



## Strains and Maladaptive Behaviors among High School Students in Qatar: An Empirical Test of the General Strain Theory

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### Abstract

**Objectives:** This study aims to test the core assumption of Agnew's general strain theory (GST) in maladaptive behavior (substance use, suicidality, and school truancy). Testing the effects of strain variables (negative life events) on negative emotions that lead to maladaptive behaviors or criminal coping. The present study tests the validity and applicability of a widely known criminological (GST) theory in a non-Western culture. Moreover, one significant contribution of this study is its applicability and generalizability in an Arabian heterogeneous society and culture.

**Methods:** A survey was used, and a questionnaire was developed to measure the GST major assumptions and maladaptive behavior (substance use, suicidality, and school truancy). The survey was distributed among students by trained teams in public schools. A sample of 4096 high school students was randomly selected from seven public schools in Qatar.

**Results:** Findings showed that some negative life events variables had the highest significant unique contribution (when holding other variables constant) on the maladaptive behaviors more than other variables. These variables are: Depression had the highest significant unique contribution to suicidality, followed by violent victimization and negative feelings. Assaults had the highest significant unique contribution to substance use, followed by delinquency and sexual harassment. Assaults had the most significant unique contribution to school truancy, followed by delinquency.

**Conclusions:** Findings suggest limiting maladaptive behaviors and crimes by equipping students with crime-preventive traits, increasing social support, enhancing social control, and reducing exposure to crime-prone situations. Schools should educate students on managing negative emotions and stress, implement low-abiding coping methods, and conduct awareness campaigns on illegal coping methods to prevent criminal behavior.

**Keywords:** General strain theory, strains, maladaptive behaviors, Qatar.

### الضغوط والسلوكيات غير التكيفية بين طلاب الثانوية في قطر: فحص امبريقي لنظرية الضغوط العامة

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#### ملخص

**الأهداف:** هدفت هذه الدراسة إلى اختبار الافتراض الأساسي لنظرية الضغوط العامة لأجنيو (Agnew's General Strain Theory) في السلوك غير التكيفي (تعاطي المخدرات، والانتحار، والتغيب عن المدرسة). فُحصت تأثيرات متغيرات الضغوط العامة (أحداث الحياة السلبية على المشاعر السلبية) التي تؤدي إلى سلوكيات غير تكيفية أو سلوك إجرامي. فُحصت الدراسة صحة وقابلية تطبيق نظرية معروفة في علم الجريمة على نطاق واسع (GST) في الثقافة العربية. علاوة على ذلك، فإن إحدى الإسهامات المهمة لهذه الدراسة هي إمكانية تطبيقها وتعميمها في مجتمع غير متجانس ثقافته عربية.

**المنهجية:** استخدم المنهج المسحي؛ حيث طُوِّرت الاستبانة لقياس الافتراضات الرئيسية لنظرية الضغوط العامة والسلوك غير التكيفي (تعاطي المخدرات، والانتحار، والتغيب عن المدرسة). جرى توزيع الاستبانة على الطلاب من خلال فرق مدربة في المدارس الحكومية ثم اختيار عينة عشوائية مكونة من (4096) طالباً من طلاب المدارس الثانوية من سبع مدارس حكومية في قطر. **النتائج:** أظهرت النتائج أن لمتغيرات أحداث الحياة السلبية (كوفاة عزيز أو الطلاق ...) أعلى إسهاماً في السلوكيات غير التكيفية مقارنة بالمتغيرات الأخرى. فقد كان لمتغير الاكتئاب أعلى إسهاماً في متغير الانتحار، يليه متغير الإيذاء العنيف والمشاعر السلبية. وكان لمتغير الاعتداءات أعلى إسهاماً في تعاطي المخدرات، يليه متغير الانحراف والتحرش الجنسي. وكان لمتغير الاعتداءات أكبر إسهاماً في متغير التغيب عن المدرسة، يليه متغير الانحراف.

