

The Family and Substance Use among Maltese University Students

Dr. Marilyn Clark

Senior Lecturer
Department of Youth and Community Studies
Faculty of Education, University of Malta

Ms Andrea Gauci

Email: andgauci@gmail.com

Doi:10.5901/jesr.2012.v2n3p115

Abstract This study examines how family structure and functioning impact on prevalence and frequency of substance use in late adolescence and emerging adulthood in Malta. Research participants are a convenience sample of 1130 University of Malta students aged between eighteen and twenty-five. Data was collected by means of a structured questionnaire exploring relationships between family functioning, family structure and substance use. The confidence interval for all results is 95% and the study has a maximum margin of error of 2.7%. The study explored the relationship between perceived family intactness, family size, emotional climate, parenting styles, family rituals and monitoring and supervision and patterns of self reported substance use. The results reveal significant relationships between perceived family functioning and family structural variables and self reported substance use especially for family intactness and monitoring and supervision. While the results do not allow for any interpretation regarding causality, they present novel data for the Maltese islands. Recommendations for policy development and further research are explored.

Key Words: adolescence/emerging adulthood, family, substance use, risk, resiliency.

1. Introduction

Consistently, research identifies the family as one of the most critical risk and resiliency variables for substance abuse in adolescence and emerging adulthood (Hawkins et al., 1992; Moon et al., 2000). No primary data in this regard has ever been collected in Malta. Recent approaches to drug prevention emphasize risk factors and several variables are identified differentiating those young people who use drugs from those who do not (Moon et al., 2000). Generally, the more risk factors a young person is exposed to, the more vulnerable he or she becomes. On the other hand, 'protective' or 'resiliency' factors enable sustained competent functioning even in the presence of major life stressors (Arthur et al., 2002; Luthar, 1991; Masten et al., 1990). Risk and resiliency factors present themselves in three systems: (a) the characteristics of the individual associated with greater risk or resiliency; (b) the family interaction system in which the young person is absorbed and; (c) the school and community milieu in which the adolescent is embedded (Lettieri et al., 1980; France and Crow, 2005; Glantz and Pickens, 1992; Hawkins et al., 2004; Petraitis et al., 1995; Schroeder et al., 2007; Sussman et al., 2002). In Malta, ESPAD (2007) reports "heavy episodic drinking" (ESPAD, 2007, p. 10) amongst 16 year olds and a continuous increase in the use of illicit drugs, although the averages for illicit drug use continue to be similar or less than the European average. The present study is the first large scale study in Malta examining the relationship between perceived types of family structures and particular family dynamics and patterns of self reported consumption of licit and illicit substances in a specific youth population: university students. It is hypothesized that there exists a significant relationship between young people's perception of the intactness of the family unit, family size, emotional climate, parenting styles, discipline strategies, family rituals, and monitoring and supervision and patterns of self reported substance use. The data gathered is descriptive and while relationships in the data are examined, there is no attempt at causal analysis.

2. Adolescent Substance Use

Several theoretical frameworks which may be roughly grouped under biological, psychological and sociological explanations (Goode, 2008), have been developed to explain adolescent substance use, identifying factors that predict the use of licit and illicit substances as well as those promoting abstinence. While it is beyond the scope of this paper to review these here, brief reference will be made to some theories that draw on the family as an explanatory framework for

substance use. Hirschi's Social Bonding Theory (1969) argued that behavioural conformity results from bonds developed between an individual and society (family, school, peers, religion, the work place etc). A strong social bond is manifested by a time factor or 'involvement', a stake in society or 'commitment' and by 'attachment' to role models about whose opinion the young person cares. Young people who spend time with their families, who care what their parents think of them and who are committed to conventional goals through the internalization of beliefs systems as a result of family socialization would be less likely to engage in non normative behaviour. The theory has been applied widely to the use of licit and illicit substances, albeit with mixed results (e.g. Collins & Ellickson 2004; Junger-Tas et al., 2004).

Social learning theories posit that youth substance use is primarily influenced by the associations one has with definitions or behaviour patterns that either reinforce or punish such behaviour, and that the acquisition of definitions favourable to law violation increases the likelihood of deviant conduct (Kobus, 2003; Sutherland, 1947). Social learning theories propose that the use and abuse of substances can be explained by differential exposure to groups in which such use is rewarded or at least goes unpunished. A number of studies that compared the relative effects of parental attachment and deviant peers on various types of substance use have found that association with deviant peers mediates the influence of social bonds on substance use and delinquency (Longshore et al., 2004). However more recent brain research suggests that adolescents give priorities to rewards over consequences in their decision-making, which means that the usual assumptions about the provisions of disincentives no longer seem all that useful (Mather & Lighthall, 2012). In their original Problem Behaviour Proneness Theory Jessor and Jessor (1977) identified unconventionality and the willingness to take risks as key elements in the initiation of substance use. While the willingness to take risks and indeed, the opportunity to take risks is identified as a significant positive factor (Trimpop, 1994), Jessor and Jessor highlighted how transition prone, unconventional youth are less likely to be attached to family. Gottfredson and Hirschi's (1990) further development of his theory postulates that lack of self control is caused by inadequate parental socialization. Parents who lack affection for their children may not monitor them adequately and hence fail to identify deviant behaviour at its onset. Drawing on Routine Activities Theory (Cohen & Felson, 1979) one might consider how adult guardians counter drug use among adolescents.

3. Youth transitions

Transitions produce potential for long-term change (Pickles & Rutter, 1991; Henderson et al., 2007). It is often during the transitional periods of adolescence and emerging adulthood that independence and residential mobility occur; a critical juncture for generating life chances (Pulkkinen & Caspi, 2002). Many post teenagers attend colleges or universities creating an extended period of temporariness. Arnett (2000) has named this period emerging adulthood. In Malta however, small geographical size and the location of the only university in a central part of the island, as well as cultural attitudes means that most young people continue to reside with their family of origin while they are studying at university. While they may not be making any housing transitions, emerging adults are given increasing freedom with the family to make their own decisions. This is a time for decision-making, evaluation, finding one's identity and carving out a place in the world (Santrock, 2007). While changes pose challenges for the young person, the vast majority deal with stresses well (Fergus & Zimmerman, 2005). Risk taking may result from the struggle to find a place in society (Sroufe et al., 2005) While substance abuse is common during this period (Rowe & Liddle, 2006) the vast majority of youth use drugs only recreationally during their transition to adulthood and most often stop using them or continue to do so only sporadically once their lives encounter greater routine and commitment through the assumption of adult roles (Van Gundy & Rebellon, 2010).

