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Depression and Suicide among Adolescents in Medellín, Colombia: A Mixed-methods Approach to Understanding Family-level Risk and Protective Factors

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An abstract of A thesis submitted to the Faculty of the Rollins School of Public Health of Emory University in partial fulfillment of the requirements for the degree of Master of Public Health in the Hubert Department of Global Health 2012

### Abstract

**Background**: Suicide is the 3rd leading cause of death for people 15-44; people under 25 are considered most at risk. Data suggests that adolescents in Medellín have a higher prevalence of suicide outcomes than national estimates: suicide ideation (15% vs. 10%), suicide plans (5.2% vs. 3.6%), and suicide attempts (5.8% vs. 4.4%).

**Purpose**: Develop a fuller understanding of how multiple risk and protective factors shape youth's experience of depression and suicide.

**Methods**: Secondary data analysis from the 2009 Medellín Adolescent Mental Health Study was performed from surveys of 4,764 youth, ages 10-19. Gender-stratified multivariate logistic regression models were developed to examine risk and protective factors associated with depression and suicide outcomes. Model trends were evaluated and informed qualitative life-history interviews on family/social protective factors among 23 high school youth.

**Results**: Quantitative finding revealed that interfamily abuse and low family cohesion were the strongest predictors for depression for both sexes. Girls had more depression predictors than boys, including chronic PTSD. The strongest gender-shared predictor for suicide plans and attempts was having no family/social support system. Qualitative interviews revealed that dysfunctional family dynamics were the most salient contributor to chronic adversity facing youth. Elements of family "closeness" included practical and emotional support, guidance, and reciprocity.

**Discussion**: Family cohesion and family/social support are important predictors for depression and suicidal behavior, but neither variable accounts for important elements of support or closeness between family members. Closeness with an adult may matter more than family cohesion, and demonstrate the extent of support that youth receive. Resilient youth present vivid self-concepts and positive perspectives about their past, present, and future. Findings suggests that there is a need to re-structure how family-level risk and protective factors and religiosity are measured among the Medellín adolescent population. A critical next-step for the Medellín public health community is to move from research to practice, translating their findings into concrete outreach programs aimed at those youth most at-risk for depression and suicide.

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Though the topic of this thesis may seem rather dreary, its purpose was not only to examine the burden of depression and suicide, but also to take a closer look at the role of family and social support systems as a protective factor. Consequently, over the course of this project, I have realized how fortunate I am to have those systems in my own life, both professionally and personally; it is only appropriate that I recognize the people who have made this thesis possible.

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#### **Chapter 1: Introduction**

"Mental health is defined as a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community."

## Introduction and Rational

According to the WHO World Health Survey (WHS) mental health disorders are common and occur globally.<sup>2</sup> Mood disorders are generally the most prevalent class of mental disorders in community epidemiological surveys<sup>2</sup> with depression considered the leading cause of years lived with disability (YLD).<sup>3</sup> Depression is typically comorbid with other mental health conditions, however, those with recurrent depression are also at increased risk for suicidal behavior.<sup>4</sup> There is strong evidence that many mental disorders begin in childhood, adolescence or young adulthood <sup>2</sup> and that depressive episodes during childhood and adolescence predict future depression in adulthood, as well as suicidal behavior.<sup>5</sup>

Suicide is among the three leading causes of death for people 15 to 44 years old and almost a quarter of all suicide deaths occur among young people under the age of 25.<sup>6</sup> In addition to age differences, there are gender disparities in depression and suicide outcomes that persist across countries and cultures.<sup>3,7-9</sup> Studies demonstrate that depressed women are significantly more likely to attempt suicide than males<sup>4,10</sup> but men more often complete their suicide attempts because they use more lethal methods;<sup>10</sup> this is often referred to as the 'Gender Paradox'.<sup>8</sup>

