

This article was downloaded by: [79.108.131.43]

On: 07 February 2013, At: 11:57

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Journal of Child & Adolescent Substance Abuse

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/wcas20>

Factors Associated With Sex Under the Influence of Alcohol Among Adolescents With Divorced Parents

Mireia Orgilés^a, Elena Carratalá^a, José L. Carballo^a, José A. Piqueras^a & José P. Espada^a

^a Miguel Hernández University, Elche, Alicante, Spain

Version of record first published: 07 Feb 2013.

To cite this article: Mireia Orgilés, Elena Carratalá, José L. Carballo, José A. Piqueras & José P. Espada (2013): Factors Associated With Sex Under the Influence of Alcohol Among Adolescents With Divorced Parents, *Journal of Child & Adolescent Substance Abuse*, 22:2, 150-162

To link to this article: <http://dx.doi.org/10.1080/1067828X.2012.730367>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.tandfonline.com/page/terms-and-conditions>

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae, and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand, or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

Factors Associated With Sex Under the Influence of Alcohol Among Adolescents With Divorced Parents

MIREIA ORGILÉS, ELENA CARRATALÁ, JOSÉ L. CARBALLO,
JOSÉ A. PIQUERAS, and JOSÉ P. ESPADA

Miguel Hernández University, Elche, Alicante, Spain

This study addresses the association of diverse individual variables, traditionally associated with sexual risk practices in the general population, with sex under the influence of alcohol in adolescents with divorced parents. A sample of 132 adolescents provided information about their knowledge and attitudes toward HIV/AIDS and sexual risk behaviors, self-concept, social anxiety, and sexual sensation seeking. Binary logistic regression revealed that not having sex under the influence is associated with a more positive predisposition to practice safe sex when finding an obstacle, and with less sexual sensation seeking. These and other findings are discussed.

KEYWORDS *adolescents, parental divorce, prevention, sex under the influence, sexual risk behaviors*

INTRODUCTION

Numerous studies have examined the variables related to the practice of risky sexual behaviors in adolescents. Notably those more traditionally studied are the knowledge about HIV/AIDS (e.g., Agius, Pitts, Smith, & Mitchell, 2010), attitudes toward HIV/AIDS and related behaviors (e.g., Marling & Moore, 1990), social anxiety (e.g., Crosby et al., 2003), sexual sensation seeking (e.g., Spiltanick et al., 2007), and self-concept (e.g., Miller, Forehand, & Kotchik, 2000). Although some studies have found a low association

This research was supported by Grant 36586/06 from FIPSE (Foundation for AIDS Research and Prevention in Spain) to José P. Espada.

Address correspondence to Mireia Orgilés, Miguel Hernández University, Department of Health Psychology, Avda. de la Universidad s/n, 03202 Elche, Alicante, Spain. E-mail: morgiles@umh.es

between the knowledge about HIV/AIDS and risk practices (Steel, Herlitz, Snyder, Mazzaferro, & Theorell, 2004), assessing the knowledge of adolescents about preventing infection is important because it constitutes a protective factor against HIV (Carey & Schroder, 2002). Studies on the influence of attitudes toward HIV/AIDS reveal conflicting results; some determine that there is a relationship between attitudes and risky sexual behaviors (e.g., Sánchez, 1997), while such association was not found in others (e.g., Brown, Lourie, Flanagan, & High, 1998). Self-concept contributes to the practice of safe sex (Salazar et al., 2004) and is often related to social behavior, so the intervention on adolescents' social skills and promoting communication between the couple are considered prevention strategies against HIV infection (Nangle & Hansen, 1998; Salazar et al., 2004). Risky sexual behaviors have also been linked with a high level of seeking novelty sexual experiences. Zuckerman (1994) considers that sensation-seeking individuals do not perceive the risk as negative, but as a generator of a new sensation, so as a result of their different perception of risk, prevention messages may have no effect on them (Liebert & Spiegler, 2000). In adolescents, sexual sensation seeking has been related to a higher frequency of vaginal intercourse, higher numbers of sexual partners, and less condom use (Spiltanick et al., 2007). Due to the lack of studies, Gullete and Lyons (2005) emphasize the need for research into sexual sensation seeking and its relation to sexual risk behaviors.