As the adolescent begins to think more like an adult there is a push for autonomy. Independence is no longer symbolised by leaving one's family but is more likely to mean emotional freedom within the family to make decisions concerning one's life and to develop autonomy. One in four families experience difficulties during this time (Rutter et al., 1976). Noller and Callan (1991) discuss how if families spend constructive time together, this can be a vital place in which youth may continue to develop. Positive family connections are protective factors against a range of risky behaviours and family relationships in adolescence and emerging adulthood have important follow on effects for a number of domains such as autonomy and later independence (Coleman & Hendry, 1990; Borkowsky et al., 2002); self esteem (Rosenberg & Kaplan, 1982; Parker & Benson, 2004); individual psychopathology (Eirini, 2010); problem behaviour (Esfandyari et al., 2009); delinquent behaviour and drug use (Guilamo-Ramos et al., 2008).

4. Family Structure

In a predominantly Catholic Maltese society the traditional nuclear family still prevails. In Maltese households, two adults

and two dependent children, still make up the largest percentage of households. In 2007 the European Survey on Income and Living Conditions reported that in a sample of 55,950 households, 7% consisted of single parent households. However, over the last decade there has been a significant increase in births outside marriage and in marital separations (National Statistics Office, 2009). At the time of the research, it was not possible to legally divorce in Malta. Divorce became legal in October 2011. Despite this, Maltese adolescents now grow up in a variety of family structures (Tabone, 1995). Adolescents experiencing parental separation may have difficulty coping with anger, showing sadness and may be used as confidants by their parents (Hetherington & Stanley-Hagan, 1999; Wallerstein, 2005; Lansford et al., 2006). They may act out, feel anxious about the future, and experience emotional and social withdrawal. Feelings of loss may put the adolescent at risk of substance abuse (Cooney, 1988; Amato, 2005; Hetherington & Kelly, 2002).

Some research finds that adolescents from non intact homes are more likely to be involved in delinquent and drug using behaviour (Curran & Renzetti, 1994). However others argue that it is the conflict preceding separation/divorce that contributes to problem behaviour rather than separation *per se* (Amato, 2001). The introduction of stepparents into the family situation is initially frequently problematic. (Santrock, 2007; Hetherington & Clingempeel, 1992; Kerig & Swanson, 2010). The number of children in the family also influences the management of adolescents, with less parental monitoring and supervision in large families (Preto & Travis, 1985; Dunn, 2006; Tucker et al., 2003). Socioeconomic status, broadly defined as one's level of income, is often seen as a basis for drug use with economic hardship facilitating substance use (Needle et al., 1990). Financial difficulties are likely to be encountered following separation or divorce and exacerbated in large families.

5. Family Functioning

Irrespective of structure, a family that functions adequately can provide a supportive environment for adolescents. Frequent exposure to negative emotion in the household may be overwhelming for adolescents, effecting their management of emotions (Gross, 2007). Parenting styles influence adolescent outcomes and are perceived in terms of two factors: responsiveness and demandingness (Baumrind, 1991). Baumrind (1991) identified four parenting styles. Authoritarian parenting is not responsive but demanding and directive. Children from such families tend to be less involved in problem behaviour and perform moderately well in school, but have poor social skills, lower self-esteem and higher levels of depression (Darling, 2010). Permissive indulgent parenting is low in demandingness but high in responsiveness and children regulate their own activities (Fagot as cited in Kaplan, 2004). These children have better social skills and higher self esteem but are more likely to be involved in risk behaviour. Permissive neglectful parents, characterised by low responsiveness and low demandingness, do not monitor their children's activities and provide little structure giving the adolescent more opportunity to experiment with substances (Kaplan, 2004). Authoritative parenting is high in responsiveness and high in demandingness. Parents are supportive and assertive but not intrusive and restrictive and encourage their adolescents to be socially responsible and self-regulated (Baumrind, 1991). The child grows to be socially competent, self-reliant, independent, self-controlled and contented, leaving the adolescent less likely to develop problems with substances (Kaplan, 2004).

Families of drug users tend to have discipline issues that arise from both how the discipline is implemented and how it is used (Jurich, Polson, Jurich & Bates, 1985). Democratic discipline has been associated with the prevention of drug use (Baumrind, 1991). Adolescents have a higher self-esteem and sense of belonging when their families have structured routines and rituals (Fiese, 1992). Family rituals are capable of giving the adolescent meaning and stability in times of transition and make the adolescent more resilient in the face of substance use (Fink, 2000). Monitoring and supervision in adolescence "serve as a protective factor against association with deviant peers, and more seriously, the influences of substance-using peers and siblings" (Dishion & Kavanagh, 2001, p. 127). Farrell and Dintcheff (as cited in Segrin & Flora, 2005) found lower levels of alcohol abuse in adolescents who were monitored. Parents who are aware of their children's activities are able to steer them from problematic situations. Even though adolescents usually detest supervision it shows them that their parents care for them fostering self-esteem and self-confidence (Segrin & Flora, 2005). Dishion, French and Patterson (as cited in Dishion & Kavanagh, 2001) found poor monitoring was associated with early onset adolescent substance use. Conflict within the family has been strongly correlated with an adolescent's involvement with alcohol and other drugs (Hops et al., 1990).

Adolescent persistent users describe their lives at home as being troubled (Shedler & Block, 1990). Adolescent drug use lessens as the strength of the attachment to the family increases (Brook et al. as cited in Guber & Taylor, 2006). Baumrind (1985) found that delayed onset of marijuana use in girls is positively related to parental firmness, responsiveness, self awareness, demandingness and intellectual stimulation. The family's social position and the maintenance of structure were also factors that were positively related to delayed onset. Delayed onset for boys was

related to parental conventionality and family intactness. The literature thus emphasises the role the family plays in adolescent drug use, and we can come to "a near unanimous conclusion that a positive relationship between the child and his or her parents can serve as a deterrent to the use of drugs" (Glynn & Haenlein, 1988, p. 44).

6. The Maltese Context

According to the Council of Europe Review of youth policy in Malta (2005):

In many respects Malta is a traditional Roman Catholic society in which faith, family and community constitute the main points of reference for the overwhelming majority of the population. It is a warm and cohesive society that certainly appears to care deeply for its young people. The family, for example, is a vital national resource and a socially protective factor. Unlike many other European countries, young people's delayed transition to independent living is not perceived as a major problem in Malta. Most young people are content to remain living at home until their late twenties, and parents appear happy to accommodate them (p. 7).