**الخلاصة:** تشير النتائج إلى أنه يمكن الحد من السلوكيات غير التكيفية والجرائم من خلال تطوير سمات الوقاية من الجريمة عند الطلاب، وزيادة الدعم الاجتماعي، وتعزيز الرقابة الاجتماعية، والحد من التعرض للمواقف المعرضة للجريمة. ويجب على المدارس تثقيف الطلاب حول كيفية إدارة المشاعر السلبية والضغوط، وتنفيذ أساليب تعامل الالتزام بالقانون، وإجراء حملات توعية حول أساليب التكيف غير القانونية لمنع السلوك الإجرامي. **الكلمات الدالة:** نظرية الضغوط العامة، الضغوط، السلوكيات غير التكيفية، قطر.



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## Introduction

General Strain Theory (GST) has gained global research popularity, and many empirical tests have been conducted in Western and non-Western cultures. An earlier version of the strain theory (Merton, 1938; Cohen, 1955; Cloward & Ohlin, 1959 & 1961) and the new version (Agnew, 1992; 1997; 2001 & 2006) have gained tremendous empirical support. GST suggests that individuals under strain may commit crimes to alleviate their feelings. Strains are unfavorable situations or events. GST defines strains as disliked events or conditions (Agnew, 1992, 2006). According to GST, people under strain may commit crimes to alleviate their feelings. Strains, according to GST, are unfavorable situations and events (Agnew, 1992, 2006).

Agnew (1992) defines strain as "relationships in which others are not treating the individual as he or she would like to be treated." Furthermore, there are many instances when close friends and family members are victimized because of their closeness to the abused person (Agnew, 1992; 2001 & 2002). Agnew (2001) defines objective strain as "events or conditions disliked by most members of a given group." Many events and conditions are disliked by most people, regardless of group membership (e.g., physical assault, lack of adequate food and shelter). and defined subjective strain as "events or conditions disliked by the people who have experienced them." (Agnew, 2001; Moon & Morash, 2017). Individuals often differ in their subjective evaluation of the same objective strains. For example, people differ in how they subjectively evaluate such objective strains as divorce and the death of a family member. The subjective evaluation of an objective strain is a function of a range of factors, including individual traits, personal and social resources (e.g., social support), goals/values/ identities, and a range of life circumstances (Agnew, 2001).

General Strain Theory (GST) delineates three major types of strain or negative relationships: others may (1) prevent individuals from achieving their positively valued goals (failure to achieve), including monetary, status, and autonomy goals; (2) remove or threaten to remove (lose) positively valued stimuli that individuals possess (e.g., the death of friends or family members, the loss of romantic partners); and (3) presentation or threaten to present individuals with noxious or negatively valued stimuli (e.g., verbal insults, physical assaults) (Agnew, 1992; Agnew et al., 2002). According to GST, strains lead to a range of negative emotions. Certain negative emotions may also reduce the ability to cope in a legal manner, reduce concern for the costs of crime, and/or increase the individual's disposition for the crime. GST may also suggest new strategies for controlling crime, like altering the goals and perceptions of individuals in ways that reduce subjective strain. For example, people might alter the masculinity goals of individuals. (Agnew, 2006). These strains make people feel depressed, and they may cope with crime. Crime may be a method for reducing or escaping from strains (e.g., stealing the money you desire, running away from abusive parents), seeking revenge against those who inflict strain or related targets (e.g., assaulting the peers who abuse you), or alleviating the negative emotions that result from strains (e.g., through illicit drug use). As can be seen in Figure 1, drawing from GST, we hypothesize that (i) Strain is positively associated with criminal outcomes (substance use, suicidality, and school truancy) and negative emotions; (ii) the stronger negative emotions affect individual experiences, the more likely this individual is to misbehave, and negative emotions interact with strains in their impact on criminal outcomes.

