Emotional Maturity, Social Media Attachment and Identity Development among Adolescents in Secondary School, Oromia Region Ethiopia.

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Abstract

The purpose of this study was to investigate the effect of emotional maturity and social media attachment for identity development among adolescents. Cross sectional survey research design was employed on 441 randomly selected adolescents in six nominated secondary schools from six nominated zonal towns of Oromia region. Aspects of identity questionnaire, emotional maturity scale, and social media attachment scale were employed for the assessment. Descriptive statistics, independent sample t-test, Pearson correlation, one-way ANOVA, and multiple liner regression were utilized to analyze the data. As a result, Out of 441 participants, 6.3% of the adolescents reported diffused identity development; 59.6% adolescents had been extremely emotionally immature; and 35.4% of adolescents were attached to social media inappropriately. Moreover, collective identity and personal identity were reported highly and poorly, respectively as identity development dimensions by the adolescents. Besides, rejection by others, unhealthy ethnic based political competition, sudden changes in life, hate speech in social media, and unrealistic expectations were highly reported causes for identity crisis. Furthermore, personal disintegration, social maladjustment, lack of independence, and emotional instability were reported as emotional maturity dimensions. Pearson correlation result showed that emotional immaturity strongly and positively correlated with social media attachment. On the other hand, there was a moderate and negative correlation between identity development not only with emotional immaturity but also with extreme social media attachment. Specifically, social identity with social maladjustment, relational identity with emotional regression, collective identity with lack of independence, and personal identity with personal disintegration were negatively and strongly correlated. In addition, ANOVA result revealed that birth order, average family monthly income, educational status of parents had statistically significant mean effect on identity development, emotional immaturity, and media attachment with different effect size. Likewise, independent sample t-test result showed that number of languages spoken and variation of family ethnic background had a statistically significant mean effect on social media attachment, emotional immaturity and identity development. Furthermore, multiple liner regression analysis result showed that personal integration significantly predicted identity development. Based on the findings, it is suggested that collaborative, multidimensional, and culture based preventive and intervention programs to create a helpful learning environment that promotes students' positive

identity development and psycho-socio-emotional wellbeing, improves their productivity, and enhances their success be developed and applied.

Keywords: Emotional Maturity, Social Media Attachment, Identity Development, Adolescent

1. Introduction

In the social jungle of human existence, there is no feeling of being alive without a sense of identity. Adolescents form their own personal sense of who they are, based on several things, including the reactions and opinions of family and friends as well as what is considered fun and chic by the parameters of the social contexts in which they live. Adolescence is the developmental transition between childhood and adulthood wherein physical, cognitive and psychological changes happen (Feidman, Papalia & Wendkos ,2004), and this is also the stage where every aspect of a young person's life changes. The development of a strong and stable sense of self is widely considered to be one of the central tasks of adolescence (Hoffman, Paris, Hall, Schell, 1988). Identities are the traits and characteristics, social relations, roles, and social group memberships that define who one is. According to (Erikson,1950), identity development involves an adolescents' active search for their role, contemplation of personal strengths and weaknesses, and the ability to make meaning of their context and experiences. Forming a stable identity is important, because role confusion might manifest itself in the form of delinquent and outright psychotic episodes (Erikson, 1950). Different social contexts may trigger an individual to think, feel and act on basis of his personal, family or national-level of self (Turner et al, 1987). Social Identity Theory asserts that group membership creates in-group/self-categorization and enhancement in ways that favor the in-group at the expense of the out-group. The examples of Turner and Tajfel (1986) showed that the mere act of individuals categorizing themselves as group members was sufficient to lead them to display in-group favoritism.

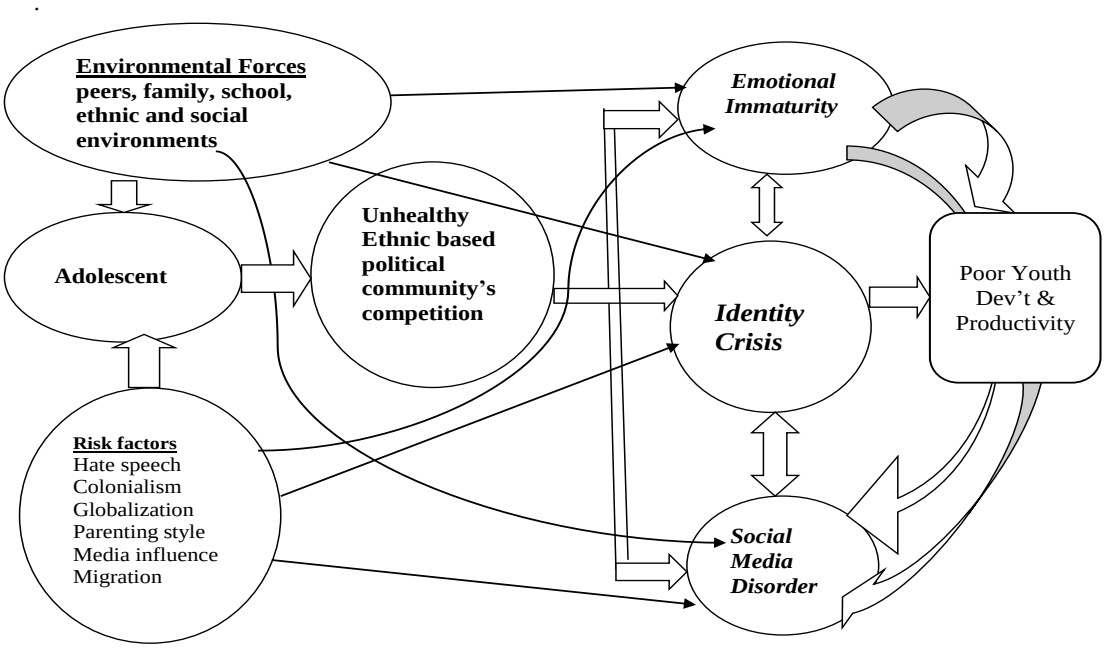
Social media attachment is currently one of the most popular leisure activities among adolescents (Subrahmanyam et al., 2011). Social media (e.g., *Facebook, Instagram, Snapchat,* etc.) host virtual communities where users can create individual public and/or private profiles (Tufekci, 2008). Users can access social media on different platforms (mobile or computer devices), for different activities e.g., interacting with real-life friends, meeting others based on shared interest, chatting, mailing, sharing

or creating pictures, blogging, dating, playing games, gambling that has direct/indirect impact for identity development (Wilson, 2012). According to McKenna and Bargh (1999), people are turning to the Internet to meet important social and psychological needs. Expressing identity is a strong self-motivator for using the Net. Self-reflection and identity formation can be enhanced by emotional and intellectual openness when the Net-generation finds it easy to expose inner thoughts and personal information on creative web pages. Generally speaking, the use of media is seen as a double edged sword having both positive and negative impacts on this group. It makes the youth and adolescents weak in real life skills, takes them away from reality, helps living in fantasy, decreases interpersonal interactions, diminishes outdoor activities, creates violence in their mind due to violent games, increases anxiety levels wanting to achieve game targets, distracts them from study, alters their lifestyle, time management and eating habits, causes addiction and psychiatric disorders as depression, bipolar disorder, obsessive compulsive disorder and attention deficit disorder (Muduli, 2014). This risk of exposure to social networks is presumed to have a role in identity development and perhaps emotional maturity.