The presence of one University in a country of 42 square km means that young people do not need to move out of home in order attend university. Many continue to live at home until they are married. According to Abela (2009) "parents continue to exert a great influence on their children, given that although younger generations tend to marry in their late twenties, most of them continue to live with their parents until they get married" (p.151). The family remains an important social context for emerging adults. A recent study on the health behaviours of university students (Cefai & Camilleri, 2009) at the University of Malta explores, similarly to this study, drug use among students. Using a random sample of 500 students, they found that 10.1% of students made use of drugs in the last month, 9.6% used cannabis and 4.4% used cocaine in the last month. 3% of students used inhalants, ecstasy, amphetamines and LSD in the last year. Students were unlikely to use heroin. Cannabis is the drug of choice for University of Malta students; 12% reported smoking tobacco regularly. In the Cefai and Camilleri study the most commonly used substance among students is alcohol; 11% drink on a regular basis, 45% drink at the weekend and 13% binge drink on a regular basis. Students seem more likely to consume alcohol rather than illicit drugs or tobacco, in the presence of family (Cefai & Camilleri, 2009).

7. Hypothesis and Research Instrument

This study hypothesized a relationship between the perceived intactness of the family unit, family size, perceived emotional climate, perceived parenting styles, participation in family rituals, perceived monitoring and supervision and patterns of self reported substance use among young people attending university in Malta. Causal analysis was not engaged in and hence the direction of the relationship was not explored. While the hypothesis that family functioning matters is somewhat predictable given the amount of research on the issue, the matter has never before been studied with such a sample locally.

Intactness of the family was measured by asking the respondents whether when they were growing up their parents were married, separated or divorced and in the case of the latter two, whether they then lived in a reconstituted family unit. Family size was measured by the number of family members living under the same roof, including extended family members like grandparents. The family functioning variable responses can only indicate what the respondents perceived to be the case at the time rather than an actual measure of the variable in question. Perceived emotional climate was measured through items in the questionnaire measuring perceived mood states of the family members, the degree of fighting in the home, an evaluation of the atmosphere as pleasant, relaxed or tense and the perceived warmth and availability of other family members.

The variable 'parenting styles' was measured through recall of parental discipline strategies and items reflecting authoritarian, authoritative and laissez faire styles. Participation in family rituals was measured by asking respondents if their family members did things together when they were growing up. Monitoring and supervision items included one that asked respondents if their parents would know where they were and who they were with and another asking if their parents knew what activities they were engaged in. The drug use variables measured substance use in lifetime and last month but most of the items focused on use in the last 30 days following the European School Survey Project on Alcohol and Other Drugs (ESPAD) and which is more indicative of actual use. The study approaches substance use as an activity rather than as an inherent problem in the population under study, which have already demonstrated success in one major area of adolescent functioning, i.e. post secondary education.

A questionnaire was constructed to examine family structure and functioning and to relate these to patterns of self

reported substance use. Reliability of the research tool was measured using the test retest method. The Guttman Split-Half Coefficient was .91 showing that the questionnaire has sufficient reliability. Participants were assured full anonymity and confidentiality. The questionnaire comprised three main sections. The first section explored demographics. The second section explored family structure and student perception of family functioning. The last section measured the students' self reported use of substances including alcohol, tobacco, marijuana, cocaine, magic mushrooms, crack, ecstasy, heroin by smoking, heroin by means other than smoking, LSD or other hallucinogen and anabolic steroids. The last part of the tool explored students' alcohol consumption patterns in further detail since this is the most commonly used substance.

8. Methodology

The 1130 respondents (311 males and 819 females) were current students of the University of Malta for the scholastic year 2009/2010. Males and females had equal opportunities to take part in the study but women are generally more likely to respond to surveys (Martikainen, 2007). Participants were aged between 18 and 25 and in the transition to adulthood. All participants had an A-Level standard of education and sufficient understanding of the English language. Convenience sampling was used through the University's Electronic Student Information Management System (eSims) to which all students have access. In 2009 to 2010 there were 10,044 students enrolled; 4209 males and 5835 females. The system provides each student with an email address, login name and password, so that through a Webmail system, the university may send emails. The questionnaire was sent out (through the registrar's office) to the 8,055 students between the ages of eighteen and twenty five, thus ensuring that each student within the eligibility bracket had an equal opportunity to take part in the study. The maximum margin of error was calculated with the degree of confidence being 95% and the population size 8055.

9. Results

9.1 Substance use

Table 1 illustrates the frequency of students' substance use across their lifetime. Alcohol is the most commonly used substance, with almost half of the population having used it over twenty times in their lifetime. The most commonly used illicit substances were marijuana and ecstasy, used by 10% and 2% of students respectively. The substances that were used least by students across their lifetimes were heroin and crack.

Table 1 Frequency of Use across Lifetime

	1 to 20 times	> 20 times
	N = 1130	
	<i>n</i>	<i>n</i>
Alcohol	405	551
Tobacco	284	255
Marijuana	213	95
Cocaine	64	13
Magic Mushrooms	32	0
Crack	12	0
Ecstasy	47	17
Heroin (by smoking)	4	2
Heroin (other than smoking)	4	1
LSD	85	3
Anabolic Steroids	28	3

It must be stated at the outset that the statistical relationships documented hereunder cannot be interpreted in a causal manner since causal analysis did not constitute part of the data analysis. Using analysis of variance each of the family

variables was separately correlated with the frequency of use of each substance across the students' lifetime.

A correlation was established between perceived home emotional climate and substance use across the lifetime. Students who drank alcohol more than twenty times in their lifetime reported a more negative perceived home emotional climate than other students ($SD = 1.09$, $p < .01$). Similarly, students who smoked tobacco more than twenty times in their lifetime report a more negative perceived home emotional climate than students who reported never smoking ($SD = 1.19$; $p < .001$). Students who reported using marijuana ($SD = 2.41$; $p < .001$), cocaine ($SD = 1.00$, $p < .01$), ecstasy ($SD = 1.13$; $p < .001$), LSD or other hallucinogens ($SD = .03$; $p < .01$), and anabolic steroids ($SD = 1.73$; $p < .01$) more than twenty times in their lifetime also perceived their home emotional climate as more negative than students who never used the substances. This finding suggests that students who perceive their family unit as being characterised by warmth, as opposed to tension report less use of licit and illicit substances.