Research supports the existence of differences in sexual behavior as a function of family structure. The literature has revealed that adolescents with divorced parents are more likely to have sexual relations (Abma, Martinez, Mosher, & Dawson, 2004; Cavanagh, Crissey, & Raley, 2008; Donahue et al., 2010), an early sexual debut (Baumer & South, 2001; D'Onofrio et al., 2006; Zimmer-Gembeck & Helfand, 2008), more frequent sexual activity (Ellis et al., 2003; Ku et al., 1998), more risk of pregnancy (Hogan, Sun, & Cornwell, 2000), more sexual partners (Cleveland & Gilson, 2004), and more sexual risk behaviors (Lansford, 2009).

Knowing the variables related to risk practices in adolescents with divorced parents is necessary for understanding and preventing the practice of unsafe sex. The literature abounds, but most studies have been focused on family factors. Specifically, research has investigated factors such as parental emotional support (Upchurch, Aneshensel, Sucoff, & Levy-Storms, 1999), the quality of the mother-child relationship (Davis & Friel, 2001), or the father's absence (Ellis et al., 2003). However, little is known about individual factors that may influence sexual risk behaviors, such as knowledge about sexually transmitted diseases or attitudes toward condom use. It seems that the lack of studies conducted on the association between unsafe sex and individual factors in adolescents with divorced parents may be explained by the abundant studies available on the general population. However, differences in sexual behaviors associated with family structure suggest that research is necessary to investigate whether the individual factors related to sexual risk

behavior in the general population are also associated with unsafe sex in those with divorced parents.

Despite the high contemporary divorce rate and the relation between sexual behavior and family structure, to our knowledge no study up to now has analyzed the influence of some variables, traditionally associated with unprotected sex in the general population, on the sexual behavior of children who have divorced parents. Therefore, the aim of this study is to examine whether knowledge and attitudes toward HIV/AIDS, self-concept, sexual sensation seeking, and social anxiety are related in adolescents with divorced parents to having sex under the influence of alcohol. Examined first are the differences in the individual variables studied between those who have sex or not under the influence of alcohol. Second, a binary logistic regression model explains which variables predict safe sex: not having sex when alcohol is consumed. Based on previous studies with adolescents from the general population, differences are expected in individual variables in function of having sex under the influence. It is hypothesized that adolescents with divorced parents who do not practice sex when they consume alcohol will have more knowledge of HIV/AIDS, more positive attitudes regarding HIV/AIDS, a better self-concept, less social anxiety, and less sexual sensation seeking.

METHOD

Participants

The participants were 132 Spanish adolescents between 14 and 17 years of age with divorced parents. The mean age was 15.87 ($SD = .72$); 51 were boys (39%) and 81 were girls (61%). The skewed gender distribution may be due to the dropout rate in Spanish schools, which is more likely in boys than girls, and this may explain the discrepancy between the percentage of boys and girls taking part in the study. The participants' age range was selected based on the average age of adolescent sexual initiation, before the fifteenth birthday (Dixon-Mueller, 2009). Most adolescents lived with their mother (85%), and less commonly with their father (7%); in 5% of the cases custody was shared, and the remaining 3% lived with their grandparents. The adolescents' average age at the time of their parents' divorce was 7.86 years ($SD = 4.35$; range: 0–17 years). Educational attainment was represented in the sample with parents with none or basic education (48%), high school studies (25%), and a university education (27%). The economic level of families, based on parental income, was medium.

To recruit the sample, 15 schools from five Spanish counties were selected, located in both rural and urban areas. Information was provided to the school principals and parents, and the appropriate permission was requested. Those adolescents whose parents gave written informed consent

($N=1,216$) were included in the sample. Approximately 20% taking part in the study were children of divorced parents ($N=168$). We excluded adolescents living in single-parent households due to causes other than divorce, such as being orphaned or living in reconstituted families ($N=23$). Also excluded from the statistical analysis are adolescents who reported never having had mutual masturbation, intercourse, or oral sex ($N=13$). No participants of the final sample had more than 20% of missing values; therefore, no case was excluded from the analysis. The study received approval from the Ethics Committee of the institution.

Procedure

The participants completed questionnaires collectively in classrooms in groups of 20 students. Instructions were read aloud, and questions were clarified. The order of the questionnaires was counterbalanced so that each student received them in a different order from the surrounding students. As in previous studies (e.g., Jemmott & Jemmott, 1992), to ensure honest replies, informed consent from the participants was obtained, the questionnaires were anonymous, and the importance of replying honestly was also explained. To prevent social desirability and ensure privacy, an envelope was provided to each adolescent to put the questionnaire into after completing it.