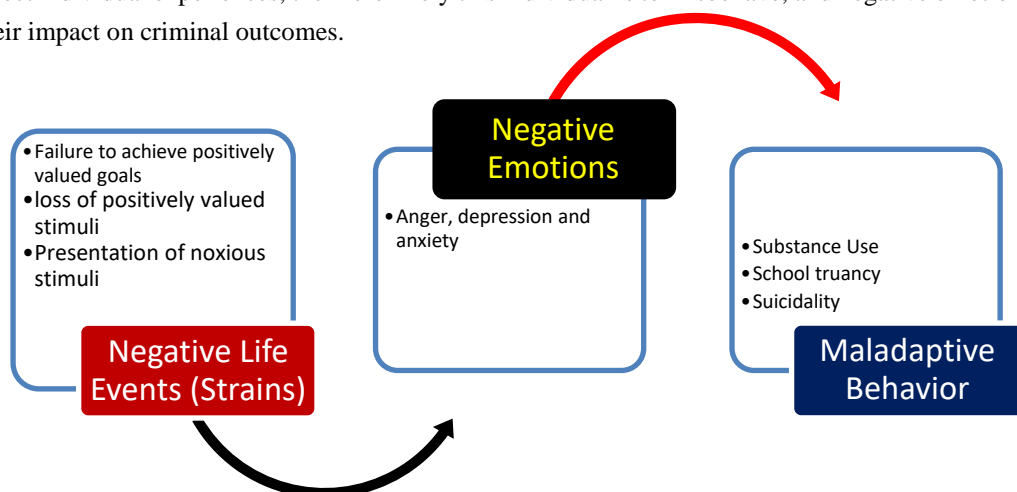


Figure 1 Theoretical model

Whether individuals cope with strains through crime, however, depends on their ability to engage in legal and illegal copying, the costs of crime, and their disposition for the crime. These factors, in turn, are influenced by a range of variables, including coping skills and resources, conventional social supports, social control, association with delinquent peers, and exposure to situations conducive to crime (Agnew, 2006). These strains increase the likelihood that individuals will experience a range of negative emotions. These negative emotions may span a broad spectrum ranging from depression to anxiety to despair. However, Agnew argues that anger, one of the most potent reactive emotions, producing a desire for retribution, may be key to strain-induced deviance (Agnew, 1992). Because it energizes the individual for action, lowers inhibitions, and creates a desire for revenge in some situations

These emotions can be simple or tense in their pressures and create pressure for corrective action, and criminal and maladaptive behaviors are one possible response. Maladaptive behavior, including but not limited to criminal and delinquent behaviors (drug use, school truancy, suicidality) may be used to reduce, avoid or escape from strain (e.g., stealing money, running away from abusive parents), seek revenge against those who have inflicted the strain (e.g., assault, vandalism), or reduce the negative feelings that result from strain (e.g., illicit drug use). Only some strained individuals turn to delinquency, however, making it critical to specify those factors that influence the reaction to strain (Agnew et al., 2002). GST conduct where negative activity may (i) be a strategy of avoiding uncomfortable circumstances or, (ii) when escape is not feasible, results in an emotional "strike out" (i.e., rage) (Al-badayneh et al., 2017). Whether or not negative affect leads to an illegitimate response depends on individual coping strategies.

Agnew describes three coping strategies: cognitive, emotional, and behavioral (Agnew, 1992). The legitimate skills and resources increase the likelihood of deviant behavior (i.e., poor problem-solving, social skills, and low constraints). Solid social support and strong relationship with family members lead to the likelihood of conformity and socially accepted behavior. Behavioral coping strategies try to remove or avoid stress or to fulfill a need for vengeance (Agnew, 1992).

Maladaptive coping habits include skipping school, running away, breaking a friendship, and indulging in various illegal or delinquent acts. Emotional coping tactics directly target the individual's negative affect in an effort to alleviate the pain of psychological distress. Examples include the use of additional substances, physical activity, abnormal eating patterns, and unsafe sexual conduct. Emotional coping is separate from other coping strategies. It attempts to immediately relieve psychological suffering as opposed to altering behavior or reinterpreting the circumstance intellectually.

### **Present study**

The present study aims to:

- Examines the core assumption of Agnew's general strain theory in maladaptive behavior (substance use, suicidality, and school truancy).
- Tests the effects of strain variables (negative life events) on negative emotions that lead to maladapted behaviors or criminal coping.
- The study contributes to the small literature addressing the Arab world.

