

## Research Article

# Assessment of Perceived Social Support and Associated Factors among Undergraduate Students of Mekelle University, Ethiopia. A Cross-Sectional Study

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**Background:** Perceived social support influence university students' social, emotional, academic wellbeing and family, friends play important role in their wellbeing. Poor perceived social support leads to psychological, social and educational problems. Consequently, students decrease in academic performance, learning ability and retention. However, no study has assessed perceived social support and associated factors among University students in Ethiopia. So the purpose of this study was to assess the perceived social support and associated factors among undergraduate university students at Mekelle University, Ethiopia.

**Methods:** A cross-sectional study was conducted on 633 study participants from October 2018 to June 2019. Data were collected using a pre-tested, standardized questionnaire. Multivariable analysis was conducted to identify factors that affect the perceived social support of the students. Statistical significance was declared using a p-value $\leq$ 0.05 and 95% of Confidence Interval (CI) for an Adjusted Odds Ratio (AOR).

**Results:** The status of perceived social support among undergraduate students of Mekelle University was found as 340 (53.7%) poor and 293(46.3%) good. The study also showed that sex AOR: 0.505, 95% CI: [0.331-0.772]), parent's resident AOR: 0.405, 95% CI: [0.260-0.630], student's monthly income AOR: 0.419, 95% CI: [0.226-0.774], support from friends AOR: 0.349, 95% CI: [0.229-0.532], support from family AOR: 0.291, 95% CI: [0.190-0.445] and support from significant others AOR: 0.136, 95% CI: [0.088-0.211] were significant predictors of perceived social support.

**Conclusion:** This study found that the majority of the students had poor perceived social support.

**Keywords:** Social Support; Multidimensional Scale; University Students; Ethiopia

## Abbreviations

AOR: Adjusted Odd Ratio; CBE: College of Business & Economics; CHS: College of Health Sciences; CI: Confidence Interval; CNCS: College of Natural and Computational Sciences; COR: Crude Odds Ratio; ETB: Ethiopian Birr; MSC: Master of Sciences; USA: United States of America

## Introduction

Perceived social support refers to an individual's belief that social support is available, is generally considered positive or negative, and provides what is considered as needed by that individual [1]. Perceived social support is very important factors help the overall well-being of the individual. It provides physical and psychological advantages for people faced with stressful physical and psychosocial events, and is considered as a factor reducing the psychological distress when faced with stressful events. But, Poor perceived social support leads to psychological, social and educational problems [2].

The ecological opinion posits that students are significantly

influenced by their surrounding social contexts [3]. This opinion offers an approach to understanding the relationship between social support and students' learning outcomes [4]. Social support provides university students with a sense of security and competence, which, in turn, helps them to address intellectual challenges more efficiently [5].

Previous studies have identified perceived social support as a protective, empowering factor that is key to enabling emerging adults to fulfill the challenges involved in university life [6]. For instance, study conducted in Trabzon, Turkey showed that the students receiving the required support from their families, friends and significant others would cope with the problems that threaten their psychology such as depression, anxiety, stress etc. [7].

Perceived social support influence university students' social, emotional, academic wellbeing and family, friends play important role in their wellbeing [8]. Perceived social support also influence academic motivation. For instance, previous study conducted to assess the relationship between perceived social support,

psychological wellbeing and academic motivation revealed that the perceived social support directly and positively influence significant psychological well-being and academic motivation among university students [9]. A one-year longitudinal study conducted to examines potential psychosocial predictors of freshman academic achievement and retention, has shown that social support is a significant factor to predict university students' academic achievement [10].

Studies have also found that students with good perceived social support reported better attendance [11]. And university adjustments [12].

Several studies have shown that socio-demographic characteristics and psychosocial factors like support from family, support from friends and support from significant others were known to predict perceived social support among university students [7-15]. Although the status and associated factors of perceived social support among university students are studied in different countries, in Ethiopia perceived social support which is very important on promoting the health of University students is not studied. Therefore this study aimed to assess perceived social support and associated factors among University students at Mekelle University, Ethiopia.

## Methods

### Study design, area and period

We used a cross-sectional study to assess perceived social support and associated factors among college students from October 2018 to June 2019 in three colleges of Mekelle University. The study was conducted in the College of Health Science (CHS), College of Business and Economics (CBE) & College of Natural and Computational Science (CNCS). These colleges are higher education and training public institutions located in the Tigray region at a distance of 783 Kilometers from the Ethiopian capital.

### Source population and study population

Our source populations were all undergraduate students and, all selected undergraduate students were our study populations.

### Sampling procedure and sample size determination

Multi stage simple random sampling was used to recruit study participants. Each college was classified in to departments using proportional sample allocation. Again each department was classified in to batches (year of study) and sample was taken from each class using simple random sampling method.