Assessment Instruments

SEXUAL BEHAVIOR

Assessment followed convention (e.g., Aspy et al., 2007; Bersamin et al., 2008; Jónsson, Njardvik, Ólafsdóttir, & Grétarsson, 2000). Two questions were addressed: (1) sexual activity (*Have you had mutual masturbation, intercourse, or oral sex?*), with a dichotomous response option (*yes* or *no*); (2) sex under the influence of alcohol (*Have you ever had sex under the influence of alcohol?*), with a dichotomous response option (*yes* or *no*).

SELF-CONCEPT

Self-concept was assessed using the Self Description Questionnaire-II, brief form (SDQ-II; Marsh, 1989; Marsh, Relich, & Smith, 1983). Only the subscales considered related to adolescent sexual behavior were used: relationships with peers of the same (seven items) and opposite sex (six items), physical appearance (four items), and relationship with parents (four items). The SDQ-II has showed an appropriate internal consistency ($\alpha = .87$) (Marsh, 1989) and an adequate predictive validity (Byrne & Worth-Gavin, 1996). With Spanish adolescents the questionnaire retained the psychometric properties with a reliability of .82, adequate factorial validity, and appropriate

convergent and discriminant validity (Espada, Huedo-Medina, Orgilés, & Inglés, 2008).

SOCIAL ANXIETY

To measure social anxiety, the Social Anxiety Scale for Adolescents, Spanish version (SAS-A; Olivares et al., 2005), was used. The SAS-A includes 22 items (4 are filler items) and 3 subscales: Fear of Negative Evaluation (FNE), Social Avoidance and Distress specific to New situations or unfamiliar peers (SAD-New), and Social Avoidance and Distress experienced in the company of peers (SAD-General). The scores range from 1 to 90 for the total score. The reliability was appropriate, with $\alpha = .91$ in the study carried out by the authors of the Spanish version.

KNOWLEDGE ABOUT HIV/AIDS

This was measured using the HIV/AIDS Knowledge Scale for Spanish Adolescents (HIV/KS; Espada et al., 2009), which consists of 10 items distributed in 3 factors: (1) HIV oral transmission (e.g., *Drinking from a glass that has been used by a person with HIV represents a risk*); (2) HIV effects (e.g., *The window period lasts one week*); and (3) Other HIV transmission methods (e.g., *HIV is transmitted through the air*). The scale assesses the knowledge about HIV/AIDS among adolescents quickly and effectively and shows invariance by gender and age as well as good internal consistency ($\alpha = .71$).

ATTITUDES TOWARD SEXUAL RISK BEHAVIORS

The Scale of Attitudes Towards AIDS and Risk Behaviors (SAARB; Espada et al., 2013) was used, consisting of 12 items distributed in 4 subscales: (1) Attitudes toward safe sex when there is an obstacle (e.g., “If I realize that I have no condoms, I would practice safe sex”); (2) Attitudes of adolescents toward testing for the virus (e.g., “I will be tested for AIDS if I engage in a risky practice”); (3) Attitudes toward condom use (e.g., “I think the condom is an effective method to prevent AIDS”); and (4) Attitudes toward people affected by AIDS (e.g., “I would kiss an HIV-positive person”). The questionnaire has an internal consistency of .77 and a test-retest reliability of .60.

SEXUAL SENSATION SEEKING

This variable was measured using the Sexual Sensation Seeking Scale (Kalichman & Rompa, 1995). The scale assesses the adolescents' need to experience various sensations and sexual risk-taking desires to enjoy such sensations. It consists of 11 Likert-type items ranging from 1 (not at all for me) to 4 (very much for me). An illustrative question includes “I am interested in trying out new sexual experiences.” Reliability in the sample was appropriate ($\alpha = .82$).

Statistical Analysis

Differences in knowledge and attitudes toward HIV/AIDS, self-concept, sexual sensation seeking, and social anxiety between adolescents that maintained sexual risk behaviors and those who practiced safe sex were examined using a t-test for a comparison between two independent samples. Effect size indexes were calculated to demonstrate on a common metric how much adolescents differ in those variables. Using binary logistic regression, a model was created with the variables that showed significant differences to predict not engaging in sex under the influence of alcohol.