As a gap, the issue of identity and its interaction effect in multi-diversified society is not well researched in our case. In Ethiopia, the multifaceted religion based and ethno-nationalist violence appears to be galvanized by individuals and groups holding vested interests and assisted by online hate speech through social media. That is to say media outlets, such as *Facebook*, help potential haters to easily spread their false information and hatred to secure followers. Yet, its effect for identity crisis and emotional immaturity has not been studied well. Therefore this study intended to fill the gap by addressing the following research questions:

- What is the prevalence of emotional maturity, social media attachment and identity development among adolescents in Oromia Region?
- Are there any relationships between emotional maturity, social media attachment and identity development among adolescents?
- Are there any statistically significant mean differences in emotional maturity, social media attachment and identity development of the students across their socio-demographic variables?
- To what do extent emotional maturity and social media attachment predict identity development among adolescents?

Figure 1: Conceptual framework



2. Research Methodology

2.1 Study Design

The purpose of this study was to examine the effect of emotional maturity and social media usage for identity development among adolescents in secondary school in Oromia region. Therefore, to achieve this purpose, cross-sectional survey research design was employed.

2.2 Study Population, Sampling and Sample Size Determination

All secondary school community was the population for the study. According to Oromia Region educational office, 41,709 students whose grade levels were from 9 up to 12 were enrolled in 6 selected zonal town based secondary schools in 2019/20

G.C academic year. These zonal towns were Ambo, Adama, Addis Ababa, Asella, Nekemte and Bishoftu. The inclusion criteria to be recruited as a sample were being a student in the selected secondary school and being adolescent whose age ranges from 14 up to 19 years. Those who were not willing to participate in the study were excluded. Following this, the sample size was calculated using Krejcie & Morgan (1970) formula for minimum sample size calculation. As a result, the sample size was estimated to be 460. The estimated prevalence of emotional maturity and social media usage and identity development were estimated as 50%. The desired confidence interval was 95% (i.e. Z = 1.96, d = degree of accuracy was taken as 5% and q = (1-p)= 0.50). Based on the above information, the sample size for the study was 384. Since the non- respondents' ratio from the previous studies indicated high proportion of sample size, 20.0%, that number, i.e., 20% contingence samples were added to the minimum sample size. The final sample size was 460. However, 441 questionnaires were correctly filled and returned. The researchers also discarded 19 questionnaires for incompleteness and fraud. Due to this, the study analysis was done based on the response of 441 properly filled questionnaires by the study participants. Therefore, response rate was 95.8%.

2.3 Sampling Technique

Participants were 460 students randomly (lottery) selected from six study sites in Oromia region, Ethiopia. Multi-stage sampling was used to recruit equal numbers of students from each town and school. In doing so, first two secondary schools were randomly selected in each selected zonal town. At school level, one class from grade 9 -12 was selected again using random sampling. Following that 10 male and female students were randomly selected from 48 classes. That is, a total of 40 students were selected from 12 secondary schools. Finally, a pool of 460 students was included in the study. Needless to say, proportionate stratified sampling technique was employed for sex, grade level, study site, ethnicity, academic performance, age and family economic status to select the samples from the population.

2.4 Study Variables

Dependent variables of the study were emotional maturity, social media usage and identity development of adolescents. Also, the prime independent variables for this

study were sex, number of language spoken, variation, birth order, father's educational status, mother's educational status, and family average monthly income.

2.5 Data Collection Instruments

A pre-established standardized questionnaire was used to collect data. The questionnaire has four sections where the first section collects data on students' socio-demographic characteristics. In the second section, emotional maturity scale was used to collect the data under three broad categories of emotional maturity. This original emotional maturity scale developed by Y. Singh and M. Bhargava (1991) measures a list of five broad factors used to determine the emotional state of participants. Items of the scale are in question form demanding information for each in either of the 5 options: Always, Mostly, Uncertain, Usually, Never in which the items were scored as 5, 4,3,2,1 respectively. Therefore, the higher the adolescents score on the scale, the greater degree of the emotional immaturity and vice versa. In the third section, Social Media Usage Scale was adapted by the researchers from social media Disorders (SMD) rating scale. The scale was done based on the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) which was developed by R.J.J.M. van den Eijnden et al., (2016). The original 27 items rating scale comprise nine subscales representing the core domains including Preoccupation, Tolerance, Withdrawal, Displacement, Escape, Problems, Deception, Displacement, and Conflict. Response categories ranged from 1 (never) to 5 (Extremely). Higher score indicates extreme social media attachment. Finally, Aspects of Identity Questionnaire (AIQ-IV) developed by Cheek and Briggs (2013) was used to test the identity development of adolescents. This scale was pre-tested and then applied in the present study. The scale consisted of 45 items and was divided into four subscales as Personal identity orientation, Relational identity orientation, Social identity orientation, and Collective identity orientation. The scale has a five point rating scale and the scoring ranges from 5 to 1 for each item. After getting responses, the scores for each dimension were calculated by summing up the weightage of responses for respective statements and categorized into high, average and low. Higher score indicates positive identity development.

2.5.1 Pilot Test Result

The pilot test was done to check the reliability and validity of the standardized instruments. Beside, clarity of instruction, items and language simplicity were also

checked. The pilot study was conducted in Guder town by selecting 41 students (10% from general sample size) from Guder Preparatory school. All tools were translated into Amharic and Afan Oromo languages. Face validity of the English, Afan Oromo and Amharic versions of the tools were assessed by two senior early childhood care and education experts from Ambo University. The instruments' translation consistency was also examined by two language experts from Ambo University. Based on the comments and suggestions of the experts, changes were made in wording and numbering of items. In the pilot study, the reliabilities of the tools were found to be 0.818, 0.898 and 0.895 for aspects of identity questionnaire, emotional maturity scale and social media usage questionnaire, respectively. The consensus of the experts was that the instruments measure what they purport to measure and were, therefore, adjudged adequate enough for the study.