Perceived discipline strategy was examined in view of frequency of use across lifetime. A significant relationship was found between perceived inconsistent discipline by parents and the use of tobacco ($SD = 1.12$; $p < .05$), marijuana ($SD = 1.18$; $p < .05$) and anabolic steroids ($SD = 1.41$; $p < .05$). A significant interaction also emerged between perceived low monitoring and supervision and the use of marijuana ($SD = 1.04$; $p < .001$), cocaine ($SD = 1.15$; $p < .001$), magic mushrooms ($SD = 1.18$; $p < .001$); alcohol ($SD = .90$; $p < .001$), tobacco ($SD = .10$; $p < .001$), ecstasy ($SD = 1.07$; $p < .001$), LSD or other hallucinogens ($SD = 1.32$, $p < .001$) and anabolic steroids ($SD = .71$; $p < .001$).

A significant negative relationship was found between partaking in family rituals and the use of alcohol ($SD = 1.05$; $p < .01$), tobacco ($SD = 1.13$; $p < .001$), marijuana ($SD = 1.17$; $p < .001$), cocaine ($SD = 1.18$; $p < .05$) and LSD or other hallucinogen use ($SD = .76$; $p < .01$). One cannot conclude from the results that lack of family rituals brings about substance use in young people. It may be the case that youth who use drugs resist involvement in family rituals or that the two are influenced by third variable.

Students who reported that their parents exercised authoritative parenting were less likely to report consuming alcohol, tobacco, marijuana and LSD or other hallucinogens. Students who perceived their parents to have high permissive neglectful parenting style had a significantly higher use of alcohol ($SD = .83$; $p < .01$), tobacco ($SD = .84$; $p < .001$), marijuana ($SD = .86$; $p < .001$), cocaine ($SD = .88$; $p < .01$) and LSD or other hallucinogens ($SD = .87$; $p < .01$), when compared to those students who perceived their parents to have low permissive neglectful parenting style. Young people from non intact homes were more likely to report using tobacco, marijuana, magic mushrooms, ecstasy, heroin by smoking, and LSD or other hallucinogens. A significant positive interaction emerged between family size and cocaine use; those students with larger families were more likely to use the drug than students with smaller families ($p < .05$).

Analysis was carried out to explore the relationships between age of first use and the individual family variables. Parents' marital status was significantly correlated to the mean age of first use of alcohol; 15 years of age for students whose parents were married in adolescence and 13 years of age for those students whose parents were separated in adolescence ($SD = 2.55$; $p < .001$). Age of first use of alcohol was also related to parenting style; students who perceived their parents to have an authoritative parenting style reported later onset of alcohol use ($r = .10$; $p < .01$) than students who perceived their parents to use a different style of parenting.

The age of first use of alcohol was also later for adolescents who perceived their parents to have a permissive indulgent parenting style ($r = .07$; $p < .01$). Students who perceived their parents to have a permissive neglectful parenting style ($r = -.09$; $p < .01$) were more likely to report drinking alcohol at an early age. Perceived parenting style was not related to age of onset of tobacco use ($p > .05$). Age of first use of alcohol was significantly correlated with monitoring and supervision ($r = .23$; $p < .001$); those students who perceived their parents to have high monitoring and supervision reported the first use of alcohol at a later age. Participation in family rituals was significantly correlated with reported age of first use of alcohol ($p < .01$).

A significant interaction was found between monitoring and supervision and binge drinking ($p < .001$). 20% of students who reported very low monitoring and supervision in their adolescence binge drink regularly, five or more times in a month, while only 1.6% of students who reported high monitoring and supervision in adolescence binge drink..

10. Discussion

The frequency of substance use, including the high rate of alcohol lifetime use among the student population in this study, was similar to that found locally by Cefai and Camilleri (2009) and ESPAD (1997, 2003, 2007). Consistent with World Health Organisation data (2008) marijuana is the most commonly used illicit substance by students. For most substances there is high lifetime use and low monthly use indicating experimentation rather than problem use.

While the role of families in youth substance use is well known, this research has yielded some novel preliminary results for the Maltese context. They should however be interpreted with caution. A relationship between variables does not necessarily mean that one variable is causing the other and further research in Malta is needed to determine this. In this study the strongest relationships were for family structure and monitoring and supervision, which are known to impact on each other (Moon et al, 2000). Students from non intact homes were more likely to report using substances. Living in a one parent family may result in less supervision since one parent may monitor and supervise less effectively than two. Parental separation may also place stress on the young person during this delicate period of transition. The literature in fact indicates that adolescents from non intact homes may have difficulty coping with their emotions (Wallerstein, 2008) and may begin to act out (Cooney, 1988; Hops et al., 1990). Parental separation thus emerges as an important risk factor. Children of divorced parents report greater alcohol and drug involvement compared with children from intact, married families (Doherty & Needle, 1991; Fergusson, Horwood, & Lynskey, 1994; Short, 1998). In Malta marital separation is on the increase (NSO, 2009) and divorce was legalised in October 2011. Current social changes affecting Maltese families include changing employment and working practices, new demographic trends and changing family structures (Abela et al, in press). In the present study students from non intact families were twice as likely to report having been intoxicated as students from intact families. Whether this is a function of the conflict preceding the separation remains to be ascertained.

Monitoring and supervision, for which this study also showed significant associations, is likely to be reduced in large families (Farrington & West, 1995) as well as in single parent households. Older adolescents may be encouraged to spend time out of the house while parents cope with younger children. Emotional climate was a factor that was significantly correlated with more than half of the substances supporting Wight and Barnes and Windle (as cited in Muisener, 1994). Emotional climate may be adversely affected as a result of parental separation or may be a precursor to it.