Suicidal behavior is a result of interactions between socio-cultural, developmental, psychiatric, psychological, and family-environmental factors.<sup>11</sup> Consequently, factors like family dynamics and family relationships can act as both a risk or protective factor adolescent depression and suicidal behavior<sup>12-14</sup> and understanding youth family environments is vital to understanding future mental and physical health across the lifespan.<sup>15</sup>

#### Depression and Suicide in Colombia

Colombia has long been recognized as having a "culture of violence."<sup>16</sup> Colombia has undergone decades of conflict between government forces and anti-government insurgent groups, with violence escalating in the 1990's.<sup>17</sup> Recognizing the history and pervasiveness of violence in Colombia may be important in understanding the population's risk of depression and suicidal behavior. Previous studies have demonstrated that exposure to terrorism and violence in the community leads to higher levels of perceived stress and increased risk depression,<sup>18</sup> as well as PTSD.<sup>19-21</sup>

In Colombia in 2008, the lifetime prevalence of any DSM-IV mood disorder was 14.6% and the prevalence of any mental disorder was 39.1%; this is the third highest global prevalence, only behind the U.S. and New Zealand.<sup>2</sup> Accordingly, Colombia has experienced drastic increases in suicide rates since 1955.<sup>22</sup>

As part of the World Mental Health Initiative in 2009, the Center for Excellence on Research in Mental Health (CESISM) in Medellín, Colombia administered the WHO Composite International Diagnostic Interview (CIDI)<sup>23,24</sup> to a nationally representative sample of 1,586 adolescents between the ages of 13 and 17. Findings from the Colombian Mental Health Study demonstrated that both depression and suicide are affecting significant proportions of the adolescent population.<sup>25</sup> Older adolescents had a higher prevalence of suicidal ideation however; researchers discovered a dramatic increase in the prevalence of suicidal ideation among youth between ages of 12 and 14. These findings suggest that there may be major life changes during this time in adolescence that drive the upward trajectory of suicidal ideation, planning, and consequently suicide attempts.

Though the prevalence of major depression and suicide outcomes in Colombia do not seem overwhelmingly high and are generally similar to those of the United States,<sup>26,27</sup> the regional differences within Colombia may be worth exploring. Medellín, the second largest city in Colombia, was considered one of the most violent cities in the world. By the 1990's the city's homicide rate skyrocketed to 381 murders per 100,000 inhabitants, nearly 40 times higher than the United Nations marker of epidemic violence.<sup>28</sup> Though violence has begun to steadily decrease, Medellín still suffers from endemic violence, with homicide rates of 40 deaths per 100,000 inhabitants, 6 times higher than Bogotá.<sup>28</sup>

Research suggests that Medellin may have a higher burden of suicide than national estimates. A recent unpublished report by CESISM from found that among adolescents ages 13-18, 15% reported suicidal ideation, 5.2% planning suicide, and 5.8% attempting suicide in their lifetime. This 5 year age group had the second highest prevalence of each suicidal behavior and estimates were almost 50% higher than the national average, <sup>29</sup>

#### **Problem Statement**

Though adolescents and young adults currently living in Medellín may only have a vague memory of the war-like era in their city's history, the remnants of extreme violence still persist. An important manner in which past violent decades may impact youth today is through their parents and adult caretakers. Adults directly exposed to this violence may also suffer from negative psychosocial outcomes, contributing to the "transmission" of those outcomes to their children.<sup>15,30</sup> Just as family can be a protective factor for depression and suicide, youth who have parents with mental illness are also at risk for those same outcomes.<sup>41</sup> The aforementioned reasons highlight why youth in Medellín are a unique population to study and may have distinct experiences that alter the context of how we understand risk and protective factors for depression and suicide.