2.6 Method of Data Analysis

The data were analyzed through descriptive statistics (percentages, mean and standard deviation) and inferential statistics (independent sample t- test, Pearson correlation coefficient, ANOVA, and multiple liner regression). All data were analyzed using Statistical Package for Social Science (SPSS) for window version 20.

2.7 Ethical Considerations

At individual level, all American Psychological Association (APA) ethical standard guidelines were strictly respected. Hence, the participants were briefed regarding the nature, objectives and method of the study and their voluntary participation acquired. In addition, total confidentiality with regard to the identification of the participants and information volunteered were assured at all times during and after the survey.

3. Result of the Study

Demographic Characteristics of the Respondents

Among the 441 respondents, 268 (60.8%) were male, and 173 (39.2%) were female. The mean age of the respondents was 17.72 (SD =1.391) where the minimum and maximum ages were 14 and 19. Among the respondents, 238(54%) and 203(46%) were multilingual and monolingual, respectively. With regard to students' ethnic group, most respondents, 318(72.1%), were from multiethnic family, whereas 123(27.9%) of respondents were from the same ethnic group family. Besides,

regarding fathers' educational status, out of 441 respondents, 101 (22.9%) were found to be degree holders and above, followed by 5 up to 8 graders (19.3%) certificate holders (15.6%), and 1st to 4th graders (14.7%); 63(14.3%), 40(9.1%) and 18(4.1%) of the respondents were 9-12 graders, illiterate, and diploma holder, respectively. With regard to mothers' educational status, out of 441 respondents, 124 (28.1%) were 9-12 graders, followed by 1 up to 4 graders (18.1%), 5-8 graders (14.3%), degree holders and above (12.9%); 50(11.3%), 39(8.8%) and 28(6.3%) of the respondents were illiterate, certificate holders and diploma holders, respectively. Finally, 199 (45.1%), 129(29.3%), and 113(25.6%) of the respondents' average family monthly income was considered as lower, middle, and higher-income group.

Table 1: Description of Respondents' Status of Emotional Maturity, Media Usage and Identity Development among Adolescents (N=441)

Variable	Level	Frequency	Percentage
Identity Development Scale	Diffused identity (35-70 score)	28	6.3
	Average (71-100 score)	148	32.4
	Positive identity (101- 156 score)	270	61.2
Emotional Maturity Scale	Extreme Emotional Maturity (31-48 score)	47	10.7
	Moderate Emotional Maturity (49-54 score)	37	8.4
	Emotional Immaturity (55- 64 score)	94	21.3
	Extreme Emotional Immaturity (65-145 score)	263	59.6
Social Media Usage	Never Media User (0-9 score)	6	1.4
	Lower Media User (10-18 score)	216	49
	Moderate Media User (19-26 score)	63	14.3
	Extreme Media User (27-45 score)	156	35.4

As can be observed from Table 1, out of 441 respondents, 28(6.3%), 148 (32.4%) and 270 (61.2%), of the adolescents were found to be exhibit diffused, average, and positive identity development, respectively. Besides, the overall full scale mean score of identity development of adolescent was 104.71(SD=20.534). It is important

to mention that 61.2% of the adolescents had high level positive identity development. Among the dimensions of identity development, collective identity orientation (M=33.21, SD=11.47), relational identity orientation (M= 31.42, SD=6.95), social identity orientation (M=22.04, SD=7.85), and personal identity orientation (M=18.05, SD=7.32) were reported by the respondents. It is worth mentioning that collective identity was highly reported dimension of identity and personal identity was the least reported identity development dimension. Regarding emotional maturity, out of the 441 participants, 47 (10.7%), 37(8.4%), 94(21.3%), and 263(59.6%) were extreme emotional mature, moderate emotional mature, emotional immature, and extreme emotional immature, respectively. The overall full scale mean score of the respondents' emotional maturity was 72.13 (SD=20.875). Among the emotional maturity dimensions, the mean score of the emotional stability was 22.61(SD=9.23). This means 46.9% of the adolescents reflected lack of capacity to dispose problems, irritability, need for constant help to accomplish one's day to day work, vulnerability, stubbornness, and temper tantrums. In this study, according to Table 2, on social adjustment, the mean score was 26.30(SD=9.56). Based on this result, it can be deduced that there was a lower effort made by adolescents to cope with standards, values and needs of a society in order to be accepted. Furthermore, in Table 1, the mean score of the independence variable was 23.22(SD=8.724). This indicates that 44.9% of the adolescents were dependents on others, have lack of objective interests in people, and think adolescents as unreliable. While comparing the dimensions of emotional maturity, the adolescents had fewer score in emotional stability implying a better emotional stability than other emotional maturity dimensions. The adolescents had better independence than social adjustment. At last, it is vital to inform that the higher mean score for social adjustment was reported which designates that the adolescents had serious problems in social adjustment than in independence and emotional stability. With regard to social media usage, 156(35.4%) and 63 (14.3) of the adolescents were extreme and moderate level social media users followed by 216 (49%) of lower social media users. However, 6(1.4%) of the students never used any social media. The mean score of the social media usage was 22.54(SD=10.234). Here, it is advisable to know that 156(35.4%) of the adolescents could be viewed as extreme level social media users as can be reported in Table 1.

General Information about Social Media Usage among Adolescents in Secondary Schools

The respondents reported that 74% of the adolescents got access of internet from mobile data; 41% of adolescents used social media for the past 5 years; 38% of them were regular users; 54% of them spent less than 1 hour on accessing the internet; 67% of them got parent permission to access internet; and 82% of them claimed to have used social media for entertainment purpose.

Prevalence of Social Media Attachment Subscale among Adolescents

Table 2: Prevalence of Social Media Attachment Subscale among Adolescents

S. N	Subscale	**Extremely**	**Very Much**	**Sometimes**	**Rarely**	**Never**	**Mean**	**SD**
1	Preoccupation	88	92	110	65	86	2.93	1.391
2	Tolerance	162	92	53	68	66	2.51	1.48
3	Withdrawal	250	24	44	24	99	2.32	1.67
4	Persistence	140	83	60	64	94	2.75	1.54
5	Displacement	171	95	71	55	49	2.36	1.38
6	Problem	227	46	27	22	119	2.46	1.73
7	Deception	182	75	58	42	84	2.48	1.55
8	Escape	117	94	76	45	49	2.31	1.37
9	Conflict	198	68	44	45	86	2.44	1.58
	Grand Mean						2.6	1.55

As can be depicted in Table 2, persistent usage and preoccupation with social media were highly reported as social media attachment dimensions. Escape was the least reported media attachment style.