### **Existing Research on General Strain Theory**

Agnew's (1992) revision of strain theory into a more general strain theory shifted the focus from macro-social structural to micro-social psychological (Broidy, 2001). Agnew's major contributions have been its applicability, testability, clarity, and scope in various criminal behaviors (Agnew, 1992). In addition to the specification of types of strain (Agnew, 2001), and group and gender differences (Broidy & Agnew, 1997; Wareham et al., 2005). Agnew (1992) defines strain as "negative or aversive relations with others." According to GST, truly criminogenic strains loosen social controls, increase the attractiveness of crime, and are usually perceived as unfair and overwhelming (Agnew, 2006). Since the publication of Agnew's (1992) foundational paper on General Strain Theory, GST has garnered much empirical support (see Agnew, 2006; Kaufman et al., 2008).

There has been much research on GST since these core ideas were first presented in 1992. GST has developed and renewed theoretical and empirical research interest in the relationship between strain and criminal behavior by offering an individual-level explanation (micro) that builds on the works of early strain theorists (Cohen, 1955; Merton, 1938). Specifically, GST extends the range of criminogenic strains and introduces negative emotions as an intervening variable between strain exposure and illegal copying. According to GTS, the adoption of criminal responses is most likely when strains produce negative emotions, particularly anger, that legitimate coping strategies fail to quell (Botchkovar & Broidy, 2010). Among these propositions, though, Agnew (1992) indicates that strains are more consequential based on their magnitude, recency, duration, and clustering, implying that the temporal patterns of strains matter in the coping process. Agnew's (1992), GST hypothesizes that criminal and delinquent behavior results from certain types of adaptations to strain. Agnew discusses internal and external factors that may condition the effects of strain on criminal behavior. Conditioning factors may range from Macro to micro levels, such as environmental variables, familial factors, and the nature of social support structures to individual characteristics such as temperament, intelligence, and beliefs (Agnew, 1992). The form of an individual's coping strategy conditioned macro-level factors (i.e., environmental) and micro-level factors (i.e., personal factors) directly affect how the individual will adapt to strain (Wareham et al., 2005).

Several studies supported the GTS main assumptions and the impact of strain on delinquency (e.g., Agnew et al., 2002; Mazerolle & Maahs, 2000; Piquero & Sealock, 2000). A significant positive relationship between various strain measures and delinquency has been reported in several studies (e.g., Agnew, 2002; Agnew & Brezina, 1997; Agnew & White, 1992; Aseltine et al., 2000; Broidy, 2001; Mazerolle et al., 2003; Eitle & Turner, 2003; Mazerolle et al., 2000; Piquero & Sealock, 2000 ; Botchkovar & Broidy, 2010). The study of Barrera et al. (2016) supports the general strain theory: negative life events (e.g., violent experiences, discrimination, sexual harassment victimization) encourage maladaptive behaviors (i.e., suicidality, substance use, and truancy), and this link is somewhat mediated or attenuated by depression. Further, conditioning factors such as parental care and supervision, social support, and engagement in physical activities moderate the effects of negative life events and depression on maladaptive behaviors (Barrera et al., 2016).

Extent research has shown that individuals exposed to various types of strain are more likely to engage in delinquent behaviors. Several tests of a full model of GST have additionally demonstrated that negative emotions, especially anger, moderately mediate the connection of strain to delinquency (Aseltine et al., 2000; Mazerolle & Piquero, 1997; Mazerolle et al., 2003). Specifically, previous studies have shown that strain predicts anger, which in turn predicts deviance (Agnew et al., 2002; Mazerolle & Maahs, 2000; Mazerolle & Piquero, 1997; Moon et al., 2009).

Growing evidence has examined the relationship between strains and delinquency and generally supported GST (Agnew et al., 2002; Agnew & White, 1992; Aseltine et al., 2000; Baron, 2004; Mazerolle & Maahs, 2000; Mazerolle et al., 1997; Mazerolle & Piquero, 1997; Moon & Morash, 2004; Piquero & Sealock, 2004). Moreover, extensive research shows that negative life events (e.g., divorce, criminal victimization), negative relationships with adults (e.g., parents, teachers), physical and emotional abuse, and neighborhood strains were significantly and positively associated with various types of delinquency (Agnew & White, 1992). Previous studies also showed that juveniles experiencing negative relationships with parents and teachers were likelier to engage in delinquency (Moon & Morash, 2004; Baron, 2004; Al-badayneh et al., 2019). However, despite accumulating evidence on the relationship between strains and delinquency, studies examining core assumptions of Agnew's general strain theory in maladaptive behavior in the Arab world are comparatively fewer.

