# Original Research



# Sexual practices in relation to psychosocial status of Greek adolescents

Theodora Ntontou, Androniki Stavridou, Athanasios Thirios, Elisavet Andri, Chara Spiliopoulou, Artemis Tsitsika

MSc Program "Strategies of Developmental and Adolescent Health", School of Medicine, National and Kapodistrian University of Athens, Greece

# ABSTRACT

Sexual behavior is considered to be an important aspect in adolescents' life and constitutes the focus of this study, as it may have consequences in physical and mental health. In the current study 1096 adolescents participated, with mean age 15 years, while qualitative methodology was used. The results presented were varied. Adolescents who were sexually active had higher scores in conduct problems scales and hyperactivity. Adolescents who were forced to have sex, had higher scores in all scales, except from pro-social scale and in total score, while adolescents with higher academic performance in last year (scoring 18 to 20 out of 20 rating scores) were less likely to have sexual experiences comparing to adolescents with grades under 15 out of 20. Finally, preventive and educational measures for students in sexuality could prevent negative consequences and challenges could be faced.

Key Words: Adolescence, Sexual behavior, Sexuality, Psychosocial Functionality, Qualitative study

Corresponding Author: Theodora Ntontou email: dora.ntontou@hotmail.gr

### Introduction

The expression of sexuality is one of the basic characteristics of puberty and is linked to adolescence (1). Sexuality in adolescence has preoccupied many scientists for decades. The way it relates to psychosocial functionality, is an issue that has also been the subject of global scientific dialogue. The last few years, adolescents are reported to start their sexual activity earlier than older generations. The age group for initiating sexual activity varies according to ethnicity and culture. According to the results of a Pan-Hellenic survey on behaviors related to the health of adolescent students (HBSC / WHO survey), a high percentage of 15-year-old adolescents in Greece (35.0% - mostly boys) report that they had at least one complete sexual intercourse in their life.

That does not necessarily mean that primary sexual experiences are desirable, pleasant or successful. In adolescence, there are many changes regarding sexual hormones which might raise sexual desire leading to sexuality and sexual identity issues (2). In this stage, experimenting with sexual behaviors is natural and expected. Immaturity and lack of knowledge could lead to high-risk behaviors, prior to develop mechanism to protect from them.

Adolescents' sexual activity and experience are various depending on gender, age or cultural differences (3). Social factors and cultural rules are associated with beginning of sexual activity in adolescents. In general, family, educational level and academic performance could affect the decision of sexual engagement. For instance, late sexual activity is linked to higher academic performance and better decision making. Many teenagers delay their sexual activity, due to academic performance focus and vice versa (4). Moreover, early sexual activity, combining with no or partial condom use, raises the risk for adolescent pregnancy and sexual transmitted diseases, while predisposing to continued risky behaviors. In Greece, the ideal conditions for contraception are far from the guidelines. The most common contraceptive method for adolescents is abstinence, following by men's condom, while percentages of contraception pills usage are only 4%, comparing to US where the percentage is 45% (5). At the same time, while different contraceptive methods are used abroad, such as contraceptive patch, DMPA contraceptive injection, vaginal ring, diaphragm and cervical cap, in Greece they are rarely or no used at all.

Furthermore, several studies have mentioned relations between sexual abuse in childhood and poor physical health later in life (6). More than 18 million children under 18 years are abused, while 13.4% of girls and 5.7% of boys are reporting sexual abuse (7).

The purpose of this study is to research the sexuality of adolescents, the behaviors adolescents follow concerning sexual intercourse, their sexual activities and whether they use protection or not and the general sexuality conception. In addition, the possible effects of sexuality on the mental health of the adolescents is studied, with a broader goal to understand these issues in order to suggest possible solutions to what is troubling adolescents.