RESULTS

Only 20% of adolescents who have had sexual relations had sex under the influence of alcohol. Differences were found in knowledge about HIV effects ($p < .01$), attitudes toward safe sex when there is an obstacle ($p < .05$), sexual sensation seeking ($p < .01$), social avoidance and distress specific to new situations or unfamiliar peers ($p < .01$), social avoidance and distress experienced in the company of peers ($p < .05$), and total social anxiety ($p < .05$). Those who never had sex under the influence were less knowledgeable about the effects from the infection, showed a more positive predisposition to have safe sex when there was an obstacle, and had less sexual sensation seeking and more social anxiety. Effect sizes were calculated and revealed indexes from medium to large (Table 1). A model for predicting safe sex (not engaging in sex under the influence) revealed as significant predictors attitudes toward using a condom when there is an obstacle and sexual sensation seeking (Table 2). The model estimated 79.5% of the cases and showed appropriate goodness of fit ($\chi^2 = 71.45$; $p = .00$; Nagelkerke $R^2 = .56$).

DISCUSSION

Adolescents are highly vulnerable to practicing unsafe sex and therefore constitute one of the highest risk groups to HIV infection (UNAIDS, 2010). The vulnerability increases with the occurrence of some negative life events, such as parental divorce, that may facilitate the practice of risk behaviors (Auerbach, Abela, Zhu, & Yao, 2007). Numerous studies have linked adolescent sexual behavior to family structure, but up to now little was known about the variables related to the risk practices in adolescents with divorced parents.

A main contribution of this study was examining the influence of five variables, traditionally associated in the general population with unsafe sex, in a risky sexual behavior of adolescents who have divorced parents: sex under the influence of alcohol. The results indicate that adolescents

TABLE 1 Knowledge About HIV/AIDS, Attitudes Toward HIV/AIDS, Sexual Sensation Seeking, Self-Concept, and Social Anxiety as a Function of Having Sex Along With Alcohol (N=132)

Risk Factors	Sex Under the Influence (N= 27)		Not Sex Under the Influence (N= 105)		t	D
	M	SD	M	SD		
Self-concept						
Physical appearance	14.22	5.57	14.51	5.17	-0.26	-
Relationships with parents	17.74	3.93	18.68	4.78	-0.94	-
Relationships with peers of the same sex	4.48	2.89	5.19	2.89	-1.14	-
Relationships with peers of the opposite sex	20.19	3.68	19.28	4.36	0.99	-
Social anxiety						
FNE	17.81	6.12	19.13	5.71	-1.06	-
SAD-N	12.15	2.84	14.83	4.42	-2.99**	-72
SAD-G	6.19	1.86	7.36	2.74	-2.11*	-5
Total	36.15	9.19	41.32	10.88	-2.27*	-51
Knowledge about HIV/AIDS						
HIV oral transmission	1.7	1.27	1.49	1.26	0.79	-
HIV effects	0.74	0.86	0.31	0.67	2.78**	.56
Other transmission methods	3.48	0.94	3.35	0.93	0.64	-
Total	5.93	1.99	5.16	2.01	1.78	-
Attitudes toward HIV/AIDS						
Obstacles	8.96	2.24	10.07	1.93	-2.56*	-53
Testing HIV	7.07	1.49	7.05	1.14	0.101	-
Condom use	14.48	2.69	14.04	1.74	1.04	-
People living with AIDS	9.78	1.91	9.75	1.73	0.07	-
Total	40.3	5.81	40.9	4.44	-0.59	-
Sexual sensation seeking	26.7	4.76	23.24	5.89	2.83**	.65

Notes. d= Cohen's effect size; FNE= Fear of Negative Evaluation; SAD-N= Social Avoidance and Distress specific to New situations or unfamiliar peers; SAD-G = Social Avoidance and Distress experienced in the company of peers.

*p < .05. **p < .01.

