender and grade level was used. Disruptive Behavior Disorders (DBD) rating scale was used for assessing primary school students' conduct disorder. Descriptive statistics (percentage, mean and standard deviation), independent sample t-test and MANOVA were utilized to analyze the collected data. As a result, the general prevalence rates of conduct disorder were 9.1%. In this study, there was statistically significant mean difference in experiencing conduct disorder between male and female participants ( $t(285) = 4.916, p < 0.05$ ) and residential area of participants ( $t(285) = 10.927, p < 0.05$ ). Hence, MANOVA result revealed that there were statistically significant mean differences between participants with their respective of grade level ( $F(12, 521) = 4.801, p < 0.05$ ), perceived parenting styles of the family ( $F(12, 521) = 2.49, p < 0.05$ ) and income of participants' family ( $F(8, 394) = 4.452, p < 0.05$ ) on conduct disorder dimensions (aggression, destruction of property, deceitfulness and violence of rules). On the other hand, parents' social support ( $F(12, 521) = 1.165, p > 0.05$ ) have no statistically significant effect on students' conduct disorder dimensions. Correspondingly, ANOVA result revealed that students' grade level had significant effect on students' aggressiveness, destruction of property, deceitfulness and violence of rules. Besides, students' perceived social support had no significant effect on students' aggressive symptoms, destruction of property and violence of rules. Yet, it had significant effect on deceitfulness. Moreover, statistical significant differences were observed on perceived parenting style of the respondents in experiencing aggressiveness and violence of rules. However, it had no significant effect on destruction of property and deceitfulness. Finally, statistical significant mean differences were observed on respondents' monthly family income in experiencing violence of rule.

**Keyword:** conduct disorder, aggression, destruction, deceitfulness, violence of rule, student, second cycle primary school.

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## I. INTRODUCTION

Conduct disorder in children is a common and disabling disorder that causes a lot of problems for teachers, families and even for the children with a lot of social complications. This disorder visibly has not only negative impact on the youngsters' educational, social and professional performance but also increases the chance of suffering from emotional problems [1]

Conduct disorder is a repetitive and persistent pattern of behavior in which either the basic rights of others or major age-appropriate societal norms or rules are violated. It is linked with violence because of the fact that behaviors exhibited fall into four main grouping which are aggressive conduct that causes physical harm to others, nonaggressive conduct that causes property loss or damage, deceitfulness or theft and serious violations of rules [2]. It is usually exhibited in a variety of settings (at home, at school, and in social situations) and they cause significant social, academic, and family functioning impairment to the child and can have an impact on his psychological development [3]

Various studies were conducted on conduct disorder among children. For instance, conduct disorder affects between 6% to 16% of boys and 2% to 9% of girls in school-aged children [4]. Besides, a study in India for the prevalence of Conduct Disorder (CD) and reported as 4.58% of boys and 4.5% of girls. This study stated that 36% of these children suffer from conduct disorder with mild severity and 64% with moderate severity [5]. The study in Iran by Najafi et.al [6] presented the prevalence of behavioral disorders in Shiraz's city. It is revealed that between 1300 boys and girls at elementary school children, 17.8% of them affected by behavioral disorders. In addition, this study explained that 5% of these children affected by conduct disorder. It is also reported that the prevalence of conduct disorder in Tehran/Iran is 10.5% among 2016 Primary school student [7]. Besides, lower prevalence of conduct disorder among pupils of primary school in Khartoum, Sudan was found [8].

Students with conduct disorder are at risk of a number of adverse outcomes in adulthood, including unemployment, early pregnancy and early fatherhood, domestic violence, criminal offending, driving offences,

psychiatric disorders, alcoholism and substance abuse, higher rates of injury, hospitalization and general health problems, separation and divorce, and a shortened life expectancy [9]. In addition, literatures indicate that behavioral problems prevent teachers from implementing high quality instruction to students. Students with conduct disorder also influence the behavior of teachers, essentially shaping teachers into providing less instruction [10].

It is very common that conduct disorder occurs with one or two other disorders. Such disorders include Attention- Deficit/Hyperactivity Disorder; Mood Disorders; Learning Disorder; Anxiety Disorders, Communication Disorders, and Substance-Related Disorders [2, 42]. The same relationships were found between childhood oppositional defiant disorder and conduct disorder and antisocial personality disorder in adulthood [43].