# Methods

The current study was conducted under the research program of MSc "Strategies of Developmental and Adolescent Health", School of Medicine, National and Kapodistrian University of Athens, entitled "What happens in adolescence?". The sample consisted of 1100 students (50.6% girls) with mean age 15 years (SD= 0.7 years), of secondary and high school, during 2018-2019 and 2019-2020 across Greece. Students from several cities of Greece, namely Maroussi, Ilion, Ioannina, Corfu, Cyclades, Pallini, Paros, Tavros and Chania participated. Proper information in parents and carers was provided and consent of participation of their children in the study was requested.

The questionnaire included questions concerning habits, experiences and knowledge about sexual education, body image, adopting sexuality standards, behaviors related to technology use, bullying etc and was based and consist of the following scales:

1. Socio-demographic characteristics, such as gender, age, family status, parents' profession, origin, academic performance etc.

2. Eating Attitudes Test- 26 item (EAT-26). The questionnaire identifies the possible appearance of eating disorder or disturbed way of eating and consists of 26 items (8).

3. Items related to Internet usage and behavior (frequency, location, applications).

4. Items related to Bullying – Cyberbullying. Those items were also used in the EU NET ADB study (9).

5. Internet Addiction Test-Short Version (IAT). The Short form is consisted of 20 questions and those questions were also used in the EU NET ADB study (10).

6. Smartphone Addiction Scale – Short Version (SAS-SV). The scale consists of questions regarding pathological usage of electronic devices such as smartphones, tablets etc (11).

7. Sexuality and Adolescence. Questions were used in previous study, which was published in Greek and Foreign journals (12).

8. Sexualization. The questions estimate the adoption of standards from adolescents as promoted by media.

9. Strengths and Difficulties Questionnaire (SDQ-Hel) Greek Version. The self-report questionnaire consisted of 25 questions, regarding mood disorders, conduct problems and general adaption of children 11-17 years. Specialized personnel using appropriate data sheet processed data from questionnaires. Data analysis performed under SPSS statistical package.

Qualitative values were described as Standard Deviations (SDs), while quantitative as absolute and relative frequencies. Independent t-test samples of students were used in order to compare mean values between boys and girls. Ratios were compared using x2 test and Fisher's exact test. Linear regression analysis was used to estimate the correlations of the SDQ subscales and the overall score with sexual behaviors after controlling for gender and age. regression coefficients (b) with Standard Adjusted Errors (SE) were calculated from the results of the linear regression models. In order to find independent factors related to sexual activity or sexual intercourse or forced intercourse, multiple linear regression models were used in a progressed method (P for subtraction was set to .1 and P for input was set to at .05). Independent values which were used in the models ware gender, age, origin, academic performance in previous year, residence status, parents' profession and working condition. Adjusted probability ratios with 95% Confidence Intervals were calculated from the results of the linear regression analysis. All P values listed are 2-tailed. The statistical significance was set at 0.05 and the analyses were performed using the statistical software SPSS (version 22.0).

#### Results

Data from 1096 adolescents, 541 boys (49.4%) and 555 girls (50.6%) were analyzed. Table 1 contains the

demographic characteristics of the sample and the scales of SDQ. Almost all adolescents were born in Greece (96.3%) and 43.9% had high academic performance in previous year (over 18/20), while 39% had medium (15-17.9/20) and 17.1% had lower (under 15/20). 83.1% lived with both parents, while 15.8% lived with only one parent. Furthermore, the majority of teenagers had at least one parent with university degree; in 92.8% of adolescents the father worked and in 78.4% the mother. The educational status of father and mother was mainly university level education. Total SDQ score was 6.09% approximately (Table 1).