The actual sample size for the study was determined by using the formula for a single population proportion by assuming 5% marginal error (d), 95% confidence interval (alpha=0.05) and the proportion, P was taken as 50%.

Based on the above information the total initial sample size will be calculated by using the formula

$$n = \frac{Z^2 p(1-p)}{d^2}$$

Where;  $n$ =require initial sample size,

$Z$ =the desired level of confidence interval 95%, ( $Z=1.96$ ).

$P$ =proportion

$q=1-p$ ,  $1-0.5=0.5$ ).

$d$ =marginal error (0.05).

$$\frac{n = (1.96)^2 \times 0.5(0.5)}{d^2} = 384$$

By considering a 10% non-response rate, the total sample size was=422

Using the design effect the final sample size was=633

### Data collection tool and technique

Data were collected using a self-administered questionnaire by trained research assistants at the classes. The questionnaire of the study had three sections. The first section contained questions on demographic characteristics of the study participants.

Perceived social support of the students was assessed in the second section by using Multidimensional Scale of Perceived Social support (MSPSS). This scale is a 12-item instrument designed to measure the status of perceived social support from three perspectives: family, friends, and significant other and was developed by Zimet, Dahlem, Zimet, & Farley [16]. Each source of social support is assessed using four specific questions and was rated on a 7-point Likert scale from 1=(Very Strongly Disagree), 2=(Strongly Disagree), 3=(Mildly Disagree), 4=(Neutral), 5=(Mildly Agree), 6=(Strongly Agree), and 7=(Very Strongly Agree). Items 1, 2, 5, & 10 assess support from significant others. Items 3, 4, 8, & 11 assess support from family and items 6, 7, 9, & 12 assess support from friends [16]. Scores greater or equal to the mean score indicated good support whereas scores less than the mean score indicated poor support.

### Data quality assurance

We used a pre-tested structured and standardized questionnaire that is the Multidimensional Scale of Perceived Social Support (MSPSS). The questionnaire was initially prepared in English and translated in to Amharic, the national language by a language expert. We gave two days of training for data collectors and supervisors. We conducted a pre-test on five percent of the total sample size before the actual data collection.

### Data processing and analysis

The collected data were edited, checked visually for its completeness and the response was coded and entered into Epi-data manager version 4.2 and exported to SPSS version 21.0 for statistical analysis. Bivariate analysis was used to determine the association between independent variable and the outcome variable.

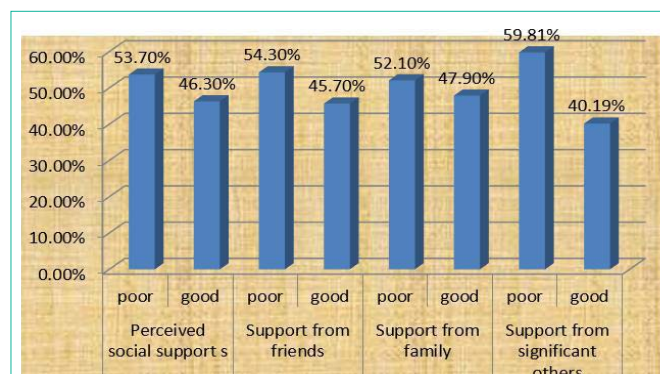


Figure 1: Status of perceived social support and its sources among Mekelle University undergraduate students (n=633).

**Table 1:** Distribution of socio-demographic characteristics and social factors of undergraduate students with perceived social support, 2019 (n=633).

Variables	Category	Perceived social support status		
		Poor n (%)	Good n (%)	Total n (%)
Sex	Female	129(20.3)	116(18.3)	245(38.7)
	Male	236(37.3)	153(24.2)	389(61.45)
Age	≥20year	269(42.5)	180(28.4)	449(70.9)
	<20 year(18-19)	94(14.85)	90(14.2)	184(29.1)
College	CHS	137(21.6)	73(11.5)	210(33.2)
	CBE	97(15.3)	59(9.3)	156(24.6)
	CNCS	130(20.52)	137(21.6)	267(42.2)
Year of education	4 <sup>th</sup> year	38(6.0)	28(4.4)	66(10.43)
	2 <sup>nd</sup> & 3 <sup>rd</sup> year	232(36.65)	131(20.7)	363(57.35)
	1 <sup>st</sup> year	94(14.85)	110(17.38)	204(32.23)
Current student's resident	Non-dorm	5(0.79)	8(1.26)	13(2.05)
	Dorm	356(56.2)	264(41.71)	620(97.95)
Parent's resident	Urban	164(25.91)	148(23.38)	312(49.29)
	Rural	200(31.6)	121(19.12)	321(50.7)
Student's monthly income (ETB)	≥300ETB	267(42.2)	234(36.97)	501(79.15)
	<300ETB	97(15.3)	35(5.53)	132(20.85)
Social factors(sources of perceived social support)				
Support from friends	Good	140(22.12)	149(23.54)	289(45.66)
	Poor	215(33.97)	129(20.38)	344(54.3)
Support from family	Good	143(22.59)	159(25.12)	302(47.71)
	Poor	231(36.49)	100(15.8)	331(52.3)
Support from others	Good	101(15.96)	166(26.2)	267(42.2)
	Poor	232(36.65)	104(16.43)	336(53.08)

Multivariable analysis conducted to assess factors that affect perceived social support among college students at a P-value<0.05, 95% confidence interval and odds ratio.