## Significance Statement

Past research in Medellín validates the need for a closer examination of mental health risk and protective factors among the adolescent population. There is evidence that certain family factors could be protective for Colombian youth, thus an enhanced understanding of that relationship may advance future mental health interventions and the knowledge base for practitioners. It has been suggested that investigations in Colombia should focus on gathering information about the closeness of the family relationship, not merely the role of the family.<sup>31</sup> This study contributes to this gap in the literature by combining statistical analysis with the words and experiences of youth who are living in the Aburra Valley, gaining further insight on how family relationships can buffer adolescent adversity, even in the most extreme life circumstances. This project will provide CESISM with formative data that will help build a foundation for developing and/or adapting evidence-based mental health interventions to address the prevalence of depression and suicide among adolescents in Medellín, Colombia.

#### Purpose Statement and research questions

The purpose of this study is to develop a fuller understanding of how multiple family-level risk and protective factors shape youth's experience of major depression and suicidal ideation. Specific research questions include:

- What are the independent risk and protective factors for depression and suicidal behavior among adolescents in Medellín?
- 2. How do risk and protective factors differ between male and female adolescents?
- 3. How do independent risk and protective factors change for depression and suicidal behavior outcomes?
- 4. How do youth in Medellín overcome or confront the stressful situations in their lives?
- 5. What are the perspectives of youth regarding the role that family and religious beliefs during stressful situations?

## **Definition of Terms**

 DSM-IV: The Diagnostic and Statistical Manual of Mental Disorders, 4<sup>th</sup> edition is used by clinicians and psychiatrists to diagnose psychiatric illness. The DSM-IV is published by the American Psychiatric Association and covers all categories of mental health disorders for both adults and children.

- Aburra Valley: The Aburra Valley is the natural basin of the Medellín River and one of the most populous valleys of Colombia. The Aburra Valley contains 10 municipalities, including Medellín, Envigado, Itagui, and Sabaneta.
- 3. Spanish vocabulary:
  - a. *Agua panela* Hardened sugarcane syrup often used as a sweetener or melted on desserts
  - b. Culto-a Christian evangelical religious group; denomination varies.
  - c. Feria de las Flores (Flower Fesitival)- a weeklong holiday and celebration unique to Medellín.
  - d. Finca- a recreational home typically outside of the city in more rural areas.
  - e. Mujeriego-womanizer
  - f. Plata-slang term for money.
  - g. *Telenovela* Latin soap operas that occur in the evenings and are more popular among the general population.
  - h. *Validación* (validation )- an education equivalency program for youth who have failed a grade and are older 16 years of age. They may elect to "validate" instead of attend a regular public high school. This permits them to take a condensed course load and catch up to their peers to graduate on time.
  - i. Vicios- Spanish slang word for drugs

#### Chapter 2: Comprehensive Review of the Literature

#### Mental Health: Depression & Suicide

According to the WHO World Health Survey (WHS) mental disorders are common and occur globally. <sup>2</sup> In a study examining the prevalence mental health disorders in 28 countries, mood disorders (bipolar disorders, dysthymia, and major depressive disorder) were generally found to be the most prevalent class of mental disorders in community epidemiological surveys, with lifetime prevalence estimates of any mood disorder averaging approximately 12%.<sup>2</sup> In 2001, depression was considered the leading cause of years lived with disability (YLD).<sup>3</sup> Across countries with varying demographic characteristics, respondents with depression comorbid with one or more chronic diseases consistently have the worst health scores of all the disease states, including any combination of chronic diseases without depression,<sup>32</sup> implying that depression not only reduces quality of life on its own, but worsens quality of life through its interaction with other health conditions. Therefore, the WHO stresses the urgency of addressing depression as a public health priority to reduce disease burden and disability.<sup>32</sup> Unfortunately, most low and middle-income countries spend less than 2% of their budget on mental health services.<sup>1</sup>

In addition to depression's comorbidity with other chronic conditions, it is also a significant predictor of suicidal behavior in both developed and developing countries.<sup>33</sup> Epidemiologic studies report that 15% of individuals in the community with a lifetime diagnosis of major depression admit attempting suicide at some point in their life.<sup>34</sup> This proportion may be closer to 50% among hospital populations admitted for suicide attempts.<sup>35</sup> Similarly, in a case control study of adolescents, major depression increased risk of suicide attempts 27-fold<sup>36</sup> and a meta-analysis of prospective studies concluded that evidence strongly supports the finding that depressed individuals with a history of previous

suicide attempts, as well as those suffering recurrent depression, are at increased risk of future suicidal behavior.<sup>4</sup>