Table 1. Demographic characteristics

		N (%)			
G	ender				
	Boys	541 (49.4)			
	Girls	555 (50.6)			
A	ge, Mean (SD)	15.0 (0.7)			
Bo	orn in Greece	1051 (96.3)			
Academic performance in previous yea					
	<15	186 (17.1)			
	15-17.9	424 (39.0)			
	18-	478 (43.9)			
Re	esidence status				
	With both parents	897 (83.1)			
	With one parent	171 (15.8)			
	Other	11 (1.0)			
W	orking father	987 (92.8)			
W	oriking mother	839 (78.4)			
Educational level of father					
	Primary school	193 (18.4)			
	High School	373 (35.6)			
	University	483 (46.0)			
Ec	lucational level of mother				
	Primary school	109 (10.3)			
	High school	342 (32.2)			
	University	610 (57.5)			
Er	notional	3.22 (2.58)			
Co	onduct problems	3.12 (1.84)			
H	yperactivity	3.31 (2.19)			
Pe	eer related problems	2.37 (1.86)			
Sc	ocial	7.39 (2.02)			
Т	otal SDQ score	11.98 (6.09)			

Data related to sexual activity of adolescents are presented in Table 2, concerning the total sample and by gender. Boys had higher percentage (70.9%) in reporting relationship with girls of same age, while girls had also a high percentage (63.8%) in reporting relationship with boys of same age. Homosexual relationships reported by more girls than boys (8% to 6.8%). Furthermore, 68.4% of adolescents were sexual active and there was not significant difference between boys and girls. As sexual activity, intercourse is referred by 21.6% and touching by 48.7%. Girls had higher percentage in kissing experience than boys (82.4% to 65.3%), but in sexual intercourse, boys recorded higher experience (28.6% to 14.7%). Additionally, boys were reported to begin their sexual life earlier than girls (13.5 years to 13.9 years). Forced intercourse was observed in both genders in a significant percentage (8.6%), which is referred to 83 adolescents per 1096 individuals (Table 2).

	Total sample N=1096	Boys N=541	Girls N=555				
	N (%)	N (%)	N (%)	Р			
Have you ever had relationship with girl of same age	392 (41.2)	355 (70.9)	36 (8.0)	<.001+			
Have you ever had relationship with boy of same age	372 (39.2)	28 (6.8)	344 (63.8)	<.001+			
Sexual axtivity	703 (68.4)	350 (70.6)	353 (66.5)	.159+			
If yes define:							
Kissing	519 (73.9)	228 (65.3)	291 (82.4)	<.001+			
Touching	342 (48.7)	181 (51.9)	161 (45.6)	.097+			
Intercourse	152 (21.6)	100 (28.6)	52 (14.7)	<.001+			
Other	112 (16.0)	67 (19.4)	45 (12.7)	.017+			
Age of first sexual experience, Mean (SD)	13.7 (1.5)	13.5 (1.6)	13.9 (1.3)	<.001‡			
Forced intercourse	83 (8.6)	40 (8.6)	43 (8.5)	.969+			

Table 2. Sexual activity in total sample and by gender

According to Table 3, during the first intercourse, 26% (n=44) of the adolescents did not use contraception (25.2% boys and 27.4% girls), while the number decreased to 32 adolescents during their last intercourse (33%). Additionally, 119 adolescents (70.4%) used condom during their first intercourse, while in the last the percentage decreases to 61.9% (n=60). Very few estimated their fertile days as a way for protection and no one used contraceptive pill. Emergency contraception (morning after pill) was usually used during last sexual intercourse, but in extremely small percentages (Table 3).

A linear regression analysis was conducted with depended values the SDQ scales and independent the sexual behaviors of sexual active adolescents adjusted for gender and age (Table 4). Sexually active adolescents had significant higher scores in conduct problems scales and hyperactivity. In addition, those who had a sexual intercourse some time in their lives had more conduct problems, hyperactivity and higher score in total score. The adolescents, who were forced to intercourse, had more problems in all scales, except from social scale (Table 4).