Correlation between Emotional Maturity, Social Media Usage and Identity Development among Adolescents

Pearson correlation coefficient was employed whereby the following criteria were used to classify magnitude of correlations: small, r =.1-.29; medium, r =.3-.49; strong, r =.5-1.0 (Cohen, 1960). In this study, there is a strong and positive

correlation between emotional maturity and social media usage among adolescents (r = 0.453, p < 0.05). This result indicated that as adolescents' social media usage increases, their emotional immaturity also increases. In addition, Table 3 below shows that there is a moderate and negative correlation between identity development and social media attachment (r = -.478, p < 0.05). This implies that the more adolescents are attached to social media, the fewer score could be recorded on the positive aspects of identity development. Finally, Table 3 shows that there is a significant, strong and negative relationship between emotional immaturity and identity development (r = -.539, p < 0.05). This result indicates that as emotional immaturity increases, positive identity development decreases.

Table 3: Correlation between Emotional Maturity, Social Media usage and Identity Development

Variables	Mean	SD		Media Usage	Identity development	Emotional immaturity
Media Usage	22.54	10.234	r	1	-.478**	.453**
			Sig.		.000	.000
Identity development	104.71	20.534	r		1	-.539**
			Sig.			.000
Emotional immaturity	72.13	20.875	r			1
			Sig.			

***. Correlation is significant at the 0.01 level (2-tailed).*

Inter-correlation between Aspect of Identity Development and Emotional Maturity Dimensions

Table 4 shows that in line with the expectation, significant negative inter-correlational relationships were observed between the subscale of identity development and emotional maturity dimensions ranging from r=-.100* to -.778**. More specifically, emotional instability has negative significant relationship with social identity (r=-.497, p<0.05), relational identity (r=-.484, p<.05), collective

identity (r= -.577, p<0.05), and personal identity(r=-.286, p<0.05). The result indicated that as emotional instability of adolescents enhances the positive development of collective, social, relational and personal identity of adolescents, and also declines in their due order. Correspondingly, emotional regression correlated negatively and significantly with relational identity (r= -.612, p<0.05) more than with collective identity (r=-.465), personal identity(r=-.462, p<0.05) and social identity (r=.296). Likewise, social maladjustment correlated negatively and significantly with social identity (r= -.647, p<0.05) more than with collective identity (r=-.594, p<0.05), relational identity (r= -.540) and personal identity(r=-.381, p<0.05) respectively (see table 4). This result shows that when social maladjustment of adolescent increases, the healthy development of social identity, collective identity and personal identity decreases. More importantly, personal disintegration correlated highly with personal identity (r=-.584, P<0.05). Finally, among the emotional maturity dimensions, lack of independence negatively and significantly correlated with the identity development dimensions such as personal identity(r=-.570, p<0.05), relational identity (r=-.310, p<.05), social identity (r= -.525, p<0.05), and collective identity (r=-.778, p<0.05). This finding indicates that adolescents with high lack of independence had also more diminished collective, personal, social and relational identity in their due order (see Table 4).

Table 5: Pearson Correlations Result among Aspect of the Dimensions of Identity Development and Emotional Maturity (N=441)

Variables	SI	RI	CI	PI	ES	EP	SA	PI	Ind	EM	ID
Social Identity	1										
Relational Identity		1									
Collective Identity			1								
Personal Identity				1							
Emotional Instability	-.497**	-.484**	-.577**	-.286**	1						

Emotional Regression	-.296**	-.612	-.465	-.462		1					
Social Maladjustment	-.647**	-.540**	-.594**	-.381**			1				
Personal Disintegration	-.485	-.203	-.396**	-.584**				1			
Lack of Independence	-.525**	-.310**	-.778**	-.570**					1		
Emotional Immaturity	-.508**	-.428**	-.305**	-.683**						1	
Identity Development					-.516**	-.332	-.289**	-.746	-.660**	-.539**	1

**Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

Note: PI= Personal Identity, RI=Relational Identity, SI=Social Identity, CI=Collective Identity, ID=Identity Development, ES=emotional stability, SA=Social Adjustment, Ind= Independence, EM=Emotional Maturity

Mean Differences in Emotional Maturity of the Students across their Socio-Demographic Variables

The results of a follow-up one-way ANOVA test in Table 5 below revealed that emotional maturity ($F\ (2,438) = 4.497,\ p < .05$) varied significantly as a function of the birth order of students. The mean emotional maturity score of middle born respondents (M=74.57, SD=21.792) was higher than the first born respondents (M=73.81, SD=20.435), and last born respondents (M=66.97, SD=17.671). Furthermore, the Benferroni post hoc multiple comparisons revealed that middle born respondents demonstrated highly significant pair wise mean difference on emotional maturity as compared to last born respondents ($p < 0.05$).

The univariant analysis of variance in Table 5 depicted that educational status of students' father s had a statistically significant mean effect on emotional maturity (*F (6, 434) = 11.296, p <.05)*. Following this, the mean emotional maturity score of degree and above holder respondents' fathers (M=61.68, SD=13.31) was lower than those who were 9 -12 graders (M=71.95, SD=20.28), 5-8 graders (M=71.62, SD=23.40), illiterate (M=79.63, SD=23.91) certificate holders (M=78.88, SD=19.25), and 1-4 graders (M=83.85, SD=18.18). (See Table 5). Furthermore, the Benferroni post hoc multiple comparisons revealed that of respondents' fathers who were degree holder and above demonstrated a highly significant pair wise mean difference on media usage as compared to respondents' fathers who were illiterate ($p< 0.05$),1-4 graders ($p< 0.05$), 5-8 graders ($p< 0.05$), 9 -12 graders ($p < 0.05$), and certificate holders ($p < 0.05$).