TABLE 2 Binary Logistic Regression Analysis for Not Engaging in Sex Under the Influence (N= 105)

Dependent Variables	Predictor	β	SE β	Wald's χ^2	df	p	OR	I.C. (95%)	
								Inferior	Superior
Not having sex under the influence	SAD-N	.21	.11	3.48	1	.06	1.23	.99	1.53
	SAD-G	.18	.16	1.32	1	.25	1.20	.88	1.64
Social anxiety total	Knowledge about effects of HIV/AIDS	.06	.05	1.44	1	.23	.94	.84	1.04
	Attitudes toward safe sex when there is an obstacle	-.51	.29	3.05	1	.08	.60	.34	1.06
	Sexual sensation seeking	.20	.09	5.15	1	.02	1.22	1.03	1.44
		-.07	.03	5.27	1	.02	.93	.88	.99

Notes. OR = odds ratio; SAD-N = Social Avoidance and Distress specific to New situations or unfamiliar peers; SAD-G = Social Avoidance and Distress experienced in the company of peers.

who practiced sex under the influence are more knowledgeable about HIV effects, but their attitude toward safe sex when there is an obstacle is worse. The reason for this finding is unclear. Previous research has shown that sex under the influence increases the likelihood that the relationship is at risk because it encourages disinhibition (Traeen & Kvaalem, 1996). According to some authors, substance use may lead adolescents to take risks that could make them more vulnerable for HIV infection (Howard & Wang, 2004). Specifically, alcohol consumption has been associated with a lower likelihood of condom use (Becoña, Juan, Calafat, & Ros, 2008; Castilla, Barrio, Belza, & de la Fuente, 1999; Rodríguez, Hernán, Cabrera, García, & Romo, 2007; Takakura, Wake, & Kobayashi, 2007), so it is possible that, despite having more knowledge about the effects of HIV infection, adolescents may perceive less risk due to disinhibition related to drugs. As reported before, the consumption of psychoactive substances is a risk factor for the practice of unsafe sex (Cooper, Wood, Orcutt, & Albino, 2003; Raj, Cheng, Levison, Meli, & Samet, 2006; Stueve & O'Donnell, 2005), and can reduce the perception of risk and increase the feeling of invulnerability (Goh, Primavera, & Bartalini, 1996).

Differences were also found in social anxiety, with lower scores in adolescents who had sex under the influence. Although it is unclear, the effects of drugs may also explain the lower anxiety in adolescents who use them, so they feel more disinhibited and show less distress associated with new social situations and relations with peers. Finally, adolescents who engaged in sexual activity having consumed alcohol were more sexual sensation seekers. These results confirm in adolescents with divorced parents previous findings in the general population (Gutiérrez-Martínez, Bermúdez, Teva, & Buela-Casal, 2007; Spiltanick et al., 2007) showing that teenagers who practiced a greater number of risk behaviors had higher scores on sexual sensation seeking.

Despite the differences found in some variables, the only ones predicting that adolescents with divorced parents will not have sex under the influence were having good attitudes about using condoms when there is an obstacle and low scores in sexual sensation seeking. Clinical implications for these findings are clear. Knowing the variables related to the practice of safe sex among adolescents who have experienced the divorce of their parents may help prevent risky sexual behaviors (for example, improving attitudes about condom use when an obstacle arises to promote condom use, or reducing having sex under the influence of alcohol). Taking care of these variables may make the implementation of sexual education programs and prevention of sexual risk behaviors in adolescents who have experienced their parents' marital breakup more effective.

The study has several limitations and strengths. The main limitation is the sample size, which may restrict the generalization of the results and may explain the few differences found in some comparisons. Yet, since there are no other studies examining the variables analyzed in our research related to

sexual activity of adolescents who have divorced parents, it is not possible to compare the current results with previous findings. Because the design is cross-sectional, conducting longitudinal research to assess the evolution of sexual behaviors and the variables related to them over time is recommended in the future. Furthermore, it would be desirable in future studies to analyze different family variables associated with risk behaviors and children's health in the general population but not included in this study, such as peer relations (Crawford & Novak, 2008; Killoren, Updegraff, Christopher, & Umaña-Taylor, 2011), parent-children communication about sex (Ferguson, 2005; Usher-Seriki, Smith Bynum, & Callands, 2008), or parental disapproval attitudes toward adolescents' sexual behavior (Kao, Loveland-Cherry, & Guthrie, 2010). As the main strength, it is highlighted that this is the first research assessing the association between some individual variables, such as knowledge or attitudes toward HIV/AIDS, and safe sex in children whose parents are divorced. Providing information in this field can improve the quality of life for this segment of the population and focus prevention on the specific risk factors.