Suicidal behavior is believed to be a result of an interaction of socio-cultural, developmental, psychiatric, psychological, and family-environmental factors.<sup>11</sup> Suicide is among the three leading causes of death for people 15 to 44 years old and almost a quarter of all suicide deaths occur among young people under the age of 25.<sup>6</sup> According to the WHO, due to steady increases in suicide rates among young people, they are now considered the highest risk group in a third of all the world's countries.<sup>6</sup> Globally, PTSD and conduct disorders also have very strong ties to suicidal behavior.<sup>33</sup> Most importantly, it is estimated that for every suicide attempt that is "successful" there are 20 additional suicide attempts that do not end in death and/or potentially go unreported.<sup>6</sup>

### Depression and Suicide over the Life Span

There is strong evidence that many mental disorders begin in childhood, adolescence or young adulthood <sup>2</sup> and that depressive episodes during childhood and adolescence predict future depression in adulthood, as well as suicidal behavior.<sup>5</sup> Retrospective studies found that adults who reported depression in childhood had elevated risks for major depression in adult life,<sup>37,38</sup> experienced more depressive episodes during their lifetime, and had a longer duration of their first depressive episode.<sup>38</sup> Adolescents with depressive symptoms in longitudinal studies are also more likely to have persistent and episodic depression in adulthood.<sup>5,39,40</sup> Those who develop depression earlier in adolescence are at higher risk,<sup>16</sup> as are those with chronic long-term major depression, who have elevated risks of anxiety disorders, comorbid mental disorders, and suicide attempts in comparison to those with episodic depression.<sup>5</sup> Thus, longstanding depression in adolescence may be a powerful predictor of continued adult mental health problems,<sup>5</sup> as well as act as a contributor to dysfunctional interpersonal relationships in adolescence that persist into maladaptive functioning in peer, family, romantic, and parenting roles as adults.<sup>41</sup>

## Gender Disparities and the Gender Paradox

It is widely accepted among the public health and medical community that there are gender differences in depression and suicide outcomes and that these disparities persist across countries and cultures.<sup>3,7-9</sup> For instance, although depression was the global leading cause of years lived with disability for both sexes in 2001, the burden of depression was 50% higher for females than for males.<sup>3</sup>

Evidence is somewhat contradictory regarding why this disparity exists, with some studies showing that even among adolescents exposed to the same risk factors, females had an increased risk of episodic depression,<sup>39</sup> while other studies suggest that girls are more at risk for developing depression in adolescence because they experience more challenges in early adolescence than boys.<sup>42</sup> Shih and colleagues' study found that girls experienced more episodic and interpersonal stress (positive or negative discrete life events that have some negative stress impact), while boys experienced higher levels of chronic stress (comprised of stressors related to social circles, close friendships, academic performance, and school behavior), but that girls were more reactive than boys to similar levels of interpersonal stress.<sup>43</sup> This finding supports the hypothesis that greater stress increases the likelihood of depression among girls, but that the type of stress may be equally important. Nonetheless, there is evidence that girls and boys share similar predictors for depression, such as low self-esteem, dissatisfaction with academic achievement, having no dating experiences, and parental divorce.<sup>39</sup>