Successful schools build their capacity to serve all students. The modern mantra of inclusive education explicitly demand that all learners disregarding their abilities and disabilities should be educated together in a regular school located near to the learners' home. With the rise of the inclusion movement, students with Emotional and Behavioral Disorders (EBD) are being placed in general education classrooms [11]. Hence, educating and supporting students with conduct disorder became an unavoidable responsibility for today's teachers. This is indeed a challenging demand for teachers and schools as they are not well readied for this highly professional task. Studies conducted in Ethiopia on the disciplinary measures initiated by teachers to deal with the problem behavior of students are not divided on their findings. Most of them are categorical that most of the measures adopted by teachers in Ethiopian schools to deal with the problem behavior of students are punitive in their nature as well as unscientific which have already been prohibited by laws [12, 13]. Similarly, it is indicated that there is a lack of teachers' preparation within teacher training programs to manage students' with conduct disorder in Ethiopia [10].

In Ethiopia, very few studies have been reported. For instance, according to Alemayehu's study [39], the top ranked frequently observed misbehavior in secondary school of Shashamane included: tardiness, truancy, and disturbing in the classroom like talking without permission, use cell phone and fighting. Another study conducted by Asfaw [41] in Ethio-japan Hidasse secondary school at Addis Ababa, claimed that frequent absenteeism, drinking alcohol, smoking, day dreaming, quarrelling, cheating and inattentiveness are frequently observed conduct problems.

Regarding to the study area, West Shewa is one of the zones of the Oromia region in Ethiopia. Based on the 2007 Census conducted by the central statistical agency of Ethiopia (CSA), West Shewa Zone has a total

population of 2,058,676, of whom 1,028,501 are men and 1,030,175 women; with an area of 14,788.78 square kilometers, West Shewa has a population density of 139.21. A total of 428,689 households were counted in this Zone. The two largest ethnic groups reported in West Shewa were the Oromo (93.82%) and the Amhara (5.15%); all other ethnic groups made up 1.03% of the population. Oromiffa (93.99%) was spoken as a first language. 5.47% spoke Amharic; the remaining 0.54% spoke all other primary languages reported.

Across the study areas, the researchers have observed the typical symptoms of conduct disorder among primary schools including shouting in the school compound, slighting, offending the school community, violating the school rules through being unpunctual, disobedience and carelessness, distracting the teaching learning process, fighting each other and sometimes with their teacher, stealing and insulting. Compatibly, conduct disorder affect all the aspects of these children's private and social life. Lack of enough attention to this problem of children can result in the long-term prevalence of this disorder. For this reason, the present research analyzes the prevalence rate of conduct disorder among the primary students in West Shewa Zone. This study intended to answer the following questions:

1. What is the prevalence rate of conduct disorder among primary school students in West Shewa Zone?
2. Is there any statistical significant mean difference in experiencing conduct disorder across students' gender and students' residential area in the primary schools in West Shewa Zone?
3. Is there any statistical significant mean difference in dimensions of conduct disorder across students' grade level, perceived social support, perceived parenting style and income of the family in the primary schools in West Shewa Zone?

## II. METHODOLOGY

### a) *Research Design*

The purpose of the present study was to assess the prevalence rate of students' conduct disorder in primary schools of West Shewa Zone, Oromia region, Ethiopia. To achieve this purpose, mixed method explanatory study design was employed.

### b) *Samples and Sampling techniques*

According to West Shewa zone educational office, 84,653 students whose grade levels were from 5 up to 8 were enrolled in 18 woredas in 2015/16 academic year. Among whom, 384 randomly selected students were participated from 16 second cycle primary schools at five towns in West Shewa Zone, Oromia region, Ethiopia. In doing so, first 13 governments and 3 private schools were randomly selected. At school level, one section from each grade 5

up to grade 8 was selected again using simple random sampling technique. Following that 6 students were randomly selected from each class. This is a total of 24 students were selected from each school. Finally, a pool of 384 students from 16 schools was included in the study. However, among the 384 distributed questionnaires, data collectors could collect 287 properly filled questionnaires. The rest 97 questionnaires were discarded for incompleteness. Due to this, the study analysis was done based on the response of 287 study participants. Simple random sampling was used to recruit students from each selected schools.