REFERENCES

- Abma, J. C., Martinez, G. M., Mosher, W. D., & Dawson, B. S. (2004). Teenagers in the United States: Sexual activity, contraceptive use, and childbearing, 2002. *Vital and Health Statistics*, *23*(24), 1–48.
- Agius, P. A., Pitts, M. K., Smith, A. M. A., & Mitchell, A. (2010). Sexual behaviour and related knowledge among a representative sample of secondary school students between 1997 and 2008. *Australian and New Zealand Journal of Public Health*, *34*(5), 476–481. doi: 10.1111/j.1753-6405.2010.00593.x
- Aspy, C. B., Vesely, S. K., Oman, R. F., Rodine, S., Marshall, L., & McLeroy, K. (2007). Parental communication and youth sexual behavior. *Journal of Adolescence*, *30*, 449–466.
- Auerbach, R. P., Abela, J. R. Z., Zhu, X., & Yao, S. (2007). A diathesis-stress model of engagement in risky behaviors in Chinese adolescents. *Behavior Research and Therapy*, *45*, 2850–2860.
- Baumer, E. P., & South, S. J. (2001). Community effects on youth sexual activity. *Journal of Marriage and Family*, *63*, 540–554.
- Becoña, E., Juan, M., Calafat, A., & Ros, M. (2008). Razones para no aceptar una relación sexual en jóvenes que se divierten en contextos recreativos nocturnos en función del género y la embriaguez [Reasons for not accepting a sexual relationship in young people having fun in nightlife settings in function of gender and drunkenness]. *Adicciones*, *20*(4), 357–364.
- Bersamin, M., Todd, M., Fisher, D. A., Hill, D. L., Grube, J. W., & Walker, S. (2008). Parenting practices and adolescent sexual behavior: A longitudinal study. *Journal of Marriage and Family*, *70*, 97–112.
- Brown, L. K., Lourie, K. J., Flanagan, P., & High, P. (1998). HIV-related attitudes and risk behavior of young adolescent mothers. *AIDS Education and Prevention*, *10*, 565–573.

- Byrne, B. M., & Worth-Gavin, D. W. (1996). The Shavelson model revisited: Testing for the structure of academic self-concept across pre, early and late adolescents. *Journal of Educational Psychology, 88*, 215–228.
- Carey, C., & Schroder, K. E. E. (2002). Development and psychometric evaluation of the brief HIV knowledge questionnaire. *AIDS Education and Prevention, 14*, 172–183.
- Castilla, J., Barrio, G., Belza, M. J., & de la Fuente, L. (1999). Drug and alcohol consumption and sexual risk behavior among young adults: Results from a national survey. *Drug and Alcohol Dependence, 56*, 47–53.
- Cavanagh, S. E., Crissey, S. R., & Raley, R. K. (2008). Family structure history and adolescent romance. *Journal of Marriage and Family, 70*, 698–714.
- Cleveland, H. H., & Gilson, M. (2004). The increased importance of mother-child relationships on sexual behaviors of adolescents in disadvantaged neighborhoods. *Journal of Youth Adolescence, 33*, 319–329.
- Cooper, M. L., Wood, P. K., Orcutt, H. K., & Albino, A. W. (2003). Personality and the predisposition to engage in risky or problem behaviors during adolescence. *Journal of Personality and Social Psychology, 84*, 390–410.
- Crawford, L. A., & Novak, K. B. (2008). Parent-child relations and peer associations as mediators of the family structure-substance use relationship. *Journal of Family Issues, 29*, 155–184. doi: 10.1177/0192513X07304461
- Crosby, R. A., DiClemente, R. J., Wingood, G. M., Salazar, L. F., Harrington, K., Davies, S. L., & Kim, M. (2003). Identification of strategies for promotion of condom use: A prospective analysis of high-risk African American female teens. *Prevention Science, 4*, 263–270.
- Davis, C. E., & Friel, L. (2001). Adolescent sexuality: Disentangling the effects of family structure and family context. *Journal of Marriage and Family, 63*, 669–681.
- Dixon-Mueller, R. (2009). Starting young: Sexual initiation and HIV prevention in early adolescence. *AIDS Behaviour, 13*, 100–109.
- Donahue, K. L., D'Onofrio, B. M., Bates, J. E., Lansford, J. E., Dodge, K. A., & Pettit, G. S. (2010). Early exposure to parents' relationship instability: Implications for sexual behaviour and depression in adolescence. *Journal of Adolescent Health, 47*, 547–554.
- D'Onofrio, B. M., Turkheimer, E. N., Emery, R. E., Slutske, W. S., Heath, A. C., Madden, P. A., & Martin, N. G. (2006). A genetically informed study of the processes underlying the association between parental marital instability and offspring adjustment. *Developmental Psychology, 42*, 486–499.
- Ellis, B. J., Bates, J. E., Dodge, K. A., Fergusson, L., Horwood, J., Pettit, G. S., & Woodward, L. (2003). Does father absence place daughters at special risk for early sexual activity and teenage pregnancy? *Child Development, 74*(3), 801–821.
- Espada, J. P., Ballester, R., Huedo-Medina, T. B., Secades, R., Orgilés, M., & Martínez-Lorca, M. (2013). Development of a new instrument to assess AIDS-related attitudes among Spanish youngsters. *Anales de Psicología, 29*(1), 83–89.
- Espada, J. P., Huedo-Medina, T. B., Orgilés, M., & Inglés, C. J. (2008). *Self-description questionnaire II, brief, SDQ, Spanish version*. Unpublished manuscript, Universidad Miguel Hernández.
- Espada, J. P., Huedo-Medina, T. B., Orgilés, M., Secades, R., Ballester, R., & Remor, E. (2009). Psychometric properties of the HIV/AIDS Knowledge Scale for Spanish adolescents (HIV-KS). *Health and Addictions/Salud y Drogas, 9*, 149–164.