The present research has also shown that parenting styles may be related to an adolescent's substance abuse with authoritative parenting style serving as a resiliency factor, while permissive indulgent and permissive neglectful parenting styles serving as risk factors. Authoritative parenting allows for emerging autonomy but still places some needed control and guidance on behaviour. The extensive dialogue afforded by this type of parenting often results in young people who are socially responsible and self reliant, protective factors for substance use (Jackobsen & Crockett, 2000). Authoritative parenting style has been shown to delay the age of use of alcohol and in the present study the two variables were positively correlated. In her longitudinal study Baumrind (1985) mentions those characteristics in parents that delay use of marijuana and alcohol, almost all of which fall under the authoritative parenting style. Results for permissive neglectful parenting style also corresponded with previous studies cited in the literature review for this paper - the higher the reported traits of this parenting style the higher the frequency of reported substance use. This style of parenting gives little structure and monitoring to an adolescent, and thus gives them time to experiment and use drugs more freely without worrying about the consequences. Baumrind (1985) found that structure is needed to delay onset of use of substances. Permissive indulgent parenting traits were positively related to the age of first use of alcohol. This is contrary to what was expected, as research indicates that adolescents who have parents with this style are more likely to be involved in problem behaviour. The adolescent may however come to respect the warmth that they receive from their parents and develop a strong social bond with them. Permissive indulgent parenting may still foster a positive emotional climate in the home although structure is lacking. The results on the parenting styles show how authoritative parenting is most effective in insulating youth from substance use. According to Baumrind authoritative parents "monitor and impart clear standards for their children's conduct. They are assertive, but not intrusive and restrictive. Their disciplinary methods are supportive, rather than punitive." (Baumrind, 1991, p. 62). This style of parenting produces socially responsible and self regulated adolescents.

Family rituals were significantly correlated with the frequency of reported use of substances and the age of first use of alcohol. This corresponds to Fink (2000), as he says that family rituals contribute to a young person's resilience in the face of substance abuse. Family rituals serve as powerful organizers of family life that provide stability during times of transition such as the period of youth and emerging adulthood. Family rituals also delay the onset of use of alcohol, as the students whose families gave importance to family rituals such as sitting and eating together have a higher age of onset for alcohol. Rituals have been shown to protect mental health under high-risk conditions (Bennett et al., 1987). The results show that monitoring and supervision in adolescence is an important variable impacting substance abuse. It was related with the frequency of use of most substances and one may hypothesise that it could serve as a possible mediating variable when examining relationships between other variables, like family structure, family size and parenting styles. This study supports the findings by Dishion and Kavanagh (2001) that monitoring and supervision are protective factors for the adolescent. The results are also consistent with those of Farrell and Dintcheff (as cited in Segrin & Flora,

2005) who found lower levels of alcohol abuse in adolescents who have parental monitoring. The results also confirm that the age of first use of alcohol is significantly higher for those students who reported experiencing parental monitoring and supervision in adolescence. Monitoring and supervision is the only variable that was related to binge drinking, and the relationship is very strong.

Students who have low monitoring and supervision are almost twenty times more likely to binge drink regularly. Lack of monitoring allows young people to freely dabble in risky behaviour. This is evidenced by the results of the current study where monitoring and supervision was exceptionally correlated with frequency of intoxication. Thus this research continues to add to the evidence that parental monitoring is protective for young people. Knowing their children's whereabouts, activities, and peers when they are not under their direct supervision reduces the incidence of substance use. Fletcher et al. (2004) found that involved parents who solicit information concerning activities and consequently provided higher levels of control have a positive impact on their adolescents' behaviour.

11. Conclusion

The aim of the study was to explore the relationship between perceived family functioning and structure and reported substance use in the transitional period of late adolescence and emerging adulthood in a sample of university undergraduate students in Malta. The main areas of focus were the frequency of substance use, binge drinking and the frequency of intoxication in relation to family variables. Both family structure and perceived family functioning have been shown to be related to self reported substance use in this transitional period and it is hypothesised that they may also influence each other.

The family variables mostly related to young people's drug use were: family intactness and monitoring and supervision in the adolescent years. Clearly these two variables are related in that monitoring and supervision is likely to decrease as a consequence of separation or divorce and living in a one parent family. Family rituals and emotional climate are also likely to be affected by family structure. Other variables such as family size, discipline strategies, emotional climate, parenting styles and family rituals also showed a significant relationship to adolescent substance use. The study suggests that the ideal family environment to foster resiliency is an intact family that monitors the activities of the young people living within it. It is also advantageous if the family is not overly large, harbours a positive emotional climate, with parents exercising an authoritative parenting style and where discipline strategies are fair and consistent. Time and effort put into family rituals also impact positively.

This study adds weight to the ample evidence on the importance of the family in the transitional period of late adolescence and emerging adulthood. In Malta empirical research in this area is notably lacking and although this study cannot make any conclusions about the causal effect of family variables on substance use, it indicates areas for further research in the area. More specifically a research agenda that allows for interpretations with regards to the direction of the relationships highlighted in this preliminary study is in order. Research among different populations of young people is also recommended since the sample population in the present study is one that has already negotiated some major successes in terms of educational achievement.

It is clear from the self reports on substance use presented here that this population is likely to use in a recreational and unproblematic manner. Research in Malta on family dynamics among young problem drug users is therefore recommended. This will have important implications for both prevention and intervention given the trends of emerging adults to continue residing with their family of origin for longer than in the past. Other family related issues need to be explored locally, most notably, the impact of parental drug use, the impact of domestic violence and fostering, adoption and being in care.

On a policy level efforts in Malta need to be directed towards strengthening the family in a time of rapid social change. Recent research is indicating that Maltese parents are working more hours and often find it hard to negotiate work and family life (Abela, Borg Xuereb, Casha, Clark, Inguanez and Sammut Scerri, in press). The family unit may be subjected to added pressures when adolescents begin to move into young adulthood. Flexible families that have the potential to adapt to change are more likely to survive transitional periods than rigid family systems (Olson & Gorall, 2003). Practical measures that assist families in such times include but are not limited to: work family balance measures; relationship education and provision of parenting skills; and provision of affordable recreational opportunities.

In times of economic hardship fiscal measures assisting families to parent effectively are crucial. Healthy families balance home, work and outside activities but achieving a work family balance might be difficult for parents who have to struggle to provide financial security for their dependents. Monitoring and supervision are difficult to sustain if parents are working at several jobs in order to support the family unit. Maltese families are moving away from the traditional male breadwinner/female homemaker model. Part time work is also on the increase. Moreover over half of the Maltese work

more than the standard eight hours a day of work (Borg, 2011).

While Maltese society and the family in particular is undergoing rapid social change, epitomised in the recent introduction of divorce in the country, values surveys indicate that family unity and the need to uphold marriage are important values embedded within Maltese culture (Abela, 2000). According to Abela (2009) Malta continues to have a strong social fabric that promotes social control with parents continuing to have considerable influence on their children. Evidence based policy efforts promoting practices that strengthen the Maltese family further should be prioritised.