Considering there are gendered differences regarding depression, it is not unexpected that there are also gender differences in suicidal behavior. Studies demonstrate that depressed women are significantly more likely to attempt suicide than males<sup>4,10</sup> but men more often complete their suicide attempts because they use more lethal methods;<sup>10</sup> this is often referred to as the 'Gender Paradox'.<sup>8</sup> Among youth, suicidal risk factors are often shared, but vary by gender, such as age, existing mental health, physical and sexual abuse, and drug and alcohol use.<sup>44</sup> From an epidemiologic perspective, in western societies there are several potential reasons for the gender discrepancies aside from what might be considered typical risk factors, such as higher rates of underreporting for female suicides or increased stigma of female suicides.<sup>10</sup> Consequently, gender roles and cultural norms are equally important to understanding suicidal behavior in any given society,<sup>7,8</sup> implying that a prototypical 'male' and 'female' suicidal process does not exist.<sup>10</sup>

### Stress and PTSD

An important component of depression and suicide in the literature focuses on the impact of stress, as well as traumatic life events that potentially lead to post traumatic stress disorder (PTSD). Several studies have found that loss of a parent to death or divorce, or living apart from one or both biological parents is a significant risk factor for completed suicide.<sup>30,45</sup> Stressful events and chronic negative circumstances are potent predictors of depressive episodes,<sup>44</sup> however, youth with depression may also generate additional stress due to their condition, creating a cumulative effect.<sup>46</sup>

PTSD on the other hand has been identified as an independent risk factor for attempted suicide among young adults, even after adjustment for prior major depressive episodes, alcohol abuse and drug use.<sup>47</sup> PTSD is defined by DSM-IV as a set of symptomatic criteria involving (1) re-experiencing trauma (via nightmares or intrusive thoughts), (2) avoidance and numbing, and (3) increased arousal.<sup>48</sup> The re-experiencing of the traumatic event through nightmares, recurrent images, flashbacks, and intrusive thoughts sets PTSD apart from other psychiatric disorders.<sup>49</sup>

Trauma, as it is typically experienced by youth, typically involves violence within the household and the community. Cumulative exposure to traumatic events, such as sexual assault, physical assault, and witnessing violence are associated to several negative health outcomes, including delinquency, binge drinking, depression, and PTSD symptoms.<sup>19-21</sup> Additionally, estimates suggest that up to 75% of youth with PTSD have at least one comorbid diagnosis.<sup>21</sup> Similar to depression and suicidal behavior, the burden of PTSD may be higher among girls,<sup>20</sup> though boys and girls have similar risk factors. Among a US adolescent population, girls and boys with a history of witnessing violence were both nearly three times more likely to meet criteria for PTSD. <sup>20</sup> In a meta-analysis examining PTSD symptomology and predictors for adults, a significant conclusion was that the type of traumatic event was a stronger indicator than prior personal characteristics, but that family history was still a significant contributor.<sup>50</sup> For youth, family may play a more salient role as parental behaviors such as supervision, family cohesion, and adaptability have been indirectly associated to anger regulation among their children, and their children's level of exposure to violence. <sup>51</sup> Furthermore, strained parent-child relationships have demonstrated more predictive power of PTSD symptomology than past victimization.<sup>52</sup>

Exposure to community violence may be a unique form of trauma contributing to PTSD as youth living in violent neighborhoods constantly hear about the victimization of family, friends, and neighbors and may feel continually at risk for victimization themselves.<sup>53,54</sup> Violence in the form of terrorism in the community may also lead to higher levels of perceived stress and increased risk depression.<sup>18</sup> A meta-analysis of 114 studies estimating the effects of exposure to community violence on mental health outcomes found that PTSD was most predicted by victimization, witnessing, or hearing about community violence and that adolescents exhibited a stronger association between externalizing behaviors (behavioral problems, aggressive behavior and delinquency) and exposure, while children exhibited more internalizing behaviors (depression and anxiety).<sup>54</sup> In a study of inner-city youth, findings demonstrated that PTSD symptomology was the only variable to show a significant relationship with exposure to violence once other mental health variables were statistically controlled for. This suggests that PTSD may act as a mediator between violence exposure, depression and suicidal ideation. <sup>49</sup> To further complicate the relationship between violence exposure, PTSD, depression, and suicide, witnessing serious violence has also been associated with other risk behavior, such as drunkenness, tobacco use, number of illicit drugs used, and problems with drugs and alcohol among Panamanian and Costa Rican adolescents. <sup>14</sup>