c) *Variables*

Dependent variable of the study was students' conduct disorder. The primary independent variables for this study were gender, students' grade level, residential area, perceived social support, perceived parenting style and income of the family.

d) *Data Collection Instrument*

A questionnaire and semi structured interview were used to assess the prevalence rate of students' conduct disorder. Ultimately, the questionnaire has two sections where the first section collects data on students' demographic characteristics. This includes gender, students' grade level, residential area, perceived social support, perceived parenting style and income of the family. The second section of the questionnaire was adapted from Disruptive Behavior Disorders (DBD) rating scale. The scale was done based on the Diagnostic and Statistical Manual of

Mental Disorders (DSM-IV-TR) [2] which was developed by Pelham and his colleagues [40]. The original rating scale has 15 items for measuring conduct disorder. These items comprise four subscales representing the core symptom clusters necessary for the diagnosis of Conduct Disorder. These included aggressive symptoms, destruction of property, deceitfulness and theft, and violation of society's rules. Before collecting the final data, the adapted tools were translated in to Afann Oromo and pilot study was conducted on 80 students. In the pilot study, the reliabilities of the tools were found to be 0.891 for full scale conduct disorder. The final data was thus collected with 15 items measuring students' conduct disorder plus 6 items measuring demographic characteristics of students.

e) *Method of Data Analysis*

Descriptive statistics including percentages, number of cases, cross-tabulations, mean and standard deviation were used to describe students' conduct disorder. MANOVA and independent sample t- test were also used to analyze the collected data. All data were analyzed using Statistical package for Social Science (SPSS) for window version 20.

f) *Ethical considerations*

Oral as well as written informed consents were secured to the respondents. In addition, written permission was obtained from the respective officials of the institutions and organizations where the respondents were recruited based on an official request letter issued by Ambo University.

### III. RESULTS

a) *Demographic characteristics of the respondents*

Table 1: Demographic characteristics of the respondent

Demographic Variable	Categories	Frequency	Percentile
Sex	Male	170	59.2
	Female	117	40.8
Students' Educational Status	Grade 5	88	30.7
	Grade 6	82	28.6
	Grade 7	70	24.4
	Grade 8	47	16.4
Residential area	Urban	160	55.7
	Rural	127	44.3
Perceived Social Support	No social support	72	25.1
	A little bit social support	64	22.3
	Good social support	100	34.8
	Very Good social Support	51	17.8
Perceived Parenting Style	Negligent	30	10.45
	Permissive	69	24.04
	Authoritarian	124	43.20

Monthly income of the family	Lower (less than 1500 birr)	106	36.9
	Middle (1501-4500 birr)	142	49.5
	Higher (greater than 4501birr)	39	13.6

As can be presented from table 1, out of the total two hundred eight seven participants, 170 (59.2%) were males and 117 (40.8%) were females. Besides, the mean age of students was 13.07(SD = 1.164) where the minimum and maximum ages were 10 and 16 respectively. Regarding to students' educational status, 88 (30.7%), 82 (28.6 %), 70 (24.4 %) and 47 (16.4%) were grade 5, grade 6, grade 7 and grade 8 respectively. Regarding the residential area of respondents, 160 (55.7%) were lived in urban area and 127 (44.3 %) were lived in rural area. Hence, the participants perceived that parents' support their children in different level. Accordingly, 72 (25.1%), 64 (22.3%), 100 (34.8%) and 51 (17.8%) were believed to be nothing, a little bit, good and very good social support respectively. Moreover this, regarding to

parenting style, participants perceived that 30 (10.45%), 69 (24.04%), 124 (43.20%) and 64 (22.29%) were found to be negligent, permissive, authoritarian and authoritative parenting style respectively. Finally, with regard to respondents' parent income, 106 (36.9%) of students' parent monthly income were considered as lower income group. Majority of them 142 (49.5%) were perceived as middle-income groups followed by the least 39 (13.6 %) were higher income groups.

b) *Prevalence rate of Conduct Disorder among Primary School Students*

In order to assess the prevalence rate of Conduct Disorder, a standardized Modified Disruptive Behavior Disorders (DBD) rating scale was employed and presented as follows:

Table 2: General Prevalence of Conduct Disorder

Variable	Category of CD Score	Frequency	Percent
Conduct Disorder	Minimal (1-15)	62	21.6
	Mild (16-25)	189	65.9
	Moderate (26-35)	10	3.5
	Severe(36-60)	26	9.1

As can be shown from table 2, out of 287 respondents, 62 (21.6%), 189 (65.9%), 10 (3.5%) and 26 (9.1%) of respondents are minimal, mild, moderate and severe level of conduct disorder respectively. Therefore, the general lifetime prevalence rate of conduct disorder

is 9.1%. According to the crosstab result even higher prevalence of conduct disorder was found among male students with authoritarian parenting style and students with no social support.

c) *The Effect of Participants' Sex and Residential Area in Experiencing Conduct Disorder*

Table 3: Comparisons of Conduct Disorder Across Participants' Sex And Residence of Student

Variable	Category	N	Mean	SD	t	df	P value
Sex	Male	170	32.27	8.559	4.916	285	0.000
	Female	117	26.84	10.030			
Residential area	Urban	158	34.74	6.509	10.927	285	0.000
	Rural	129	24.32	9.575			

Notes: SD = standard deviation; \*Significant at the 0.05 level

As can be revealed in table 3, the independent sample t-test result shows that there was statistically significant mean difference in experiencing conduct disorder between male and female participants (t (285) = 4.916, p < 0.05). Here, the mean score of conduct disorder for male participants (M=32.27, SD=8.55) was higher than female participants (M=26.84, SD=10.03). This implies that male respondents were more victim of conduct disorder than their female respondents counterparts. Moreover, the mean score of conduct disorder for participants whose residential area were urban (M=34.74, SD= 6.50) was higher than participants whose

place of residence were rural (M= 24.32, SD=9.57) and the difference was statistically significant (t (285) = 10.927, p < 0.05).

d) *The Effect of Students' Demographic Variable in Experiencing Conduct Disorder Dimensions in Primary Schools*

To see whether significant statistical difference exists in conduct disorder domains (Aggression, Destruction of property, Deceitfulness and Violence of rules) on students' socio demographic variable, multi variant analysis of variance was computed and presented as follows.

**Table 4:** A Manova of the Effect of Parents' Marital Status, Educational Status of Students, Social Support, Parenting Style and Parents' Income on Conduct Disorder Dimensions

Independent Variables	Wilks' Lambda Value	F	df	P-value	Partial Eta Square	Observed Power
Students' Grade level	0.758	4.801	12,521	0.000	0.088	1.000
Perceived social Support	0.932	1.165	12,521	0.305	0.023	0.604
Perceived parenting Style	0.863	2.496	12,521	0.003	0.048	0.950
Income of the Family	0.841	4.452	8,394	0.000	0.083	0.997

Notes: SD = standard deviation; \*Significant at the 0.05 level

As can be seen in table 4, a multi variant analysis of variance result revealed that there were statistically significant mean differences between participants with their respective of grade level ( $F(12,521) = 4.801, p < 0.05$ ), perceived parenting styles of the family ( $F(12, 521) = 2.49, p < 0.05$ ) and income of participants' family ( $F(8, 394) = 4.452, p < 0.05$ ) on conduct disorder dimensions (aggression, destruction of property, deceitfulness and violence of rules). On the other hand, parents' social support ( $F(12,521) = 1.165,$

$p > 0.05$ ) have no statistically significant effect on students' conduct disorder dimensions.

e) *Comparisons of Conduct Disorder Dimensions among Students' demographic variable*

To see whether significant statistical difference exists in conduct disorder domains (aggression, destruction of property, deceitfulness and violence of rules) on students' grade level, univariant analysis of variance was computed and presented as follows.

**Table 5:** Anova of the Effect of Students' Grade Level on Conduct Disorder Dimensions

Outcome variable	Grade level of students				F	P-value
	Grade 5	Grade 6	Grade 7	Grade 8		
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)		
Aggression	10.68 (3.17)	8.37 (2.17)	7.13 (2.66)	8.20 (3.39)	11.532	.000
Destruction of Property	1.25 (1.08)	1.19 (1.16)	0.56 (0.97)	1.24 (1.28)	2.061	.007
Deceitfulness	5.83 (2.30)	4.46 (1.68)	4.57 (2.31)	5.20 (1.27)	3.930	.009
Violence of rules	4.47 (1.72)	4.75 (1.64)	2.79 (1.58)	4.15 (2.52)	4.135	.007