References

- Abela, A. (2009). Relationship education for families in transition between different cultural value systems: A Maltese perspective. H. Benson, & S. Callan (Eds.), *What works in relationship education? Lessons from academics and service deliverers in the United States and Europe* (pp. 149-160). Qatar: Doha International Institute for Family Studies and Development
- Abela, A., Borg Xuereb, R., Casha, C., Clark, M., Inguanez, J. and Sammut Scerri, C. (in press) Needs of Maltese Families with Dependent Children : A Focus Group Study Among Professionals. BOV Review
- Akers, R. and Sellers, C. (2004) *Criminological Theories: Introduction, Evaluation, and Application*. Fourth Edition.
- Amato, P. R. (2001). Children of divorce in the 1990s: An update of the Amato and Keith 1991 meta-analysis. *Journal of Family Psychology, 15*, 335-370. doi: 10.1037/0893-3200.15.3.355
- Amato, P. R. (2005). The impact of family formation change on the cognitive, social and emotional well-being of the next generation. *The Future of Children, 15*, 75-96. doi: 10.1353/foc.2005.0012
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*, 469-480. doi: 10.1037/0003-066X.55.5.469
- Arthur, M. W., Hawkins, D., Pollard, J. A., Catalano, R. F., & Baglioni, A. J. (2002). Measuring risk and protective factors for use, delinquency, and other adolescent problem behaviours. *Education Review, 26*, 575-601. doi: 10.1177/0193841X0202600601
- Ausubel, D. P. (2002). *Theory and problems of adolescent development (3rd ed.)*. Bloomington: iUniverse.
- Baumrind, D. (1985). Familial antecedents of adolescent drug use: A developmental perspective. In C. LaRue Jones & R. J. Battjes (Eds.), *Etiology of drug abuse: Implications for prevention* (pp. 13-44). Washington: DHHS.
- Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *Journal of Early Adolescence, 11*, 56-95. doi: 10.1177/0272431691111004
- Benett, L. A., Wolin, S. J., Reiss, D., & Teitelbaum, M. A. (1987). Couples at risk for transmission of alcoholism: Protective influences. *Family Process, 2*, 111-129. doi: 10.1111/j.1545-5300.1987.00111.x
- Berk, L. (2007). *Development through the lifespan*. Boston: Allyn and Bacon.
- Bezzina, C., Author, & Borg, M. (1997). *ESPAD: National report*. Malta: Dormax Press.
- Borkowski, J. G., Bisconti, T., Weed, K., Willard, C., Keogh, D. A., & Whitman, T. L. (2002). The adolescent as parent: Influences on children's intellectual, academic, and socioemotional development. In J. G. Borkowski, S. L. Ramey, & M. Bristol-Power (Eds.), *Parenting and the child's world: Influences on academic, intellectual, and social-emotional development* (pp.161-186). Mahwah: Erlbaum.
- Borg, B. (2011) "Most People Overworked," Times of Malta, 9 November. Available at: <http://www.timesofmalta.com/articles/view/20111109/local/Most-people-overworked.392928>. Accessed on 16 January 2012.
- Caya, M. L., & Liem, J. H. (1998). The role of sibling support in high-conflict families. *American Journal of Orthopsychiatry, 68*, 327-33. doi: 10.1037/h0080342
- Cefai, C. and Camilleri, L. (2009). *Healthy students healthy lives: The health of Maltese university students*. Malta: University of Malta
- Press. Chassin, L., Pitts, S. C., & Prost, J. (2002). Binge drinking trajectories from adolescence to emerging adulthood in a high-risk sample: Predictors and substance abuse outcome. *Journal of Consulting and Clinical Psychology, 70*, 67-78. doi: 10.1037/0022-006X.70.1.67
- Cohen, Lawrence E. and Marcus Felson (1979). "Social Change and Crime Rate Trends: A Routine Activity Approach." *American Sociological Review, 44*:588-605.
- Coleman, J. C., & Hendry, L. B. (1999). *The nature of adolescence*. London: Routledge.
- Collins, W. A. (1990). Parent-child relationships in the transition to adolescence: Continuity and change in interaction, affect and cognition. In R. Montemayor, G. Adams, & T. Gullotta (Eds.), *Advances in adolescent development: From childhood to adolescence, a transitional period?* (pp.85-106). London: Sage.
- Collins R.L., Ellickson P.L. 2004. Integrating four theories of adolescent smoking. *Substance Use and Misuse* 39: 179-209.
- Coombs, R. H., & Landsverk, J. (1988). Parenting styles and substance use during childhood and adolescence. *Journal of Marriage and the Family, 50*, 473-482. Retrieved from <http://www.jstor.org/pss/352012>
- Cooney, T. M. (1988). Young adults and parental divorce: Exploring important issues. *Human Relations, 41*, 805-822. doi: 10.1177/001872678804101102
- Council of Europe (2005). *Youth policy in Malta*. Report by an International Panel of Experts Appointed by the Council of Europe Strasbourg, Council of Europe.
- Costello, B.J., and Vowell, P.R. (1999). "Testing control theory and differential association: A reanalysis of the Richmond youth project data." *Criminology, 37*, 815-842
- Curran, D. J., & Renzetti, C. M. (1994). *Theories of crime*. Boston: Allyn and Bacon