## **Methodology**

### ***Sample***

A sample of 4096 high school students was randomly selected from seven public schools in Qatar. Over forty percent of the participants are Qatari nationals, and 59.4 percent are expatriate residents of Qatar.

### ***Procedure***

The survey was distributed among students by trained teams in public schools. A team of researchers, teachers, and social workers were trained as field survey administrators. The research team explained the purpose of the study,

confidentiality, and potential risks and provided directions for completing the survey. Parents and their children provided signed informed consent before participation, following the institutional review boards of Qatar University's Human Subject Research Committee and the Ministry of Social Development in Qatar.

### ***Measures***

#### ***Dependent variables***

Suicidality was measured by feeling depressed, uninterested in life, not being concerned, and wanting to die. Students were asked to answer on a five scale of 5=always to 1= never. The reliability coefficient was (82.9) with estimated validity by correlating negative feelings with Suicidality ( $r=0.38 \alpha 0.000$ ). The substance use was initially measured by an index of items on using tobacco products and drinking alcoholic beverages, chewing tobacco, volatile drugs, and stimuli. Students were asked to answer on a five scale of 5=always to 1= never. The reliability coefficient was (74.5) with estimated validity by correlating negative feelings with substance use ( $r=0.14 \alpha 0.000$ ). Truancy was measured by school truancy, late, cheating, vandalism, and running away from school. Students were asked to answer on a five scale of 5=always to 1= never. The reliability coefficient was (71) with estimated validity by correlating negative feelings with truancy ( $r=0.185 \alpha 0.000$ ).

#### ***Independent variables***

Negative life events were measured by the following variables: Personal variables, Aggressive attitudes, and participation in fights. delinquent peers, violent perpetrators. Delinquency, the experience of violence during childhood, the experience of Violence in the last 12 months, sexual harassment, assault, cyberbullying, bullying, F2F Bullying, the perpetrator of violence, and victimization. Family variables: Family strains, Strains victimization, coercive parenting, and family dispute and delinquent family. Emotions: Depression and negative feelings.

#### ***Control Variables***

Family status, health, number of friends, family relations, life satisfaction, school satisfaction, low self-control, and physical activities.

#### ***Statistical analysis***

Multiple regression analysis was applied using SPSS v. 21 to test the effects of strain variables on negative emotions that lead to maladaptive behaviors.

## **Results**

### ***Descriptive statistics***

Nearly half of the participants (49.6%) are males; 20.7% live in intact families, and 92.4% reported having good health. Moreover, 2.4% of participants have no friends; 92.9% have normal family relations; 63.4% have disputed families; 34.8% have delinquent family members; and 8.7% reported a father's absence during childhood. 82.2% of participants reported being exposed to violence.

**Table 1. Descriptive statistics**

<b>Variable</b>		<b>Number</b>	<b>%</b>
Nationality	Qatari	1665	40.6
	non-Qatari	2431	59.4
Gender	Males	1906	49.6
	Females	1936	49.6
Family status	Broken home (single parent)	849	20.7
	Intact family (two parents)	3247	97.3
Health	Not good health	184	7.6
	Good health	4637	92.4
Number of friends	No friends	94	2.4
	1	256	6.5
	2 +	3562	91.1

Variable		Number	%
Family relations	Unhealthy relations	280	7.1
	Healthy relations	3658	92.9
Family disputes	No	1423	36.6
	Yes	2475	63.4
Delinquent family	No	2370	65.2
	Yes	1264	34.8
Father absence	No	3190	81.3
	Yes	736	18.7
Decision maker	Father	1130	28.8
	Mother	318	8.1
	Parents	2318	59.0
	Others	164	4.2
Exposure to Violence	No	968	24.7
	Yes	2949	75.3
Violence Experience	No	699	17.8
	Yes	3222	82.2

Table 2 displays results of the correlation between maladaptive behavior (substance use, suicidality, and school truancy) and strain and control variables such as negative life events (e.g., violent experiences, family strains, sexual harassment victimization).