After multiple linear regression analysis, with dependent value the sexual experience of participants, it was found that the older age was associated with greater probability of sexual experience (Table 5). Teenagers with working mother had also greater possibility to have sexual experience. On the contrary, adolescents with higher academic performance during previous year (scoring 18 to 20 out of 20 rating scores) were less likely to have sexual experience

Table 3. Contraception usage in total sample and by gender

		Total sample	Boys	Girls	
Contraception usage		N (%)	N (%)	N (%)	P++
During first intercourse					
Non	e	44 (26.0)	27 (25.2)	17 (27.4)	.162
Con	dom	119 (70.4)	78 (72.9)	41 (66.1)	
Con	traception pill	0 (0.0)	0 (0.0)	0 (0.0)	
Fert	ile days estimation	5 (3.0)	1 (0.9)	4 (6.5)	
Eme	ergency contraception	0 (0.0)	0 (0.0)	0 (0.0)	
Oth	er	1 (0.6)	1 (0.9)	0 (0.0)	
During last	intercourse				
Non	e	32 (33)	16 (29.6)	16 (37.2)	.316
Con	dom	60 (61.9)	36 (66.7)	24 (55.8)	
Con	traception pill	0 (0.0)	0 (0.0)	0 (0.0)	
Fert	ile days estimation	2 (2.1)	0 (0.0)	2 (4.7)	
Eme	ergency contraception	3 (3.1)	2 (3.7)	1 (2.3)	
Oth	er	0 (0.0)	0 (0.0)	0 (0.0)	

Table 4. Association of sexual activity with SDQ scales adjusted for gender and age

	Sexual activity		Had sexual intercourse some time in their lives		Forced intercourse	
	β (SE)+	Р	β (SE)+	Р	β (SE)+	Р
Emotional	0.12 (0.17)	.490	0.15 (0.24)	.513	1 (0.3)	.001
Conduct problems	0.65 (0.13)	<.001	0.9 (0.17)	<.001	0.64 (0.23)	.005
Hyperactivity	0.42 (0.15)	.007	0.5 (0.21)	.016	0.98 (0.26)	<.001
Peers related problems	-0.18 (0.13)	.156	0.41 (0.18)	.022	0.85 (0.22)	<.001
Social	0.02 (0.14)	.873	-0.21 (0.19)	.254	0.07 (0.24)	.763
Total SDQ score	0.78 (0.43)	.071	1.86 (0.59)	.002	3.55 (0.75)	<.001

+ Adjusted regression coefficients ( $\beta$ ) with Standard Errors (SE) for age and gender

experience comparing to adolescents with academic performance under 15. Furthermore, adolescents with mothers with educational level of high school and mothers with university degree were more likely to have sexual experience. Girls had less possibility to have sexual intercourse and older age was associated with sexual intercourse possibility. In addition, girls started their sexual activity in older age comparing to boys. Finally, adolescents with higher academic performance during previous year (15-17.9 and 18 to 20) had less possibility of having sexual intercourse than teenagers with lower academic performance (Table 5).

Adolescents living with one parent were more likely to have sexual intercourse than those living with both parents. When dependent value was forced intercourse, it was found that adolescents with higher academic performance during previous year (18 to 20) were less likely to be forced in sexual intercourse than those with lower academic performance. Teenagers with working mother had higher possibility to be forced into sexual intercourse some time in their lives. Students with academic performance reported having a sexual experience some time in their lives (Table 5).

There was not significant difference in both gender concerning having sexual intercourse some time in their lives, and none of the genders was forced to have sexual intercourse. There was not, also, significant difference between those born in Greece with those who did not. Family status and profession of parents did not significant associated with the occurrence or not of sexual experience between adolescents and forced intercourse (Table 5).

### Discussion

Adolescence is a period of intense development and great change. Great concerns raised by researchers concerning adolescents' sexual health and their activities.

According to the study, adolescents who were sexually active had higher scores in conduct problems scale and hyperactivity (SDQ). Studies reported that individuals who were sexually abused in childhood, presented conduct problems which are mostly reported in boys (13). Girls also present those problems but not in that intense and complexity as boys. How and why sexuality affects problematic behavior is not yet know. There is no theory or reference to confirm that.