- Darling, N. (2010). *Parenting style and its correlates*. Retrieved from <http://www.athealth.com/Practitioner/ceduc/parentingstyle.html>
- Dishion, T. J., & Kavanagh, K. (2001). An ecological approach to family intervention for adolescent substance use. In E. F. Wagner, & H. B. Waldron, (Eds.), *Innovations in adolescent substance abuse interventions* (pp. 127-142). New York: Pergamon.
- Dunn, J. (2006). Siblings and socialization. In J. E. Grusec, & P. D. Hastings (Eds.), *Handbook of Socialization* (pp. 309-327). New York: Guilford Press/Elkind, D. (1985). Egocentrism redux. *Developmental Review*, 5, 218-226. doi: 10.1016/0273-2297(85)90010-3
- Elliott, D.S., D. Huizinga, and S.S. Ageton. (1985). *Explaining Delinquency and Drug Use*. Beverly Hills, CA: Sage.
- Erikson, E. H. (1968). *Identity: Youth and crisis*. New York: Norton.
- Esfandyari, B., Baharudin, R., & Nowzari, L. (2009). Background of inter-parental conflicts and internalizing behaviour problems among adolescents. *European Journal of Scientific Research*, 37, 599-607. Retrieved from http://www.eurojournals.com/ejsr_37_4_10.pdf
- European School Survey Project on Alcohol and other Drugs. (2007). *The 2007 ESPAD report: Summary*. Retrieved from <http://www.espad.org/espadreports>
- Fergus, S., Zimmerman, M.A. (2005). Adolescent resilience: A framework for understanding healthy development in the face of risk. *Annual Review of Public Health*, 26, 399-419.
- Fiese, B. H. (1992). Dimensions of family rituals across two generations: Relation to adolescent. *Identity Family Process*, 31, (151-162). doi: 10.1111/j.1545-5300.1992.00151.x
- Fink, G. (2000). *Encyclopedia of stress (2nd ed.)*. Oxford: Academic Press.
- Fletcher, A. C., Steinberg, L., & Williams-Wheeler, M. (2004). Parental influences on adolescent problem behavior: Revisiting Stattin and Kerr. *Child Development*, 75, 781-796. doi: 10.1111/j.1467-8624.2004.00706.x
- Flouri, E., Tzavidis, N., & Kallis, C. (2010). Area and family effects on the psychopathology of the Millennium Cohort Study children and their older siblings. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 51, 152-161. doi: 10.1111/j.1469-7610.2009.02156.x
- France, A., & Crow, I. (2005). Using the risk factor paradigm in precection: Lessons from the evaluation of communities that care. *Children and Society*, 19, 172-184. doi: 10.1002/chi.866
- Glynn, T. J., & Haenlein, M. (1988). Family theory and research on adolescent drug use: A review. In R.H. Coombs (Ed.), *The family context of adolescent drug use* (pp. 39-56). New York: Haworth Press.
- Gottfredson, Michael R., and Travis Hirschi. 1990. *A General Theory of Crime*. Stanford, CA: Stanford University Press.
- Goode, E (2008) *Drugs in American Society*, McGraw-Hill, 1999/2005/2008.
- Gross, J. J. (2007). *Handbook of emotion regulation*. New York: Guilford Press.
- Guber, K. J., & Taylor, M. F. (2006). A family perspective for substance abuse: Implications from the literature. In S. L. Ashenberg Straussner & C. Huff Fewell. (Eds.), *Impact of substance abuse on children and families: Research and practice implications*. London: Routledge.
- Guilamo-Ramos, V., Jaccard, J. Dittus, P., Gonzalez, B. & Bouris, A. (2008). A conceptual framework for the analysis of risk and problem behaviours: The case of Adolescent Sexual behaviour. *Social Work Research*, 32, 29-46. Retrieved from <http://www.ingentaconnect.com/content/nasw/swr/2008/00000032/00000001/art00004#expand/collapse>
- Hawkins, J. D., Catalano, R. F., & Miller, J. Y. (1992). Risk and protective factors for alcohol use and other drug problems in adolescence and early adulthood: Implications for substance use prevention. *Psychological Bulletin*, 112, 64-105. doi: 10.1037/0033-2909.112.1.64
- Hawkins, J. D., Van Horn, M. L., & Arthur, M. W. (2004). Community Variation in Risk and Protective Factors and Substance Use Outcomes. *Prevention Science*, 5, 213-220. doi: 10.1023/B:PREV.0000045355.53137.45
- Henderson, S., Holland, J., McGrellis, S., Sharpe, S., & Thompson, R. (2007). *Inventing adulthoods: A biographical approach to youth transitions*. London: Sage.
- Hetherington, E. M., & Clingempeel, W. G. (1992). Coping with marital transitions: A family systems perspective. *Monographs of the Society for Research in Child Development*, 57, 1-242. doi: 10.1111/j.1540-5834.1992.tb00300.x
- Hetherington, E. M., & Stanley-Hagan, M. (1999). The adjustment of children with divorced parents: A risk and resiliency perspective. *Journal of Child Psychology and Psychiatry*, 40, 129-140. doi: 10.1111/1469-7610.00427
- Hirschi, T. (1969). *Causes of delinquency*. Berkeley and Los Angeles: University of California Press.
- Hops, H., Tildesley, E., Lichtenstein, E., Ary, D., & Sherman, L. (1990). Parent adolescent problem-solving interactions and drug use. *The American Journal of Alcohol and Drug Abuse*, 16, 239-258. Retrieved from <http://informahealthcare.com/doi/abs/10.3109/00952999009001586>
- Howe, D., Brandon, M., Hinings, D., & Schofield, G. (1999). *Attachment theory, child maltreatment and family support a practice and assessment model*. New York: Palgrave.
- Jacobson, K. C., & Crockett, L. J. (2000). Parental monitoring and adolescent adjustment: An ecological approach. *Journal of Research on Adolescence*, 10, 65-97.
- Jessor, R., & Jessor, S. L. (1977). *Problem behaviour and psychosocial development: A longitudinal study of youth*. New York: Academic Press.
- Junger-Tas, Josine & Terlouw, Gert-Jan & Klein, Malcolm W. (Ed.) (1994). *Delinquent Behavior Among Young People in the Western World*. RDC/Kugler Publications, Amsterdam.
- Jurich, A., Polson, C., Jurich, J., & Bates, R. (1985). Family factors in the lives of drug users and abusers. *Adolescence*, 20, 143-154. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/3984801>