### The Influence of Family on Mental Health

According to Bridge and colleagues, suicidal behavior is a result of an interaction of socio-cultural, developmental, psychiatric, psychological, and family-environmental factors.<sup>11</sup> It is well recognized that depression<sup>41</sup> and suicidal behavior<sup>55,56</sup> runs in families. Evidence on suicidal behavior suggests that possible pathways of intergenerational transmission include genetics, the interaction of genes with stressful environments, or imitation of family members exhibiting suicidal behavior.<sup>55</sup> Similarly, Hammen suggests that the diffusion of depression from one generation to the next involves both heritable and environmental factors; depressed youth can become caught in their parent's marital and parenting conflict, contributing to further depression, and eventually transmission to the next generation.<sup>41</sup>

Exposure to interparental violence in childhood is associated with psychosocial maladjustment in adulthood,<sup>57</sup> but equally important is the bond youth have with family

members and the quality of those relationships. Risky families are considered to have high levels of conflict and aggression, creating relationships that are cold, unsupportive, and neglectful.<sup>15</sup> Numerous studies have shown that family conflict, including perceived maternal hostility toward the child, is higher among families with depressed mothers and is associated with maladaptive outcomes in the children.<sup>41</sup> In 2003, among adolescents in Mexico City, youth were at higher risk of presenting depression or suicidal ideation symptomology if they were experiencing higher conflict levels with their mother and/or father and if their parents argued over economic problems.<sup>12</sup> Other characteristics of parent-child relationships that have characterized suicidal adolescents include a lack of perceived support and poor communication, particularly between children and fathers. 58-60 In Chile, the relationship extended beyond parents, demonstrating that youth suicidal ideation was associated with suicidal ideation by close relatives as well, and that family adaptability (the ability for the family system to change their power structure, role relations, and rules in response to situational stress) was correlated to youth progressing to suicide attempts, even after controlling for previous suicidal ideation.<sup>13</sup> High levels of family cohesion have attenuated the risk between exposure to violence and drug use among adolescents,<sup>14</sup> while close mother-child relationships have reduced the negative effects of stressful personal life events on depression outcomes over time.<sup>18</sup> As the previous studies suggest, just as negative family behavior can act as a risk factor for youth, positive relationships can be beneficial and reduce the risk of depression and suicide. This may be related to the 'stress-buffering hypothesis' that states when faced with troubling life events, individuals with greater support from family, friends, or community are less likely to become depressed than those with lower levels of support.<sup>61</sup> Consequently, understanding youth family environments is vital to understanding future mental and physical health across the lifespan.<sup>15</sup>

### Friendship & Religion

Aside from the effects of family on depression and suicidal behavior, friendship and religiosity have demonstrated effects on these outcomes as well. Among adolescents, having a friend who committed suicide increased the likelihood of suicidal ideation<sup>62</sup> and social isolation has increased suicidal thoughts among adolescent girls.<sup>62</sup> On the other hand, social support can also be protective, as high levels of peer support prior to terrorist community violence can mediate the risk of perceived stress and depression over time.<sup>18</sup>

A large majority of evidence suggests that religiosity has a positive relationship with psychological adjustment, though how it is measured may alter the association;<sup>63</sup> measures related to the institution of religion versus emotional connections result in an inverse relationship.<sup>63</sup> Though participation in religious institutions may reduce stress by enhancing social support and creating positive coping mechanisms, such as prayer.<sup>64</sup> Among U.S. adolescents, religious involvement reduced the occurrence of school and health stressors, thus reducing the risk of depression.<sup>65</sup> In this same study, religious participation also increased social resources, mediating the risk for suicidal ideation. Researchers have also shown that the frequency of attendance affiliated with a religion, and level of perceived spirituality reduce suicidal ideation.<sup>66,67</sup> Zhang and Jin suggest that religion also influences the acceptability and propensity of suicide.<sup>66</sup>