Notes: SD = standard deviation; \*Significant at the 0.05 level

As can be seen from table 5, the univariant analysis of variance result showed that students' grade level had significant effect on students' aggressive symptoms ( $F(3, 282) = 11.532, p < 0.05$ ), destruction of property ( $F(3, 282) = 2.061, p < 0.05$ ), deceitfulness ( $F(3, 282) = 3.930, p < 0.05$ ) and violence of rules ( $F(3, 282) = 4.135, p < 0.05$ ) symptoms. Furthermore, the Benferroni post hoc multiple comparisons revealed that grade five respondents demonstrated highly significant mean difference on aggression symptom as compared to grade six ( $p < 0.05$ ), grade seven ( $p < 0.05$ ) and grade eight ( $p < 0.05$ ). The mean aggression score of grade five respondents ( $M=10.68, SD=3.172$ ) is higher than grade six ( $M=8.37, SD=2.179$ ), grade seven ( $M=7.13,$

$SD=2.664$ ) and grade eight ( $M=8.2, SD=3.390$ ) counter parts. Along with this, grade seven respondents reported highly significant mean difference on destruction of property and violence of rules as compared to grade five ( $p < 0.05$ ), grade six ( $p < 0.05$ ) and grade eight ( $p < 0.05$ ). Moreover, the post hoc shows that grade five respondents reported significant mean difference with grade six ( $p < 0.05$ ) and grade seven ( $p < 0.05$ ) on deceitfulness symptoms. The mean deceitfulness score of grade five respondents ( $M=5.83, SD=2.301$ ) is higher than grade six ( $M=4.46, SD=1.684$ ), grade seven ( $M=4.57, SD=2.319$ ) and grade eight ( $M=5.20, SD=2.08$ ) counter parts students.

**Table 6:** Anova of the Effect of Perceived Social Support on Conduct Disorder Dimensions

Outcome variable	Perceived social support				F	P-value
	Not at all	A little bit	Good	Very Good		
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)		
Aggression	10.91 (3.21)	8.89 (1.99)	8.15 (2.45)	6.44 (3.84)	1.508	.214
Destruction of Property	1.26 (1.09)	1.19 (1.08)	1.01 (1.31)	0.58 (0.94)	1.432	.235
Deceitfulness	6.34 (2.00)	4.96 (1.45)	4.61 (1.52)	4.00 (2.97)	3.083	.028
Violence of rules	5.00 (1.69)	4.40 (1.63)	4.10 (1.74)	2.19 (2.04)	.351	.788

Notes: SD = standard deviation; \*Significant at the 0.05 level

As it is seen from table 6, the univariant analysis of variance result showed that students' perceived social support had no significant effect on students' aggressive symptoms ( $F(3, 282) = 1.508, p > 0.05$ ), destruction of property ( $F(3, 282) = 1.432, p > 0.05$ ) and violence of rules ( $F(3, 282) = 0.351, p > 0.05$ ) symptoms. On the other hand, students' perceived social support had significant effect on deceitfulness ( $F(3, 282) = 3.083, p < 0.05$ ). Furthermore, Benferroni post hoc multiple comparisons revealed that respondents with no perceived social support demonstrated significant mean difference on

aggression, violence of rules and deceitfulness as compared with respondents with a little bit ( $p < 0.05$ ), good ( $p < 0.05$ ) and very good ( $p < 0.05$ ) social support. Correspondingly, respondents with no perceived social support demonstrated significant mean difference on destruction of property as compared with respondents with very good ( $p < 0.05$ ) social support. The mean destruction of property score of respondents with no perceived social support ( $M = 1.26, SD = 1.090$ ) is higher than respondents with very good social support ( $M = 0.58, SD = 0.942$ ) counter parts.