Table 2 shows a significant relationship between maladaptive behavior (substance use, suicidality, and school truancy) and strain and control variables at ( $\alpha=.000$ ), with exception to the relationship between family support and suicidality ( $\alpha=.001$ ). However, no significant relationship found between sexual harassment and suicidality, and coercive parenting and school truancy.

**Table 2. Correlation coefficients between negative life events (strains), conditioning, emotions variables, and maladaptive behavior variables**

	Suicidality	Substance Use	School Truancy
1. Suicidality	1		
2. Substance Use	.051*	1	
3. School Truancy	.102**	.321**	1
4. Physical Activities	.197**	.066**	.112**
5. Family Strains	.300**	.116**	.138**
6. Violence Victimization	.242**	.155**	.099**
7. Coercive Parenting	.217**	-.08**	-.003
8. Aggressive Attitudes	.263**	.124**	.202**
9. Fight Participation	.107**	.354**	.343**
10. Delinquent Peers	.239**	.206**	.241**
11. Violence Perpetrator	.255**	.274**	.153**
12. Delinquency	.111**	.569**	.340**
13. School Delinquency	.096**	.413**	.537**
14. Expose to Violence	-.121**	-.216**	-.169**
15. Sexual Harassment	.009	.535**	.260**

	<b>Suicidality</b>	<b>Substance Use</b>	<b>School Truancy</b>
16. Life Stress Events	.251**	.132**	.127**
17. Family support	.010	-.24**	-.102**
18. Family Relations	-.117**	-.24**	-.167**
19. Health	-.10**	-.29**	-.162**
20. Low self control	.373**	.135**	.205**
21. School Satisfaction	-.116**	-.10**	-.175**
22. Negative feelings	.383**	.141**	.185**
23. Depression	.595**	.067**	.127**

\*\* Correlation is significant at the 0.00 level (2-tailed).

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

### ***Effect of Strains on Suicidality***

Table 3 shows that negative life events (strains) variables accounted for 46% of the variance on the suicidality variable. Table 4 presents regression coefficients of the strain variables, conditioning variables, and emotion variables on suicidality. As can be seen from this table, four variables have the best unique significant contributions (standardized coefficients beta) meaning if we hold all other variables constant, depression had the best significant unique contribution (.316), on suicidality followed by violent victimization (.245), and negative feelings (.157). Other variables had medium or low significant contribution (i.e., family strains, coercive parenting, fight participation, delinquent peers, assault, cyberbullying, number of friends, family relations, and low-self-control). The rest of the variables were not significant.

**Table 3. ANOVA regression analysis of the effect of strains on the suicidality**

<b>Model</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Regression	8828.591	31	284.793	69.657	.000
Residual	10164.040	2486	4.089		
Total	18992.631	2517			

**Table 4. Regression analysis of the effect of strains on the suicidality**

	<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>	<b>t</b>	<b>Sig.</b>
	<b>B</b>	<b>S.E.</b>	<b>Beta</b>		
(Constant)	.679	.326		2.086	.037
Family strains	.026	.012	.039	2.160	.031
Coercive parenting	.028	.006	.081	4.495	.000
Aggressive attitudes	.020	.012	.031	1.706	.088
Participation in a fight	.388	.128	.064	3.020	.003
Delinquent Peers	-.019	.009	-.042	-2.117	.034
Violence Perpetrator	-.013	.022	-.018	-.593	.553
Delinquency	.084	.049	.030	1.707	.088
Experience Violence childhood	.077	.130	.012	.592	.554
Experience Violence las 12 months	-.079	.144	-.011	-.549	.583
Sexual harassment	-.109	.198	-.011	-.551	.581
Life stress events	.002	.006	.007	.391	.696
Violence victimization	.312	.026	.245	11.859	.000