Table 5: Summary of One-Way ANOVA Results for Students' Birth order, Parents' Educational Status and Family Monthly Income on Emotional Maturity (N=441)

Variable	Category	N	M	SD	95% Confidence Interval for Mean		Minimum	Maximum	F	p-value
					Lower Bound	Lower Bound				
Birth Order	First born	123	73.81	20.435	70.17	77.46	40	126	4.497	.012
	Middle Born	230	74.57	21.792	71.73	77.40	35	129		
	Last Born	88	66.97	17.671	63.22	70.71	34	115		
Adolescents' Father Educational	Illiterate	40	79.63	23.911	71.98	87.27	38	126	11.296	.000
	1-4 graders	65	83.85	18.188	79.34	88.35	38	124		
	5-8	85	71.6	23.4	66.	76.	3	12		

Status	graders		2	00	58	67	4	6		
	9-12 grader	63	71.95	20.281	66.84	77.06	40	129		
	Certificate	69	78.88	19.253	74.26	83.51	39	124		
	Diploma	18	66.28	20.358	56.15	76.40	40	113		
	≥Degree	101	61.68	13.313	59.05	64.31	37	98		
Adolescents' Mother Educational Status	Illiterate	50	79.04	20.588	73.19	84.89	38	126	10.000	.000
	1-4 graders	80	77.55	19.698	73.17	81.93	34	117		
	5-8 graders	63	68.86	20.415	63.72	74.00	34	113		
	9-12 grader	124	73.87	20.758	70.18	77.56	40	124		
	Certificate	39	84.79	23.754	77.09	92.50	44	129		
	Diploma	28	61.96	11.876	53.57	62.78	38	81		
	≥Degree	57	58.18	14.653	58.08	65.85	37	98		
Adolescents' monthly family income	Lower	199	64.21	18.282	61.65	66.76	34	120	37.223	.000
	Middle	129	78.37	19.405	74.99	81.75	34	126		
	Higher	113	81.73	20.836	77.84	85.61	42	129		

As shown in Table 5, the univariant analysis of variance disclosed a statistically significant difference in emotional maturity (*F (6, 434) = 10.000, p <.05*) of students as a function of their mothers' educational status. In the same way, the Benferroni post hoc multiple comparisons revealed that degree holder and above mothers of respondents confirmed highly significant pair wise mean difference on emotional

maturity as compared to respondents' mothers who were illiterate ($p< 0.05$),1-4 graders ($p< 0.05$), 5-8 graders($p< 0.05$), 9 -12 graders ($p < 0.05$) and certificate holders ($p < 0.05$). For this reason, the mean emotional maturity score of degree and above holder respondents' mothers (M=58.18, SD=14.65) was lower than their counterpart respondents' mothers who were diploma holders (M=61.96, SD=11.87), 5-8 graders (M=68.85, SD=20.41), 9 -12 graders (M=73.87, SD=20.75), illiterates (M=79.04, SD=2056), 1-4 graders (M=77.55, SD=19.68) and certificate holders (M=84.79, SD=23.75). (See Table 5). The univariant analysis of variance in Table 6 below showed that average family monthly income had a statistically significant mean effect on emotional maturity (*F (2, 431) = 20.760, p <.05*). What is more, the Benferroni post hoc comparisons indicated that respondents with lower family income reported highly significant mean difference on emotional maturity as compared to respondents with middle family income ($p < 0.05$), and respondents with higher family income ($p < 0.05$).

Comparison of Social Media Usage across Demographic Variable of Respondents

Table 6: Summary of One-Way ANOVA Results for Students' Birth Order, Parents' Educational Status of Students and Family Monthly Income on Social Media Usage (N=441)

Variable	Category	N	M	SD	95% Confidence Interval for Mean		Minimum	Maximum	F	p-value
					Lower Bound	Lower Bound				
Birth Order	First born	123	22.22	9.928	20.45	23.99	9	42	5.173	.006
	Middle Born	230	23.79	10.767	22.39	25.19	10	45		

	Last Born	88	19.74	8.608	17.91	21.56	9	39		
Adolescents' Father Educational Status	Illiterate	50	24.15	10.951	20.65	27.65	11	41	18.026	.000
	1-4 graders	80	29.28	9.128	27.02	31.54	11	44		
	5-8 graders	63	23.93	11.352	21.48	26.38	9	43		
	9-12 grader	124	21.79	9.570	19.38	24.20	12	45		
	Certificate	39	25.57	9.942	23.18	27.95	12	42		
	Diploma	28	19.00	7.693	15.17	22.83	10	32		
	≥Degree	57	15.45	5.147	14.43	16.46	9	32		
Adolescents' Mother Educational Status	Illiterate	50	26.12	11.405	22.88	29.36	11	41	10.576	.000
	1-4 graders	80	26.50	10.004	24.27	28.73	11	43		
	5-8 graders	63	22.68	9.804	20.21	25.15	10	38		
	9-12 grader	124	22.11	9.508	20.42	23.80	9	42		
	Certificate	39	25.26	12.738	21.13	29.39	9	45		
	Diploma	28	15.07	4.259	13.42	16.72	10	21		
	≥Degr	5	16.	6.2	14.	18.	10	32		

	ee	7	46	54	80	12				
Adolescents' monthly family income	Lower	199	18.98	8.874	17.74	20.23	9	45	27.295	.000
	Middle	129	24.11	10.679	22.25	25.97	9	44		
	Higher	113	27.03	9.813	25.20	28.86	10	42		

The results of a follow-up one-way ANOVA test in Table 6 revealed that media usage (*F (2,438) = 1.402, p <.05)* varied significantly as a function of the birth order of students. Correspondingly, the Benferroni post hoc multiple comparisons also revealed that last born respondents ($p < 0.05$) demonstrated highly significant mean difference on media usage as compared to middle born respondents ($p < 0.05$), and first born respondents ($p < 0.05$). As shown in Table 6, the mean media usage score of last born respondents (M=19.74, SD=8.60) was lower than that of first born respondents (M=22.22, SD=9.92), and middle born respondents (M=23.79, SD=10.76). As shown in Table 6, the univariant analysis of variance depicted that educational status of students' fathers had a statistically significant mean effect on media usage (*F (6, 434)* = 18.026*, p <.05*). Furthermore, the Benferroni post hoc multiple comparisons revealed that of respondents' fathers who were degree holders and above demonstrated highly significant pair wise mean difference on media usage as compared to respondents' fathers who were illiterate ($p< 0.05$),1-4 graders ($p< 0.05$), 5-8 graders($p< 0.05$), 9 -12 graders ($p < 0.05$), and certificate holders ($p < 0.05$). Correspondingly, as can be observed from Table 8, the mean media usage score of degree and above holders respondents' fathers (M=15.45, SD=5.14) was lower than respondents' fathers with 9 -12 graders (M=21.79, SD=9.57), 5-8 graders (M=23.93, SD=11.35), illiterate (M=24.15, SD=10.95), certificate holders (M=25.57, SD=9.94), and 1-4 graders (M=29.28, SD=9.12).