### Ethical consideration

Ethical clearance and approval obtained from the institutional review board of Mekelle University. Moreover, prior to conducting the study, the purpose and objective of the study were described to the study participants and written informed consent was obtained. The study participants were informed as they have full right to discontinue. Subject confidentiality and any special data security requirements were maintained and assured by not exposing students' name and information. Besides, the questionnaires and all other information were stored in a personal computer which is protected with a password.

## Results

### Socio-demographic characteristics

From the total 633 study participants, 389(61.5%) were males, of those 236(37.3%) had poor perceived social support. The Median age of the respondents was 20.00 (IQR=±3).

The result showed that 363(57.34%) of the study participants were 2<sup>nd</sup> and 3<sup>rd</sup> year students, of them 232(36.65%) had poor perceived social support. This result also indicated that 321(50.7%)

of the study participants came from rural area, of those 200(31.6%) had poor perceived social support. Moreover, this result revealed that 501(79.15%) of the study participants were in the monthly income category of ≥ 300 ETB, of them 267(42.2%) had poor perceived social support (Table-1).

### Social factors (Sources of perceived social support)

The result indicated that 344(54.34%) of the study participants had poor support from their friends, of them 215(33.96%) had poor perceived social support. This result also showed that 331(52.3%) of the study participants had poor support from their family, of those 231(36.5%) had poor perceived social support. Moreover, this result revealed that 366(59.81%) had poor support from significant others, of them 262(41.4%) had poor perceived social support (Table-1).

### Perceived social support with respect to family, friends and significant others

The result showed that majority (31.44%) of the study participants mildly agreed that there was a special person who is around when they were in need.

According to this result most (26.1%) of the study participants strongly disagreed that they had a special person who is a real source of comfort to them. This result also indicated that only 2.84% of the study participants very strongly disagreed that they could talk about their problems with their friends. Moreover, this result revealed that

**Table 2:** Perceived social support with respect to family, friends and significant others.

No	Items	Very strongly disagree	Strongly disagree	Mildly disagree	Neutral	Mildly agree	Strongly agree	Very strongly agree	Very strongly agree
1	There is a special person who is around when I am in need.	142(22.4)	143(22.6)	40(6.32)	39(6.17)	199(31.4)	27(4.3)	43(6.8)	
2	There is a special person with whom I can share joys and sorrows								
3	My family really tries to help me.	33(5.2)	15(2.4)	66(10.43)	136(21.5)	185(29.23)	132(20.85)	66(10.43)	
4	I get the emotional help & support I need from my family	31(5.0)	67(10.58)	103(16.3)	143(22.6)	208(32.9)	52(8.2)	29(4.6)	
5	I have a special person who is a real source of comfort to me.	34(5.4)	165(26.1)	152(24.0)	153(24.2)	56(8.85)	38(6.0)	35(5.53)	
6	My friends really try to help me.	38(6.0)	44(6.95)	287(4.5)	157(24.8)	58(9.2)	18(2.8)	31(5.0)	
7	I can count on my friends when things go wrong	32(5.05)	77(12.2)	163(25.8)	146(23.1)	141(22.3)	45(7.12)	29(4.58)	
8	I can talk about my problems with my family	16(2.5)	88(13.9)	92(14.5)	113(17.9)	159(25.1)	102(16.1)	63(9.95)	
9	I have friends with whom I can share my joys and sorrows.	31(4.9)	57(9.0)	101(16.0)	145(22.9)	163(25.8)	96(15.2)	40(6.32)	
10	There is a special person in my life who cares about my feelings.	89(14.1)	260(41.1)	37(5.85)	127(20.1)	53(8.37)	52(8.2)	15(2.4)	
11	My family is willing to help me make decisions	15(2.4)	53(8.37)	108(17.1)	197(31.1)	152(24.0)	75(11.8)	33(5.2)	
12	I can talk about my problems with my friends	18(2.8)	52(8.2)	171(27.0)	151(23.9)	168(26.54)	51(8.1)	22(3.5)	

most (32.89%) of the study participants mildly agreed that they got the emotional help & support they need from their family (Table-2).

### Status of perceived social support

The result revealed that the status of perceived social support among undergraduate Mekelle university students was found as 340 (53.7%) poor and 293(46.3%) good.