Adolescents who were forced to have sexual intercourse had problems in all scales, except from social scale. This is

of high importance since forced intercourse might lead to mental health issues (14). Victims of sexual abuse feel sorrow, anger, depression and have suicidal thoughts that may lead to high-risk behaviors (15). The impact of a rape may take years to be present. Thus, individuals who were sexually abused in childhood or adolescence may struggle with social relationships (16).

The older age was associated with great possibility of sex ual experience. This is natural because adolescence last more than a decade in western societies. In some culture such as the Roma, this may not be applicable. Furthermore, adolescents with working mothers were more likely to have sexual experience. In other studies, there was not a significant association between financial status and parental profession with sexual experience of children (17). Middle class parents seems to talk more to their children, guide them and consult them about contraception. Children who communicate with their parents were more likely to start their sexual life in older age (18).

On the contrary, adolescents with higher academic performance during previous year (18 to 20) had less possibility to have sexual experience comparing to adolescents with lower academic performance (under 15). This could be interpreted as adolescents interested more in their studies and present concerns regarding life. Furthermore, they set higher goal and they are trying to achieve them, through consistency and organization. Teenagers with mothers with high school diploma and university degree were more likely to have sexual experience. In addition, adolescents living with only one parent had greater probability to have intercourse than those living with both parents. This may occur due to lack of guidance and role models. When dependent value was forced intercourse, it was found that adolescents with higher academic performance during previous year (18 to 20) were less likely to be forced into sexual intercourse than adolescents with lower academic performance (under 15). A finding like this requires further investigation and theory, in order to understand why this happens. In addition, teenagers with working mothers were more likely to be forced into sexual intercourse some time in their lives. In our study, 68.4% of adolescents had sexual experience and there was not significant association between boys and girls. In another study with 1072 participants, 73.6% had sexual experience (19).

Concerning contraceptive methods in Tsitsika et al. (2014) study (19), in their last intercourse, adolescents use

Table 5. Results from multiple regression analysis for sexual experience, sexual intercourse and forced intercourse

			Had sexual				
	Sexual experience		intercourse some time		Forced intercour	se	
				in their life			
	OR (95% CI)+	Р	OR (95% CI)+	Р	OR (95% CI)+	Р	
Gender							
Boys							
Girls	0.87 (0.65 – 1.16)	.347	0.45 (0.30 – 0.67)	<.001	1.16 (0.71 – 1.91)	.550	
Age	1.42 (1.17 – 1.74)	<.001	1.66 (1.28 – 2.15)	<.001	0.97 (0.69 – 1.36)	.860	
Born in Greece					1		
No							
Yes	1.11 (0.51 – 2.44)	.795	0.59 (0.22 – 1.54)	.279	3.38 (0.44 – 26.26)	.244	
Academic performance in prev	ious year						
<15							
15-17.9	0.79 (0.50 – 1.26)	.328	0.56 (0.34 – 0.92)	.023	0.88 (0.44 – 1.75)	.715	
18-20	0.47 (0.29 <i>—</i> 0.75)	.001	0.32 (0.18 – 0.56)	<.001	0.45 (0.21 – 0.95)	.035	
Residence status							
With both parents							
With one parent	1.04 (0.69 – 1.59)	.841	2.12 (1.34 – 3.35)	.001	1.08 (0.57 – 2.06)	.808	
Other	0.41 (0.08 – 2.16)	.290	-++		-++		
Working father							
No							
Yes	1.26 (0.73 – 2.19)	.404	1.34 (0.58 – 3.12)	.491	0.46 (0.20 – 1.04)	.063	
Working mother							
No							
Yes	1.49 (1.06 – 2.09)	.023	1.43 (0.87 – 2.35)	.160	2.44 (1.13 – 5.29)	.024	
Educational level of father							
Primary school							
High school	1.46 (0.95 – 2.24)	.082	0.81 (0.46 – 1.43)	.473	1.35 (0.63 – 2.90)	.439	
University	1.08 (0.70 – 1.67)	.721	0.90 (0.51 – 1.61)	.733	1.48 (0.68 – 3.22)	.327	
Educational level of mother							
Primary school							