As shown in Table 6, the univariant analysis of variance disclosed a statistically significant difference in media usage (*F (6, 434) = 10.576, p <.05*) of students as a function of their mothers' educational status. Furthermore, the Benferroni post hoc multiple comparisons revealed that respondents' mothers who were degree holders

and above ($p < 0.05$) demonstrated highly significant pair wise mean difference on media usage as compared to respondents' mothers who were illiterate ($p< 0.05$),1-4 graders ($p< 0.05$), 5-8 graders ($p< 0.05$), 9 -12 graders ($p < 0.05$) ,and certificate holders ($p < 0.05$). Likewise, as can be revealed from Table 6, the mean media usage score of degree and above holders respondents' mothers (M=16.46, SD=6.25) was lower than respondents' mothers who were 9-12 graders (M=22.11, SD=9.50), 5-8 graders (M=22.68, SD=9.80), certificate holders (M=25.26, SD=12.73), illiterate (M=26.12, SD=11.40), and 1-4 graders (M=26.50, SD=10.00) .(See table 6). Hence, the univariant analysis of variance in Table 7 showed that average family monthly income had a statistically significant mean effect on media usage (*F (2, 438) = 27.295, p <.05*). The mean media usage score of respondents with lower family monthly income (M=18.98, SD=8.87) was lower than that of respondents with middle family income (M=24.11, SD=10.67), and respondents with higher family income (M=27.03, SD=9.81).

Comparison of Identity Development Across Demographic Variable of Respondents

The results of ANOVA test in Table 7 revealed that identity development (*F (2,438) =2.737, p > .05)* did not vary significantly as a function of the birth order of students. Moreover, the post hoc multiple comparison result showed that a statistically significant pair wise mean difference in identity development was found with first born and last born students. In the same way, the mean identity development score of last-born respondents (M=109.75, SD=18.19) was higher than that of first born respondents (M=103.63, SD=20.82), and middle born respondents (M=104.45, SD=20.74) (See table 8).

The univariant analysis of variance in Table 7 depicted that educational status of students' fathers had a statistically significant mean effect on identity development (*F (6, 434) = 6.820, p < .05).* In addition, regarding educational status of students' fathers, a statistically significant pair wise difference in identity development was found among illiterate fathers ($p< 0.05$) as compared to 5-8 graders ($p< 0.05$), and degree and above holders ($p< 0.05$). Similarly, the mean identity development score of degree and above holder respondents' fathers (M=113.44, SD=17.60) was higher than respondents' fathers who were illiterate (M=93.60, SD=22.65), 9-12 graders (M=102.14, SD=20.19), 1-4 graders (M=99.17, SD=21.91), certificate holders

(M=105.58, SD=17.41), 5-8 graders (M=107.12, SD=20.12), and diploma holders (M=108.67, SD=17.34).

Table 7: **Summary of One-Way ANOVA Results for Students' Birth Order, Parents' Educational status, and Family Monthly Income on Identity Development (N=441)**

Variable	Category	N	M	SD	95% Confidence Interval for Mean		Minimum	Maximum	F	p-value
					Lower Bound	Lower Bound				
Birth Order	First born	123	103.63	20.824	99.91	107.34	53	156	2.737	.066
	Middle Born	230	104.45	20.740	101.76	107.15	52	152		
	Last Born	88	109.75	18.198	105.89	113.61	56	144		
Adolescents' Father Educational Status	Illiterate	40	93.60	22.656	86.35	100.85	52	135	6.820	.000
	1-4 graders	65	99.17	21.912	93.74	104.60	58	156		
	5-8 graders	85	107.12	20.122	102.78	111.46	56	149		
	9-12 grader	63	102.14	20.195	97.06	107.23	53	141		
	Certificate	69	105.58	17.411	101.40	109.76	55	142		
	Diplo	1	108	17.	100	117	69	139		

	ma	8	.67	344	.04	.29				
	≥Degree	101	113.44	17.600	109.96	116.91	55	152		
Adolescents' Mother Educational Status	Illiterate	50	96.78	21.841	90.57	102.99	53	135	6.868	.000
	1-4 graders	80	103.04	20.806	98.41	107.67	52	149		
	5-8 graders	63	108.44	16.698	104.24	112.65	67	144		
	9-12 grader	124	106.99	20.785	103.30	110.69	53	156		
	Certificate	39	93.33	20.270	86.76	99.90	56	129		
	Diploma	28	112.09	17.739	108.05	121.81	86	152		
	≥Degree	57	114.93	16.113	107.81	116.36	76	145		
Adolescents' monthly family income	Lower	199	108.79	19.711	106.04	111.55	52	152	6.319	.002
	Middle	129	103.91	20.809	100.28	107.53	53	156		
	Higher	113	100.65	20.044	96.92	104.39	58	149		

As presented in Table 7, the univariant analysis of variance disclosed a statistically significant difference in identity development (*F (6, 434) = 6.868, p < .05)* of students as a function of their mothers' educational status. In this study, the post hoc result showed that a statistically significant pair wise mean difference in identity development was found among students whose mothers' educational status was

degree holders and above (p< 0.05) as compared to illiterate (p< 0.05), 1-4 graders (p< 0.05), and certificate holders (p< 0.05). Likewise, the mean identity development score of degree and above holders respondents' fathers (M=114.93, SD=16.11) was higher than respondents' mothers who were illiterate (M=96.78, SD=21.84), 9-12 graders (M=106.99, SD=20.78), 1-4 graders (M=103.04, SD=20.80), certificate holders (M=93.33, SD=20.27) and 5-8 graders (M=108.44, SD=16.69). The univariant analysis of variance in Table 7 showed that average family monthly income had a statistically significant mean effect on identity development (*F (2, 438) = 6.319, p <.05*). As can be observed from Table 8, the mean identity development score of respondents with lower monthly income was higher than that of respondents with middle family income, and respondents with higher family income. Conversely, the post hoc multiple comparisons result confirmed that significant pair wise mean differences on identity development were found on lower family income as compared to respondents with middle family income (p >0.05) and respondents with higher family income (p >0.05).