- Fingerson, L. (2005). Do mothers' opinions matter in teens' sexual activity? *Journal of Family Issues*, *26*, 947–974. doi: 10.1177/0192513X04272758
- Goh, D. S., Primavera, C., & Bartalini, G. (1996). Risk behaviors, self-efficacy and AIDS prevention among adolescents. *Journal of Psychology Interdisciplinary and Applied*, *130*, 537–547.
- Gullete, D. L., & Lyons, M. A. (2005). Sexual sensation seeking, compulsivity and HIV risk behaviors in college students. *Journal of Community Health Nursing*, *22*, 47–60.
- Gutiérrez-Martínez, O., Bermúdez, M. P., Teva, I., & Buela-Casal, G. (2007). Sexual sensation seeking and worry about sexually transmitted diseases (STD) and human immunodeficiency virus (HIV) infection among Spanish adolescents. *Psicothema*, *19*, 661–666.
- Hogan, D. P., Sun, R., & Cornwell, G. T. (2000). Sexual and fertility behaviors of American females aged 15–19 years: 1985, 1990, and 1995. *American Journal of Public Health*, *90*, 1421–1425.
- Howard, D., & Wang, M. Q. (2004). The relationship between substance use and STD/HIV related sexual risk behaviors among U.S. adolescents. *Journal of HIV/AIDS Prevention in Children and Youth*, *6*, 65–82.
- Jemmott, L. S., & Jemmott, J. B. (1992). Increasing condom-use intentions among sexually active black adolescent women. *Nursing Research*, *41*, 273–279.
- Kalichman, S. C., & Rompa, D. (1995). Sexual sensation seeking and sexual compulsivity scales: Reliability, validity and predicting HIV risk behavior. *Journal of Personality Assessment*, *65*, 586–601.
- Kao, T. A., Loveland-Cherry, C., & Guthrie, B. (2010). Maternal influences on Asian American-Pacific Islander adolescents' perceived maternal sexual expectations and their sexual initiation. *Journal of Family Issues*, *31*, 381–406. doi: 10.1177/0192513X09351150
- Killoren, S. E., Updegraff, K. A., Christopher, F. S., & Umaña-Taylor, A. J. (2011). Mothers, fathers, peers, and Mexican-origin adolescents' sexual intentions. *Journal of Marriage and Family*, *73*(1), 209–220. doi: 10.1111/j.1741-3737.2010.00799.x
- Ku, L., Sonenstein, F. L., Lindberg, L. D., Bradner, C. H., Boggess, S., & Pleck, J. H. (1998). Understanding changes in sexual activity among young metropolitan men: 1979–1995. *International Family Planning Perspectives and Digest*, *30*, 256–262.
- Lansford, J. E. (2009). Parental divorce and children's adjustment. *Perspectives on Psychological Science*, *4*, 140–152.
- Liebert, R., & Speigler, M. D. (2000). *Personalidad*. Estrategias y temas de Liebert y Speigler [Personality. Strategies, and Liebert and Speigler's topics]. México, D. F.: Thomson.
- Marling, N. R., & Moore, S. M. (1990). Adolescents' attitudes towards AIDS precautions and intention to use condoms. *Psychological Reports*, *67*, 883–890.
- Marsh, H. W. (1989). Age and sex effects in multiple dimensions of self-concept: Preadolescence to early adulthood. *Journal of Educational Psychology*, *81*, 417–430.
- Marsh, H. W., Relich, J. D., & Smith, I. D. (1983). Self-concept: The construct validity of interpretations based upon the SDQ. *Journal of Personality and Social Psychology*, *45*, 173–187.
- Miller, K. S., Forehand, R., & Kotchik, B. A. (2000). Adolescent sexual behavior in two ethnic minority groups: A multisystem perspective. *Adolescence*, *35*, 313–333.