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	S.E.	Beta		
Assault	-.120	.038	-.086	-3.146	.002
Cyberbullying	.819	.220	.090	3.725	.000
Bullying F2F	.270	.146	.039	1.845	.065
Bullying Perpetrator	-.031	.057	-.014	-.551	.582
Family dispute	-.004	.049	-.001	-.082	.935
Delinquent Family	-.037	.057	-.011	-.649	.516
Gender	.131	.093	.024	1.411	.158
Nationality	-.165	.086	-.029	-1.931	.054
Family status	.078	.112	.011	.695	.487
Health	-.123	.070	-.031	-1.773	.076
Number friends	.223	.064	.055	3.462	.001
Family relation	-.165	.074	-.041	-2.229	.026
Life satisfaction	-.051	.010	-.091	-4.951	.000
School satisfaction	-.079	.049	-.026	-1.612	.107
LSC	.029	.007	.086	4.289	.000
Physical activities	.001	.008	.003	.158	.874
Depression	.735	.044	.316	16.592	.000
Negative feelings	.057	.008	.157	7.545	.000

### *Effect of Strains on Substance Use*

Table 5 shows that negative life events (strains) variables accounted for 50% of the variance on the substance use variable. Table 6 presents regression coefficients of the strain variables, conditioning variables, and emotion variables on substance use. As can be seen from this table, four variables have the best unique significant contributions (standardized coefficients beta, meaning if we hold all other variables constant, assaults had the best significant unique contribution (.38), on substance use followed by delinquency (.29), and sexual harassment (.16). Other variables had a medium or low significant contribution (i.e., aggressive attitudes, fight participation, F2F bullying, delinquent family, family status, health, number of friends, and low school satisfaction). The rest of the variables were not significant.

**Table 5. ANOVA regression analysis of the effect of strains on the substance use**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2072.882	31	66.867	83.024	.000
Residual	2003.030	2487	.805		
Total	4075.913	2518			

**Table 6. Regression analysis of the effect of strains on the substance use**

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	S.E.	Beta		
(Constant)	.665	.144		4.602	.000
Family strains	.007	.005	.023	1.316	.188
Coercive parenting	-.003	.003	-.019	-1.094	.274
Aggressive attitudes	-.011	.005	-.038	-2.163	.031



	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	S.E.	Beta		
Participation in a fight	-.266	.057	-.095	-4.671	.000
Delinquent Peers	-.003	.004	-.015	-.763	.445
Violence Perpetrator	.007	.010	.021	.733	.464
Delinquency	.370	.022	.282	16.917	.000
Experience Violence childhood	-.090	.058	-.031	-1.563	.118
Experience Violence las 12 months	.107	.064	.032	1.669	.095
Sexual harassment	.774	.088	.164	8.824	.000
Life stress events	.001	.003	.006	.314	.754
Violence victimization	.017	.012	.028	1.424	.154
Assault	.248	.017	.384	14.641	.000
Cyberbullying	-.047	.097	-.011	-.486	.627
Bullying F2F	-.137	.065	-.042	-2.108	.035
Bullying Perpetrator	.019	.025	.018	.761	.447
Family dispute	.016	.022	.012	.729	.466
Delinquent Family	.077	.025	.051	3.033	.002
Gender	-.027	.041	-.011	-.647	.518
Nationality	-.048	.038	-.018	-1.263	.207
Family status	-.263	.050	-.080	-5.285	.000
Health	-.141	.031	-.076	-4.550	.000
Number friends	-.082	.029	-.044	-2.876	.004
Family relation	.023	.033	.012	.704	.482
Life satisfaction	-.004	.005	-.016	-.923	.356
School satisfaction	.051	.022	.037	2.327	.020
LSC	-.001	.003	-.005	-.277	.782
Physical activities	.002	.004	.010	.619	.536
Depression	.016	.020	.015	.806	.420
Negative feelings	.000	.003	.002	.119	.905

### *Effect of Strains on school truancy*

Table 7 shows that negative life events variables accounted for 31% of the variance on the school truancy variable. Table 8 presents regression coeffects of the strain variables, conditioning variables, and emotion variables on school truancy. As can be seen from this table, four variables have the best unique significant contributions (standardized coefficients beta), meaning if we hold all other variables constant assaults had the best significant unique contribution (.43), on school truancy followed by delinquency (.11). Other variables had a medium or low significant contribution (i.e., student participation in fights, delinquent peers, violent victimization, school satisfaction, and self-control. The rest of the variables were not significant.