Comparisons of Media Usage, Emotional Maturity and Identity Development across Adolescents' Sex, Number of Languages Spoken and Family Ethnicity Variation

Table 8: Comparisons of Media Usage, Emotional Maturity and Identity Development across Adolescents' Sex, Number of Languages Spoken and Family Ethnicity Variation (N=441)

Dependent Variable	Category	N	Mean	SD	t	Sig.
Social Media Attachment	Male	268	22.16	9.531	-.980	.328
	Female	173	23.14	11.239		
	Monolingual	203	16.57	9.556	17.136	.000
	Multilingual	238	29.55	6.220		
	From the same ethnicity	318	20.14	9.604	-8.579	.000
	From multi-ethnicity	123	28.77	9.155		
Emotional Maturity	Male	268	78.80	22.532	-2.318	.021
	Female	173	83.90	22.503		
	Monolingual	203	98.93	16.542	23.079	.000

	Multilingual	238	65.34	14.015		
	From the same ethnicity	318	74.39	21.203	-10.728	.000
	From multi-ethnicity	123	97.37	17.191		
Identity Development	Male	268	104.50	16.965	.081	.936
	Female	173	104.36	15.922		
	Monolingual	203	102.35	16.810	-2.469	.014
	Multilingual	238	106.23	16.137		
	From the same ethnicity	318	105.87	16.459	2.934	.004
	From multi-ethnicity	123	100.76	16.262		

As shown in Table 8, the mean score of social media usage for female students (M=23.14, SD=11.23) was higher than for male students (M=22.16, SD=9.53) although the difference was not statistically significant (t (439) =-.980, p>0.05). Similarly, the independent sample t-test result showed that number of languages spoken (t (439) =17.136, p<0.05), and ethnic background variation (t (439) =-8.579, p<0.05) had a statistically significant mean difference in social media attachment. More specifically, the mean score of social media usage for multilingual (M=29.55, SD=9.556) and students from multi-ethnic family (M=28.77, SD=9.115) was higher than the mean score of media usage for monolingual (M=16.57, SD=6.220) and students from the same ethnic family (M=20.14, SD=9.604). This implies that multilingual students and students with multi-ethnic family background are attached more to social media than their counter parts; whereas sex of respondents had no effect on social media attachment.

Independent sample t-test results on Table 8 indicated that sex (t (439) =-2.318, p<0.05), number of languages spoken (t (439) =23.079, p<0.05) and ethnic background variation (t (439) =-10.728, p<0.05) had a statistically significant mean difference on emotional maturity of students. It is also worthy to mention that the mean score of emotional maturity for female (M=83.90, SD=22.503), monolingual (M=98.93, SD=16.542), and from multi-ethnic family (M=97.37, SD=17.191) was higher than that of male (M=78.80, SD=22.532), multilingual (M=65.34, SD=14.015), and from the same ethnic family (M=74.39, SD=21.203). Based on this finding, it is viable to conclude that female, monolingual students with multi-ethnic family background were emotionally immature than their counter parts. Concerning

identity development, the sex of students had statistically insignificant mean effect (t (439) =-.081, p>0.05), as presented in Table 9. Therefore, being male or female does not have any influence on the identity development of adolescents. Besides, number of languages spoken (t (439) =-2.469, p<0.05), and ethnic background variation (t (439) =2.934, p<0.05) had a statistically significant mean difference in identity development of the students. As it was expected, the mean score of identity development for multilingual (M=106.23, SD=16.137), and students from the same ethnic family (M=105.87, SD=16.459) was higher than that of monolingual (M=102.35, SD=16.810) and students from multi-ethnic family (M=100.76, SD=16.262). Therefore, these results showed that multilingual students and students with the same-ethnic family background had positive and healthy identity development than their counter parts.

Effect of Emotional Maturity Sub-scales, Social Media Attachment and Academic Performance on Predicting Identity Development of Adolescents

Based on standardized beta value, personal integration (β =-.386, $p < .05$) significantly predicted identity development. Besides, independence (β =-.363, $p < .05$), academic performance (β =.274, $p < .05$), emotional stability (β =-.249, $p < .05$), and social adjustment (β =-.127, $p < .05$) were statistically significant predictors of identity development. However, emotional progression did not significantly predict identity development (See table 9).

Table 9: Multiple Regression Result on Emotional Maturity Sub-scales, Media Attachment and Academic Performance in Predicting Identity Development of Adolescents

Model	B	Std. Error	Beta	Sig.
(Constant)	97.919	6.352		
Emotional Stability	-.582	.114	-.249	.000
Emotional Progression	-.116	.076	-.043	.139
Social Adjustment	-.302	.121	-.127	.013
Personal Integration	-.443	.086	-.386	.000
Independence	-.205	.124	-.363	.010
Social Media	-.486	.082	-.237	.000

Attachment				
Academic Performance	.432	.057	.274	.000

Note: R=0.716 R^2 = .512, F-ratio = 56.718 *, *p<0.05, n = 441

Effect of Identity Development Sub-Scales and Media Attachment in Predicting Emotional Immaturity of Adolescents

Table 10: Multiple Regression Result on Identity Development Sub-scales and Media Attachment in Predicting Emotional Immaturity of Adolescents

Model	B	Std. Error	Beta	Sig.
(Constant)	112.845	6.450		
Social Identity	-.637	.121	-.210	.000
Relational Identity	-.638	.124	-.208	.000
Collective Identity	-.101	.079	-.154	.002
Personal Identity	-.821	.116	-.283	.000
Social Media Attachment	.505	.088	.250	.000

Note: R=0.609, R2 = .371, F-ratio = 51.289 *, n = 441, *p<0.05

Beta result shows that personal identity (β =-.283, p < .05), and social media attachment significantly predicted emotional immaturity. Besides, social identity (β =-.210, p < .05), and relational identity (β =.208, p < .05) were statistically significant predictors of emotional maturity. Yet, collective identity was the least predictor of emotional maturity (See table 10).

4. Discussion

The findings of the study revealed that almost half of the respondents had high level positive identity development. Among the dimensions of identity development, relational identity orientation, collective identity orientation, social identity orientation, and personal identity orientation were reported by adolescents. This finding is different from that of Etsuko et al., (2015), who found that personal identity orientation (M= 3.91), relational identity orientation (M= 3.8980), collective

identity orientation (M=3.86), and social identity orientation (M=3.4133) were the ones reported as dimensions of identity development.

In this study, more than one third of the adolescents (40.6%) were extremely emotionally immature. This extreme emotional immaturity of adolescents may be attributed to the transition of adolescents from childhood to adulthood where there is a greater change in the biological, cognitive and socio-emotional aspects, which may have impacts on the behavioral changes of the adolescents. This result was consistent with the findings of Joy & Mathew (2018) who reported that emotional maturity of adolescents had a mean score of 124.05, which is interpreted as extremely immature. Besides, this study also revealed that the respondents had higher social maladjustment, where lack of independence and emotional instability were decidedly reported. Our finding contradicts with the finding of Joy & Mathew (2018) who reported that group has better social adjustment than that of emotional progression and the high mean score for the area of emotional stability which indicates that the group has comparatively less stability than that of all the four other areas of emotional maturity.