- Nangle, D., & Hansen, D. (1998). Adolescent heterosocial competence revisited: Implications of an extended conceptualization for the prevention of high-risk sexual interactions. *Education and Treatment of Children, 21*, 431–446.
- Olivares, J., Ruiz, J., Hidalgo, M. D., García-López, L. J., Rosa, A. I., & Piqueras, J. A. (2005). Social Anxiety Scale for Adolescents, SAS-A. Psychometric properties in a Spanish speaking population. *International Journal of Clinical and Health Psychology, 5*(1), 85–97.
- Raj, A., Cheng, D., Levison, R., Meli, S., & Samet, J. (2006). Sex trade, sexual risk, and nondisclosure of HIV serotatus: Findings from HIV infected persons with a history of alcohol problems. *AIDS and Behavior, 10*(2), 149–157.
- Rodríguez, A., Hernán, M., Cabrera, A., García, J. M., & Romo, N. (2007). ¿Qué opinan adolescentes y jóvenes sobre el consumo de drogas recreativas y las conductas sexuales de riesgo? [What do adolescents and young people think about recreational drug use and risk sexual behavior?] *Adicciones, 19*, 153–167.
- Salazar, L. F., DiClemente, R. J., Wingood, G. M., Crosby, R. A., Harrington, K., Davies, S., ... Oh, M. K. (2004). Self-concept and adolescents' refusal of unprotected sex: A test of mediating mechanisms among African American girls. *Prevention Science, 5*, 137–149.
- Sánchez, F. (1997). Representaciones psicosociales sobre el SIDA [Psychosocial representations about AIDS]. *Revista Información Psicológica, 63*, 198–200.
- Spiltanick, J. S., DiClemente, R. J., Wingood, G. M., Crosby, R. A., Milhausen, R. R., Sales, J. M., ... Younge, S. N. (2007). Brief report: Sexual sensation seeking and its relationship to risky sexual behaviour among African-American adolescent females. *Journal of Adolescence, 30*, 165–173.
- Stueve, A., & O'Donnell, L. N. (2005). Early alcohol initiation and subsequent sexual and alcohol risk behaviors among urban youths. *American Journal of Public Health, 95*, 887–893.
- Takakura, M., Wake, N., & Kobayashi, M. (2007). Relationship of condom use with other sexual risk behaviors among selected Japanese adolescents. *Journal of Adolescent Health, 40*, 85–88.
- Traeen, B., & Kvaem, I. L. (1996). Sex under the influence of alcohol among Norwegian adolescents. *Addiction, 91*, 995–1006.
- UNAIDS. (2010). *UNAIDS report on the global AIDS epidemic*. Retrieved from <http://www.unaids.org>
- Upchurch, D., Aneshensel, C., Sucoff, C., & Levy-Storms, L. (1999). Neighborhood and family contexts of adolescent sexual activity. *Journal of Marriage & the Family, 61*, 920–933.
- Usher-Seriki, K. K., Smith Bynum, M., & Callands, T. A. (2008). Mother–daughter communication about sex and sexual intercourse among middle- to upper-class African American girls. *Journal of Family Issues, 29*, 901–917. doi: 10.1177/0192513X07311951
- Zimmer-Gembeck, M. J., & Helfand, M. (2008). Ten years of longitudinal research on U.S. adolescent sexual behaviour: Developmental correlates of sexual intercourse and the importance of age, gender and ethnic background. *Developmental Review, 28*(2), 153–224.
- Zuckerman, M. (1994). *Behavioral expressions and biosocial bases of sensation seeking*. New York, NY: Cambridge University.