- Kaplan, P. S. (2004). *Adolescence*. Orlando: Houghton Mifflin.
- Kenniston, K. (1970). Youth: A "new" stage of life. *The American Scholar*, 39, 631- 654.
- Kerig, P. K. & Swanson, J. A. (2010). Ties that bind: Triangulation, boundary dissolution, and the effects of interparental conflict on child development. In M. S. Schulz, M. K. Prueett, P. K. Kerig, & R. Parke (Eds.), *Strengthening couple relationships for optimal child development: Lessons from research and intervention* (pp. 59-76). Washington: American Psychological Association.
- Kobus K. (2003) Peers and adolescent smoking. *Addiction*. 98 Suppl 1:37-55.
- Lansford, J. E., Ceballo, R., Abbey, A., & Stewart, A. J. (2001). Does family structure matter? A comparison of adoptive, two parent biological, single mother, stepfather, and stepmother households. *Journal of Marriage and the Family*, 63, 840–851. doi: 10.1111/j.1741-3737.2001.00840.x
- Lansford, J. E., Malone, P. S., Castellino, D. R., Dodge, K. A., Pettit, G. S., & Bates, J. E. (2006). Trajectories of internalizing, externalizing, and grades for children who have and have not experienced their parents' divorce. *Journal of Family Psychology*, 20, 292–301. doi: [10.1037/0893-3200.20.2.292](https://doi.org/10.1037/0893-3200.20.2.292).
- Lettieri, D. L., Sayers, M., & Pearson, H. W. (1980). *Theories on drug abuse: Selected contemporary perspectives*. London: Sage
- Longshore D, Urada D, Evans E, Hser Y, Prendergast ML, Hawken A, Bunch T, Ettner S. *Evaluation of the Substance Abuse and Crime Prevention Act: 2003 report*. UCLA Integrated Substance Abuse Programs for the California Department of Alcohol and Drug Programs; Los Angeles: 2004.
- Luthar, S. S. (1991). Vulnerability and resilience: A study of high-risk adolescents. *Child Development*, 62, 600-612. doi: 10.1111/j.1467-8624.1991.tb01555.x
- Males, M. A. (1997). Debunking 10 myths about teens. *Education Digest*, 28: 48-50.
- Masten, A. S., Best, K. M., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology*, 2, 425-444. doi: 10.1017/S0954579400005812
- Moon, D. G., Jackson, K. M., & Hecht, M. L. (2000). Family risk and resiliency factors, substance use and drug resistance process in adolescence. *Journal of Drug Education*, 30, 373-398. doi: [10.2190/4AEC-BV03-5KDE-FUMW](https://doi.org/10.2190/4AEC-BV03-5KDE-FUMW)
- Muisener, P. P. (1994). *Understanding and treating adolescent substance abuse*. London: Sage.
- National Statistics Office Malta. (2009). *International day of families: 2009*. Retrieved from http://www.nso.gov.mt/statdoc/document_file.aspx?id=2497
- Needle, R. H., Su, S. S., & Doherty, W. J. (1990). Divorce, remarriage, and adolescent substance use: A prospective longitudinal study. *Journal of Marriage and the Family*, 52, 157-169. Retrieved from <http://www.jstor.org/pss/352847>
- Noller, P., & Callan, V. (1991). *The adolescent in the family*. London: Routledge.
- Olson, D. & Gorall, D. (2003) Circumplex models of marital and family systems. In F. Walsh (Ed) *Normal family Processes* (pp.514-547) NY: Guilford.
- Papalia, D. E., & Wendkos Olds, S. (1979). *A child's world: Infancy through adolescence (2nd ed.)*. Hightstown: McGraw-Hill.
- Parker, J. S., & Benson, M. J. (2004). Parent-adolescent relations and adolescent functioning: Self-esteem, substance abuse, and delinquency. *Adolescence*, 39, 519-530. Retrieved from http://www.questia.com/googleScholar.qst?jsessionid=5380DAF9F107C51EA804C84EC81495A5.inst1_3b?docId=5008576984
- Pickles, A., & Rutter, M. (1991). Statistical and conceptual models of 'turning points' in developmental processes. In D. Magnusson, L. R. Borgman, G. Rudinger & B. Torestad (Eds.), *Problems and methods in longitudinal research: Stability and change* (pp. 133 – 165). Cambridge: Cambridge University Press.
- Preto, N. G., & Travis, N. (1985). *The adolescent phase of the family life cycle*. New York: Gardner
- Pulkkinen, L., & Caspi, A. (2002). *Paths to successful development: Personality in the life course*. Cambridge: Cambridge University Press.
- Rosenberg, M. & Kaplan, H. B. (1982). *Social psychology of the self-concept*. Arlington Heights: Harlan Davidson.
- Rowe, C. L., & Liddle, H. A. (2006). Family-based treatment development for adolescent alcohol abuse. *International Journal of Adolescent Medicine and Health*, 18, 43-51. Retrieved from http://www.med.miami.edu/CTRADA/documents/ICR_HL_2006_IJAMH.pdf
- Rutter, M., Graham, P., Chadwick, O. F. D., & Yule, W. (1976). Adolescent turmoil: fact or fiction? *Journal of Child Psychology and Psychiatry*, 17, 35-56. doi: 10.1111/j.1469-7610.1976.tb00372.x
- Santrock, J. W. (2007). *Adolescence: An introduction*. Dubuque: Brown & Benchmark.
- Satterthwaite, D. (1997). Urban poverty: Reconsidering its scale and nature. *IDS Bulletin*, 28(2), 9-23. doi: 10.1111/j.1759-5436.1997.mp28002002.x
- Schroeder, R. D., Giordano, P. C., & Cernkovich, S. A. (2007). Drug use and desistance processes. *Criminology*, 45, 191-222. doi: 10.1111/j.1745-9125.2007.00076.x
- Segrin, C., & Flora, J. (2005). *Family communication*. London: Routledge.
- Shedler, J., & Block, J. (1990). Adolescent drug use and psychological health: A longitudinal perspective. *American psychologist*, 45, 612-630. doi: 10.1037/0003-066X.45.5.612
- Sousa, D. (2006). *How the brain learns*. London: Sage.
- Sroufe, L. A., Egeland, B., Carlson, E. A., & Collins, W. A. (2005). *The development of the person*. New York: Guilford Press.
- Sussman, S., Dent, C. W., Craig, S., Ritt-Olsen, A., & McCuller W. J. (2002). Development and immediate impact of a self-instruction curriculum for an adolescent indicated drug abuse prevention trial. *Journal of Drug Education*, 32, 121-137. doi: 10.2190/93XY-C6GB-9LLY-PAA4

- Sutherland, Edwin. (1947) *Principles of Criminology*, New York: Harper & Row, Publishers, Inc.
- Tabone, C. (1995). *Maltese families in transition: a sociological investigation*. Malta: Dominican Publication.
- Tucker, C. J., McHale, S. M., & Crouter, A. C. (2003). Conflict resolution: Links with adolescents' family relationships and individual well-being. *Journal of Family Issues*, 24, 715-736. doi: 10.1177/0192513X03251181
- Vartanian, L. R. (2000). Revisiting the imaginary audience and personal fable constructs of adolescent egocentrism: A conceptual review. *Adolescence*, 35, 639 -661. Retrieved from <http://find.galegroup.com.ezproxy.lib.le.ac.uk/gtx/infomark.do?&contentSet=IAC-Documents&type=retrieve&tabID=T002&prodId=EAIM&docId=A70777828&source=gale&srcprod=EAIM&userGroupName=leicester&version=1.0>
- Wallerstein, J. S. (2005). Growing up in the divorced family. *Clinical Social Work Journal*, 33, 401-418. doi: 10.1007/s10615-005-7034-y
- World Health Organisation. (2008). *Inequalities in young people's health: School-aged children international report from the 2005/2006 survey*. Retrieved from <http://www.euro.who.int/Document/E91416.pdf>