**Table 7. ANOVA regression analysis of the effect of strains on school truancy**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	367.147	31	11.843	38.151	.000
Residual	771.748	2486	.310		
Total	1138.894	2517			

**Table 8. Regression analysis of the effect of strains on school truancy**

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	S.E.	Beta		
(Constant)	.268	.090		2.989	.003
Family strains	.005	.003	.033	1.620	.105
Coercive parenting	-.001	.002	-.015	-.745	.456
Aggressive attitudes	.004	.003	.024	1.166	.244
Participation in a fight	-.068	.035	-.046	-1.908	.057
Delinquent Peers	.010	.002	.088	3.939	.000
Violence Perpetrator	-.003	.006	-.015	-.437	.662
Delinquency	.073	.014	.105	5.352	.000
Experience Violence childhood	.026	.036	.017	.715	.474
Experience Violence las 12 months	-.069	.040	-.040	-1.737	.083
Sexual harassment	.032	.054	.013	.591	.554
Life stress events	-.002	.002	-.019	-.882	.378
Violence victimization	-.022	.007	-.070	-3.024	.003
Assault	.147	.011	.431	13.990	.000
Cyberbullying	.004	.060	.002	.067	.946
Bullying F2F	-.054	.040	-.031	-1.339	.181
Bullying Perpetrator	.013	.016	.023	.835	.404
Family dispute	-.003	.014	-.005	-.239	.811
Delinquent Family	.013	.016	.017	.838	.402
Gender	.038	.026	.028	1.466	.143
Nationality	.035	.024	.025	1.475	.140
Family status	.025	.031	.014	.798	.425
Health	-.021	.019	-.022	-1.102	.271
Number friends	.015	.018	.015	.823	.410
Family relation	-.035	.020	-.035	-1.694	.090
Life satisfaction	-.005	.003	-.037	-1.783	.075
School satisfaction	-.035	.014	-.048	-2.574	.010
LSC	.005	.002	.056	2.475	.013
Physical activities	.001	.002	.012	.641	.521
Depression	.008	.012	.013	.614	.539
Negative feelings	-.002	.002	-.019	-.813	.416

### Discussion and Conclusion

This study attempts to test the generalizability and applicability of the core assumption of Agnew's general strain theory GST outside its own culture (USA) in a heterogenous culture of a developing country (Qatar). This study examines GST in maladaptive behavior (substance use, suicidality, and school truancy) among high school students. It tests the effects of strain variables (negative life events) on negative emotions that lead to maladaptive behaviors or criminal coping. It attempts to address whether GST is useful in understanding the etiology of maladaptive behavior among high school students in Qatar. The study's findings support the GST: negative life events (e.g., violent experiences, family strains, sexual harassment victimization) affect maladaptive behaviors (i.e., suicidality, substance use, and truancy). All strain variables, conditioning variables, and emotion variables were significantly ( $\alpha=.000$ ) correlated with maladaptive behavior (suicidality, substance use, and school truancy) with the exception of a non-significant relationship between coercive parenting and school truancy and sexual harassment and suicidality. One significant contribution of this study is its

applicability and generalizability in a heterogeneous society and non-western culture. Some negative life events variables had the highest significant unique contribution (when holding other variables constant) on the maladaptive behaviors more than other variables. These variables are: Depression had the highest significant unique contribution to suicidality, followed by violent victimization and negative feelings. Assaults had the highest significant unique contribution to substance use, followed by delinquency and sexual harassment. Assaults had the best significant unique contribution to school truancy, followed by delinquency.

### **Applications and recommendations**

The findings of this study have maladaptive behavior prevention implications in the educational and security sectors. On the educational level, schools (i.e., school counseling) need to educate and train students on how to manage and cope with negative emotions and strains. Schools should educate students on managing negative emotions and strains, implement low-abiding coping methods, and conduct awareness campaigns on illegal coping methods to prevent criminal behavior.

It recommends that group counseling and role-playing are just examples of what schools can do. On the security level, applying low-abiding coping and environmental crime prevention methods will help prevent criminal and maladaptive behaviors. School counselors and social workers can launch an awareness campaign on illegal coping methods. Findings suggest limiting maladaptive behavior by equipping students with crime-preventive traits, increasing social support, enhancing social control, and reducing exposure to crime-prone situations.

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