**Table 7:** Anova of the Effect of Perceived Parenting Style on Conduct Disorder Dimensions

Outcome variable	Perceived Parenting Style				F	P- value
	Negligent	Permissive	Authoritarian	Authoritative		
	Mean(SD)	Mean(SD)	Mean(SD)	Mean(SD)		
Aggression	9.10 (3.03)	8.91 (1.68)	9.84 (3.03)	6.30 (3.28)	3.313	.021
Destruction of Property	0.97 (1.35)	1.12 (1.25)	1.15 (1.04)	0.89 (1.11)	.866	.460
Deceitfulness	5.20 (1.66)	4.89 (1.41)	5.64 (1.96)	3.94 (2.58)	2.185	.091
Violence of rules	5.13 (1.59)	4.16 (1.42)	4.78 (1.58)	2.17 (2.04)	7.020	.000

Notes: SD = standard deviation; \*Significant at the 0.05 level

According to table 7, statistical significant mean differences were observed on perceived parenting style of the respondents in experiencing aggressive symptoms ( $F(3, 282) = 3.313, p < 0.05$ ) and violence of rules ( $F(3, 282) = 7.020, p < 0.05$ ) symptoms. However, respondents' perceived parenting style had no significant effect on destruction of property ( $F(3, 282) = 0.866, p > 0.05$ ) and deceitfulness ( $F(3, 282) = 2.185, p > 0.05$ ). To investigate further, the Benferroni post hoc multiple comparisons result shows that respondents

with authoritarian parents reported highly significant mean difference on aggression symptoms as compared to respondents with permissive ( $p < 0.05$ ) and authoritative ( $p < 0.05$ ) parenting style. The mean aggression score of respondents with authoritarian parents ( $M = 9.84, SD = 3.032$ ) is higher than respondents with permissive parents ( $M = 8.91, SD = 1.687$ ), negligent parents ( $M = 9.10, SD = 3.033$ ) and authoritative parenting style ( $M = 6.30, SD = 3.289$ ) counter parts.

**Table 8:** Anova of the Effect of Monthly Income of Family on Conduct Disorder Dimensions

Outcome variable	Monthly income of family			F	P- value
	Lower	Middle	Higher		
	Mean(SD)	Mean(SD)	Mean(SD)		
Aggression	8.85 (3.25)	8.99 (3.08)	7.62 (2.76)	.607	.546
Destruction of Property	1.21 (1.24)	1.06 (1.16)	0.69 (0.61)	.895	.410
Deceitfulness	5.06 (2.14)	5.21 (2.13)	4.28 (1.52)	.715	.490
Violence of rules	4.58 (2.07)	4.05 (1.84)	2.87 (1.55)	15.958	.000

Notes: SD = standard deviation; \*Significant at the 0.05 level

As it is shown from table 8, statistical significant mean differences were observed on respondents' monthly family income in experiencing violence of rule ( $F(3, 282) = 15.958, p < 0.05$ ). The mean violence of rule score of respondents with lower monthly parents' income ( $M = 4.58, SD = 2.079$ ) is higher than respondents with middle family income ( $M = 4.05, SD = 1.841$ ) and respondents with higher family income ( $M = 2.87, SD = 1.553$ ). On the other hand, respondents' family income had no significant effect on aggression

symptoms ( $p < 0.05$ ), destruction of property ( $p < 0.05$ ) and deceitfulness ( $p < 0.05$ ).

#### IV. DISCUSSION

The main purpose of the present study is to assess the prevalence rate of students' conduct disorder in primary schools. In this study, the results of the research show that the prevalence rate of conduct disorder among primary school students is 9.1% in West

Shewa zone, Oromia region. In this study area, children with conduct disorder exhibit a wide range of rule-violation behaviors, from lying, cheating, stealing, running away from home, aggression, temper tantrums, truancy, non-compliance, destructiveness and oppositional behavior. This result is supported with that of Azadyekta [7] in the city of Tehran/Iran, who found that the prevalence rate of conduct disorder among the elementary school students is 10.5%. Along with this, all previous studies estimate the prevalence of conduct disorder to fall below 17% [31, 2, 30 & 32]. Moreover, the present finding is in accordance with Mohammadi's findings [33] who reported the rate of conduct disorder in Kordestan Province at 9.6%. Moreover, the study in Iran by Najafi, Foladchang, Alizadeh, and Mohamadifar [6] presented the prevalence of behavioral disorders in Shiraz's city. It is revealed that between 1300 boys and girls at elementary school children, 17.8% of them affected by behavioral disorders. In addition, this study explained that 5% of these children affected from conduct disorder. In line with this, a study conducted by Mishra et al. [44] reported that among a total of screened 900 students, 25.45% of the total subjects were having psychiatric morbidities. Among whom the researchers found that the prevalence of conduct Disorder was found to be 5.48%.