The finding of the present study revealed that more than one third of the adolescents could be viewed as extreme level social media users. This number was inconsistent with the findings of Lenhar (2010) who reported that 95% of teens spend more time comparing themselves and judging others on SNS than they normally would in the hallways of their schools. This difference could be attributed to the contexts of internet accessibility. In the United States, 95% used the Internet and the websites they gravitate to en mass are social networking sites, capturing 80% of adolescent Internet users (Lenhart, 2012).

Another finding of the present study was that there was a strong and positive correlation between emotional immaturity and social media usage of adolescents. This result goes along with the findings of Dangwal and Srivastava (2016). They carried out research on emotional maturity of internet users, and showed the prevalence of emotional immaturity among young internet users. The findings of the study carried out by Visala and Rawat (2016) indicated that internet users who spend more time on the internet tend to have higher emotional immaturity, and the probability of emotional instability and personality disintegration was more. This might be due to spending more time on social networks that reduces individual's

intimate relationships with peers, family and community and leading to loss of skills and one's abilities to recognize and understand emotional stimuli, solve problems and ultimately lead to lack of growth and emotional immaturity by reducing individual's power to cope up with everyday real-life challenges.

The result of the present study also showed that there was a moderate and negative correlation between identity development and social media attachment. This result is consistent with the finding of Long et al (2011) who reported that internet usage impacts adolescent identity development. This might be due to the fact that social media tools provide a wealth of opportunity for teens to create, test, and recreate various versions of themselves and in this case it might be difficult for them to build a stable positive identity. As teens use online spaces to project themselves to virtual audiences, they may do so in a way that seems inconsistent with how parents and other people see them.

The result of the study further showed that there was statically significant mean difference in identity development across birth order, but not for emotional maturity and media usage. Concurrently, the study by Kumar (2014) revealed that birth order did not make any significant difference in the emotional maturity. However, this finding differs from the study of Salmon and Daly (1998), (could not find the source) which reported that middle born declare themselves to be less close to parents (and more so to friends and siblings) than first born or last born, and less likely to be actively interested in their family histories, or to make kin ties a part of their self-identity.

The result of the study also showed that educational status of students' fathers and mothers had a statistically significant mean effect on identity development, emotional maturity, and media usage. In short , the study stressed upon the importance of educated parents and their impact on children's maturity (Pant & Singh, 2017).

The finding of the study also revealed that monolingual females from multiethnic family had higher score of emotional immaturity. This result is consistent with the findings of Ahmad et al (2009), Smriti et al (2016), Shafiq & Khan, (2016), Dureja et.al (2012) and Subbarayan and Visvanathan (2011), which reported that male adolescents have higher emotional maturity than female adolescents. But the

findings of the study were inconsistent with other findings, Katyal and Awasthi (2005), Wing and Love (2001), Singh (2002), Rieff, et al (2001) which indicated higher emotional intelligence among girls than boys. The results also show that multilingual adolescents from the same ethnic family had higher score on identity development. This might be attributed to being from families of the same ethnic background and speaking/ understanding more than one language might be one tool to have a positive identity development. Recently, the issue of ethnicity by itself is becoming controversial and in this situation, identifying oneself with the same ethnic background might facilitate the journey of adolescents towards developing their identity.

5. Conclusion

The purpose of this study was to examine the effect of emotional maturity and social media usage for identity development among adolescents. The findings of the study showed that 38.8% of the adolescents had high level positive identity development; 59.6% adolescents had extremely emotional immaturity; and 35.4% of adolescents were extreme level social media users. Hence, relational identity, collective identity, social identity and personal identity were reported as dimensions of identity development by adolescents. Besides, social maladjustment, lack of independence and emotional instability were reported as emotional maturity dimensions. Pearson correlation result showed that strong and positive correlations were found between emotional maturity and social media usage. Also, there was a moderate and negative correlation between identity development not only with emotional immaturity but also with extreme social media usage. Specifically, emotional stability had negative relationship with collective identity, relational identity, social identity and personal identity. Correspondingly, social adjustment was negatively correlated with social identity, collective identity and personal identity. Also, independence was negatively correlated with personal identity, relational identity, social identity, and collective identity. In addition, ANOVA result revealed that birth order, average family monthly income, educational status of students' fathers and mothers had a statistically significant mean effect on identity development, emotional maturity, and media usage with different effect size. Likewise, independent sample t-test result showed that number of languages spoken and family ethnic background variation had a statistically significant mean effect on social media usage, emotional maturity and identity development. Furthermore, multiple linear regression analysis result showed that emotional instability had a moderate negative direct effect on the

identity development of students. Therefore, mental health service shall be essentially strengthened and consecutive soft skill trainings shall be provided to students.

6. Recommendations

Based on the result of the study, the following recommendations shall be implemented by responsible stakeholders. First and foremost, school guidance and counseling service shall be essentially strengthened as part of the routine investigation of students' extreme level of social media usage, emotional immaturity and negative identity development in order to easily resolve the developmental identity conflicts successfully. Along with this, to resolve the psychological crisis positively, consecutive soft skill trainings shall be provided to students, especially to female, monolingual students and students from multiethnic families. In this way, students can explore possibilities and begin to form their own identity based upon the outcome of their explorations. It is noteworthy to know that failure to establish a sense of identity within a society can lead to role confusion. Educational experts, in collaboration with parents, can play a significant role in developing collaborative, multidimensional, and culturally sensitive preventive and intervention programs to create a helpful school environment that promotes students' positive identity development and psycho-socio-emotional wellbeing, improves their productivity, and enhances their success because those students who receive proper encouragement and reinforcement through personal exploration will emerge with a strong sense of self and a feeling of independence and control.

Moreover, to address the effect of media usage and emotional immaturity in identity development, policy makers, academicians, researchers, parents, and other concerned bodies in Ethiopia shall give attention to design preventive as well as intervention mechanisms that focus on improving positive identity development and strong emotional maturity by designing strategies that can sustainably handle problems. For instance, it can be through awareness raising programs on the relationship between media usage, emotional maturity and identity development, through attaching with the academic curriculum starting from primary schools, and through special support systems for those vulnerable students. Finally, parent shall encourage their adolescents to successfully complete this stage that will lead them to

build a strong and positive sense of self that can remain throughout their entire life.

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