### Factors associated with perceived social support

Sex, parent's resident, student's monthly income, support from family, support from friends and support from significant others were identified as predictors of perceived social support declared with odds ratio and 95% CI in Multivariable analysis Figure 1.

Male students were 49.5% less to have a good perceived social support comparing to their counterpart (AOR: 0.505, CI: [0.331-0.772]). Students whose parents were living in rural area were 59.5% less to have good perceived social support than students who came from urban area (AOR: 0.405, CI: [0.260-0.630]). Those students who were in the monthly income category of <300 ETB were 58.1% less to have a good perceived social support than students who had ≥ 300 ETB monthly income (AOR: 0.419, CI: [0.226-0.774]).

Students who had poor support from their friends were 65.1% less to have a good perceived social support than students who had good support from their friends (AOR: 0.349, CI: [0.229-0.532]). Those students who had poor support from their families were 70.9% less to have a good perceived social support than students with good support from their families (AOR: 0.291, CI: [0.190-0.445]). Students who had poor support from significant others were 86.6% less to have a good perceived social support than students who had good support from significant others (AOR: 0.136, CI: [0.088-0.211]) (Table-3).

## Discussion

The current study showed that the perceived social support among undergraduate students of Mekelle University was found as 340 (53.7%) poor and 293(46.3%) good. The present study also indicated that sex, parent's resident, student's monthly income, support from friends, support from families and support from significant others were significant predictors of perceived social support among Mekelle University students.

The present study revealed that female students were more likely to have a good perceived social support than male students. This finding is similar to previous studies conducted in USA [12,13 &17], in which females reported better perceived social support. This can be explained by the fact that females more contact with network members and they have tendency to possess relationships characterized by greater intimacy, emotional disclosure, and empathy.

The current study indicated that students who came from urban area were more likely to have good perceived social support than students came from rural area. This result is congruent with previous study of social support that used representative community samples in general adult populations conducted in Korea [15].

The present study found that students who had monthly income less than 300 ETB were less likely to have a good perceived social support than students who had greater or equal to 300ETB. This finding is similar to previous studies conducted in Germany [18], and USA [19], where socioeconomically disadvantaged peoples reported poor perceived social support status.

The current study showed that students with a good support from their friends, families and significant others were more likely to have

**Table 3:** Bivariate and multivariate analysis results of factors associated with perceived social support of undergraduate students of Mekelle university (n=633).

Variables	Category	Perceived social support status		P-value	COR	AOR[CI]
		Poor	Good			
		Sex	Female			
	Male	236	153	0.002	0.721	0.505[0.331-0.772]
Age	≥20year	269	180			1
	<20 year(18-19)	94	90	0.812	1.431	
College	CHS	137	73			1
	CBE	97	59	0.185	1.142	
	CNCS	130	137	0.32	1.978	
Year of education	4 <sup>th</sup> year	38	28			1
	2 <sup>nd</sup> & 3 <sup>rd</sup> year	232	131	0.542	0.766	
	1 <sup>st</sup> year	94	110	0.212	1.588	
Current student's resident	Non-dorm	4	9			1
	Dorm	356	264	0.736	0.33	
Parent's resident	Urban	164	148			1
	Rural	200	121	0	0.67	0.405[0.260-0.630]
Student's monthly income (ETB)	≥300ETB	267	234			1
	<300ETB	97	35	0.005	0.412	0.419[0.226-0.774]
Support from friends	Good	140	149			1
	Poor	215	129	0	0.564	0.349[0.229-0.532]
Support from family	Good	143	159			1
	Poor	231	100	0	0.389	0.291[.190-0.445]
Support from others	Good	101	166			1
	Poor	232	104	0	0.273	0.136[.088-0.211]

a good perceived social support than students with poor support from their friends, families and significant others. This result is congruent to previous studies [7-9 &12]. This can be explained due to the fact that perceived social support is a social & psychological support from friends, families and significant others [20]. Hence, poor support from friends, families and significant others lead to poor perceived social support.

## Limitation of the Study

There is limited literature regarding perceived social support and associated factors among University students. There is no similar study done in Ethiopia previously. More ever, using a self-administered questionnaire, the respondents might not pay full attention to it/read it properly.

## Conclusion

The study found that majority of the study participants had poor perceived social support. This study also indicated that sex, parent's resident, student's monthly income', support from friends, support from families and support from significant others were significant predictors of perceived social support among Mekelle University undergraduate students.

## Declarations

### Ethics approval and consent to participate

Ethical clearance and approval obtained from the institutional

review board of Mekelle University. Moreover, before conducting the study, the purpose and objective of the study were described to the study participants and written informed consent was obtained. The study participants were informed as they have full right to discontinue. Subject confidentiality and any special data security requirements were maintained and assured by not exposing patients' names and information. Besides, the questionnaires and all other information were stored on a personal computer which is protected with a password.

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