However, the result of the present study is contradicted with the previous research findings conducted by Abdelrahim [8] in Khartoum/Sudan who found that the prevalence of conduct disorders among pupils of primary school in Khartoum is low. Such finding is also consistent with another study in which the estimate of the prevalence of conduct disorder is 0.2% [34]. Based on large-scale community-based epidemiological surveys in Canada, the United Kingdom and the United States (US), the estimated prevalence rate for Conduct Disorder is 4.2% [14]. This small prevalence may be due to cultural differences between the populations.

The result of present study displays that male students had found to have higher conduct disorder score than their female students counter parts. The mean difference is also statistically significant. This is because male children in the younger age groups, showing misconduct may be considered as having normal behavior. This result yield consistent with previous research finding conducted by Azadyekta [7] who found that the rate of the conduct disorder among male students are significantly more than female students. Besides, this result is in accordance with the statistical and diagnostic collection of the United States' Psychiatric associations, which has estimated the rate of boys under the age of 18 to be between 6 % to 16 % and the girls in the same age to be between 2 % to 9 %. These rates vary by age range and type of conduct disorder [2]. Moreover, this finding is similar with the conclusion of Moradi's [35] and Mehrabi's research [34].

Most studies conducted in some African countries were gender-based studies, focusing largely on sexual bullying or harassment of female students. Such studies have been conducted in Ghana [15], Ethiopia [16], Cameroon [17] and Tanzania [18]. Congruently, Sarkhel, Sinha, Arora, and DeSarkar [5] also conducted a study in India for the prevalence of conduct disorder and reported as 4.58% of boys and 4.5% of girls with conduct disorder. This study stated that 36% of these children suffer from conduct disorder with mild severity and 64% with moderate severity. This is because male students are more likely to learn aggressive behavior through a delinquent peer group. They are not closely supervised as females and are not expected to stay at home. More often, both of which may restrict the opportunity for crime and the time available to mix with delinquent peers also limit the chance [19, 37].

Moreover, the result of the existing study depicted that the mean score of conduct disorder for students whose residential area is urban area found to be higher than students whose place of residence is rural area. The mean difference is also statistically significant. This is because the attitude of a community towards conduct disorder, especially in rural areas, may lead to under reporting. The findings of the study regarding to residential area is consistent with Shems [27] and American Psychiatric Association [2] study that found the prevalence of conduct disorder appears to be higher in urban than in rural settings. Actually, rates vary widely depending on the nature of the population sampled and methods of ascertainment. On the other hand, this finding is inconsistent with a research conducted by Alemayehu [39] in Ethiopia who found that there is no significant difference in misbehavior on the bases of the place of residence of students. However, the research uncovered that there is disparity in the type of misbehavior in which those students from rural or suburb of Shashemenetown largely involve in mob-actions and to a lesser extent in disrupting classroom activities.

The finding of the present study shows that there were statistically significant mean differences in experiencing conduct disorder dimensions across grade level of students in which grade five students had found to have higher mean score in aggressive symptoms, destruction of property, deceitfulness and violence of rules than grade six, grade seven and grade eight students. However, this result is in contradiction with a previous research conducted by Alemayehu [39] who found higher prevalence rate of misbehavior observed among students of 10<sup>th</sup> than 9<sup>th</sup> grade. This implies that students' prolonged stay in the school as well as repeated exposure to misbehavior further induces other misbehavior, especially if the response mechanism is poor. So far, grade level highly correlated with the age of students, various previous researches claimed that conduct disorder is negatively associated in which as



age increases, the number of misbehavior by students will be decreased [20,21& 39]. This implies the level of age maturity of students has an implication for misbehavior if it not handled properly. This may be attributed to biological and social changes of the growing child.

In this study, the result shows that parents' social supports have no statistically significant effect on students' conduct disorder dimensions. Specifically, students' perceived social support had no significant effect on students' aggressive symptoms, destruction of property and violence of rules symptoms. On the other hand, students' perceived social support had significant effect on deceitfulness. However, this result is contradicted with a previous research conducted by Manguvo and Whitney [22] who found that students' perceived social support are the basic factors as having a negative influence on student misbehavior. In addition, a significant risk for conduct disorder was found for boys and girls who were hyperactive and unhelpful [23, 28] due to the fact that child rearing practices can retard or accelerate the development of child health.