condom by 79.1%, while in this study the percentage was 60%. No protection was reported by 32% of adolescents in this study, comparing to 1.5% in Tsitsika et al. (2014). In addition, 3.4% did not use any contraceptive methods and 79.9% used condom (19). In this study, 26% did not use any contraceptive methods and 70.4% used condom, and the mean age of first intercourse was 13.7 years, while in Tsitsika et al. (2014) was 14.5 years (19).

How and why sexual experience affects problematic behavior is yet to know. In Tsitsika et al. (2014), was reported that early beginning in sexual activities in girls was associated with depressive symptoms, which was not present in this study (19). Adolescent boys who were sexually experienced, tended to externalize their problems more often, as reported in both studies. However, in the present study nor in the other study (Tsitsika et al, 2014) is not known whether psychological problems lead to premature sexual intercourse or if the opposite happens (19). A decrease in years of sexual activity beginning and increase in the absence of protection during sexual activities among adolescents.

Finally, family status, origin and parental profession affect sexual experience in adolescents. Teens who have established a healthy parental relationship tend to avoid having an early sexual experience (20). Family structure seems to affect the sexuality of adolescents. Thus, girls with single parents tended to begin earlier their sexual life. Individuals from homosexual families did not face any problems with their sexuality or sexual orientation. Nevertheless, those studies provide multiple findings (21). Adolescents with parents of high educational level are not in risk for sexual intercourse and do not have multiple sexual partners (22).

The present study presented some limitations, as the relatively small sample size and the use of the quantitative method. A larger sample survey should be conducted in order to extract results that are more valid for adolescents, so that could be generalized. Qualitative research method mixed with quantitative, could provide better results and more in depth analysis. Recall bias did not strongly affect, as the nature of the questionnaire (validity, reliability) makes it capable of dealing with such methodological issues. Concerning strengths, this study contributes to the research dialogue about adolescence. It is a research focused only on adolescent's sexuality with a large sample and a versatile tool, connecting sexuality with psychosocial functionality.

#### Conclusions

Adolescence is a developmental period of great importance. Since sexual experience is intertwined with normality and life and since adolescents are a vulnerable group due to their characteristics, special emphasis should be given on prevention and appropriate education on these issues. This will help both society and adolescents to cope with the difficulties of modern life. The current study tried to follow that direction and become a reference to adolescents' well-being.

## References

1. Ott, M. A. (2010). "Examining the development and sexual behavior of adolescent males": Erratum. Journal of Adolescent Health, 47(3), 318

2. Geldard, K., Geldard, D.,& Yin-Foo, R. (2017). Counseling psychology in adolescents: The preventive approach. Athens: Pedio.

3. Petersen, J. L., & Hyde, J. S. (2010). A meta-analytic review of research on gender differences in sexuality, 1993–2007. Psychological Bulletin, 136(1), 21–38.

4. Frisco, M. L. (2008). Adolescents' sexual behavior and academic attainment. Sociology of Education, 81(3), 284-311

5. Alexatou, E. (2018). Adolescent sexual behavior. Knowledge, practices and factors that affect it. Study for first-year students of the TEI of Western Greece in Patras.

6. Tracy, E. M., Laudet, A. B., Min, M. O., Kim, H., Brown, S., Jun,

M. K., & Singer, L.(2012). Prospective patterns and correlates of quality of life among women insubstance abusetreatment. Drug and alcohol dependence, 124(3), 242-249. 7. Sofuoğlu, Z., Sariyer, G., Aydin, F., Cankarde, S., &Kandemirci, B. (2016). Child abuse and neglect among children who drop out of school: а studv in Izmir. Turkev. Social public health, 31(6), 589-598.