In the current study, regarding the effect of parenting style on conduct disorder, there is a statistically significant mean difference in experiencing conduct disorder dimensions across students' perceived parenting styles of the family. Parents are responsible their children's mental, emotional and behavioral adjustments in a productive and fruitful way to make ready for their adult life. In addition to that, when children enter school, usually supervising the children's conduct, education and homework is the responsibility of parents. Parents also help the school authorities in solving educational, behavioral and emotional problems. Therefore, it is natural that the parenting style of family has a direct impact on the quality of raising children. The result of this study is consistent with the research conducted by Azadyekta [7] that concluded the prevalence of conduct disorders in cases where parents raise their children autocratically is 17 % and for those parents who are permissive, the rate is 13.2% which is more than authoritative parenting style. Correspondingly, a study conducted by Manguvo and Whitney [22] also consistent with the present study findings who found that permissive home environments as contributing highly to student misbehavior, sighting an increase in child-headed households. Along with this, Henry et al. [24] also supported this finding that family style of child rearing is considered as an important factor for students' misbehavior. It is explained that parents of children with Conduct Disorder often uses the coercive style, and children experienced corporal punishment. So the style of a family can affect negatively on pattern of children with their peers. In addition, a number of causal factors have been highlighted in different research on conduct disorder. Most children with conduct disorder come from

disadvantaged backgrounds. Additional risk factors appear to include harsh and inconsistent parenting, lack of adult support and mentoring, and isolation with deviant peer groups [21, 20,25 & 29]. Further, Evans and Miguel [26] found that Kenyan students who do not have the guardianship of biological parents had higher rates of misbehavior and absenteeism from schools. Along with this, unhappy marital relations, interpersonal conflict and aggression characterize the parental relations of antisocial children. Poor parental supervision and monitoring of the child and knowledge of the child's whereabouts are also associated with conduct disorder.

The findings of this study showed that the rates of the conduct disorder among the students with higher family income are not exposed for conduct disorder. Therefore, statistically significant mean differences were observed in experiencing conduct disorder dimensions (aggression, destruction of property, deceitfulness and violence of rules) across students' family income. This conclusion is in agreement with the findings of researches conducted by Richard & Tremblay [38], Shams [27] and Alemayehu [39] who found that as level of family income increases, number of misbehavior slightly decreases. This implies that conduct disorder exhibited among lesser proportion of students from high income families as compared to those from low income families.

## V. CONCLUSION AND RECOMMENDATION

In conclusion, high prevalence rate of conduct disorder had found among second cycle primary school students and statistical significant differences were found in relation to sex, students' grade level, residential area, perceived social support, perceived parenting style and income of the family on conduct disorder dimensions. Therefore, school administrators shall design and execute the intervention strategies to reduce and manage the high prevalence rate of conduct disorder in primary schools. Along with this, school counselors shall be placed in each primary second cycle schools across the West Shewa zone. Specifically, the schools community shall develop appropriate guideline and strategies of working with stakeholders like School Counselor, Special Needs Education teachers, regular teachers, students, and parents to identify and implement appropriate intervention mechanisms to manage the severity of the problem because children are the most important asset and wealth of a nation. Healthy children make a healthy nation. In addition, both government and non-government organizations who are working with children shall launch outreach programs for students with severe conduct disorder.

## VI. LIMITATION AND FUTURE IMPLICATION

In conducting this study, the usage of a structured instrument, trained data collectors and supervised field workers to collect data from randomly selected children in the school decreases the likelihood of the occurrence of bias in the study. However, there were two limitations. First, although the Afann Oromo version of the instrument had revealed good reliability and feasibility, it was too hard to be quite sure that the translated tool had been retained their original psychometric properties in different cultural backgrounds of the study sites. Second, the finding was not supported by similar locally available researches on students' conduct disorder. Due to this, it is difficult to generalize for other contexts. Along with this, the finding of this research implied as further research shall be conducted to identify the major causes that contribute for the high prevalence rate of conduct disorder in primary schools and teachers' management skill in handling students' misbehavior for intervention purpose.

### a) Conflict of Interest

The authors declared no conflict of interest

### b) Funding

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