8. Garner, D. M., Olmsted, M. P., Bohr, Y., &Garfinkel, P. E. (1982). The eating attitudes test: psychometric features and clinical correlates. Psychological medicine, 12(4), 871 -878.

9. Tsitsika, A., Janikian, M., Wójcik, S., Makaruk, K., Tzavela, E., Tzavara, C., Greydanus, D., Merrick, J., & Richardson, C. (2015). Cyberbullying victimization prevalence and associations with internalizing and externalizing problems among adolescents in six European countries. Computers in Human Behavior, 51, 1-7.

10. Tsimtsiou, Z., Haidich, A. B., Kokkali, S., Dardavesis, T., Young, K. S., &Arvanitidou, M. (2014). Greek version of the Internet Addiction Test: A validation study. Psychiatric Quarterly, 85(2), 187-195.

11. Kwon, M., Lee, J. Y., Won, W. Y., Park, J. W., Min, J. A., Hahn, C., Gu, X., Choi, J.,&Kim, D. J. (2013). Development and validation of a smartphone addiction scale(SAS). PloS one, 8(2), e56936.

12. Tsitsika, A., Greydanus, D., Konstantoulaki, E., Bountziouka, V., Deligiannis, I.,Dimitrakopoulou, V., Critselis, E., Tounissidou, D., Tsolia, M., Papaevagelou, V.,Connstantopoulos, A., &Kafetzis, D. (2010). Adolescents dealing with sexuality issues: a cross-sectional study in Greece. Journal of pediatric and adolescent gynecology, 23(5), 298-304.

13. Garnefski, N., &Diekstra, R. F. (1997). Child sexual abuse and emotional and behavioral problems in adolescence: Gender differences. Journal of the American Academy of Child & Adolescent Psychiatry, 36(3), 323-329.

14. Holmberg, L. I., &Hellberg, D. (2010). Sexually abused children. Characterization of these girls when adolescents. International Journal of Adolescent Medicine and Health, 22(2), 291-300

15. Draucker, C. B., & Mazurczyk, J. (2013). Relationships between childhood sexual abuse and substance use and sexual risk behaviors during adolescence: An integrative review. NursingOutlook, 61(5), 291-310.

16. Oz, S. (2001). When the wife was sexually abused as a child: Marital relations before and during her therapy for abuse. Sexual and Relationship Therapy, 16(3), 287-298.

17. Santelli, J. S., Lowry, R., Brener, N. D., & Robin, L. (2000). The association of sexualbehaviors with socioeconomic status, family structure, and race/ethnicity among US adolescents. American journal of public health, 90(10), 1582.

18. Blake, Simkin, Ledsky, Perkins, & Calabrese, (2001). Effects of a Parent-Child Communications Intervention on Young Adolescents' Risk for Early Onset of Sexual Intercourse

19. Tsitsika, A., Andrie, E., Deligeoroglou, E., Tzavara, C., Sakou, I., Greydanus, D.&Bakoula,C. (2014). Experiencing sexuality in youth living in Greece: contraceptivepractices,risk taking, and psychosocial status. Journal of pediatric and adolescent gynecology,27(4), 232-239.

20. Pearson, J., Muller, C., & Frisco, M. L. (2006). Parental involvement, family structure, and adolescent sexual decision making. Sociological Perspectives, 49(1), 67-90.

21. Davis, E. C., &Friel, L. V. (2001). Adolescent sexuality: Disentangling the effects of family structure and family context. Journal of marriage and family, 63(3), 669-681

22. Crockett, L. J., Raffaelli, M., & Moilanen, K. L. (2003). Adolescent sexuality: Behavior and meaning. Faculty Publications, Department of Psychology, 245.