#### Examining mental health, depression, and suicide in Colombia

Examining the burden of mental health disorders in Colombia, studies show that in 2008 the lifetime prevalence of a DSM-IV mood disorder was 14.6%, though the prevalence of any mental disorder was 39.1%, the third highest only behind the U.S. and New Zealand.<sup>2</sup> Recently, in a nationally representative study of Colombian adults, the probability of suicide attempts among those who had experienced suicidal ideation and made suicide plans was

52.1% and 8.8% among those with suicidal ideation only.<sup>68</sup> Consistent with the existing literature on the relationship between depression and suicide, mood disorders and anxiety disorders were positively associated to all three suicide outcomes.<sup>68</sup>

According to the WHO, suicide rates in Colombia have steadily increased. Though Colombia once had one of the lowest suicide rates globally, it has since experienced a 165% increase between 1955 and 1994.<sup>22</sup> Consistent with findings across other cultures, when stratified by gender, Colombian men have higher suicide rates than women. In 2007 the suicide rate for men was almost four times higher than the rate for women (7.9 versus 2.0 suicides per 100,000).<sup>22</sup> In 2007 there were also very clear differences between rates across age groups, with adolescents and young adults 15-24 having the highest rates of suicide, 8.5 suicides per 100,000 people. Stark differences are seen in self-inflicted, intentional injuries, as well as rates of injuries incurred by violence (Table 1).<sup>69</sup> Thus it seems intuitive that the WHO considers Colombia one of the 26 countries possessing the largest mental health burden in the world.<sup>70</sup>

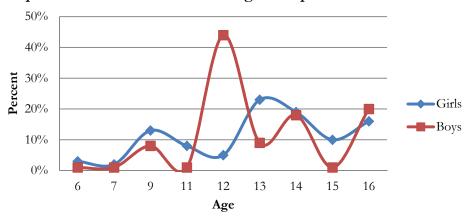
	Men	Women
	(per 1,000)	(per 1,000)
Intentional injury	24.6	2.5
Self-Inflicted injuries	1.8	.5
Violence	17.7	1.6

Table 1: Estimated causes of Injury among Colombians in 2008 ages 15-69

Source: WHO, Global Burden of Disease Estimates<sup>69</sup>

In a Colombian national random household survey examining the relationships between violence and family protective factors, nearly 1 in 10 adolescents reported having a family member murdered, kidnapped, or vitally threatened in the past year.<sup>31</sup> Youth who were exposed to violence and reported low levels of family support had anxiety scores approximately one half of a standard deviation higher than youth who had been exposed to violence but who had high levels of family support, but these effects were most pronounced for younger adolescents and girls. <sup>31</sup> In a study of young people (15-25 years) in Cartagena, the most important predictors for anxiety and depression symptomology were being female, incomplete or no primary schooling, presence of family violence, being a victim of violence, perceiving that violence affects one's community, and being a perpetrator of violence.<sup>71</sup> Similarly, a low-income adolescent population in Bogotá showed that previous suicide attempts, low self-esteem, depression, and belonging to an unhealthy family were the only significant predictors of suicidal ideation.<sup>72</sup> Conversely, among young people in Cartagena, high self-esteem, high religiosity, and having a functional family were significant predictors for "general wellbeing." <sup>73</sup>

More recently, as part of the World Mental Health Initiative in 2009, the Center for Excellence on Research in Mental Health (CESISM) in Medellín, Colombia administered the WHO Composite International Diagnostic Interview (CIDI)<sup>23,24</sup> to a nationally representative sample of 1,586 adolescents between the ages of 13 and 17. Findings from the Colombian Mental Health Study<sup>25</sup> demonstrated that both depression and suicide are affecting significant proportions of the adolescent population. Among the total sample surveyed, 7% of adolescents experienced episodes of major depression in their lifetime. The lifetime prevalence among this population for suicidal ideation, suicide planning, and suicide attempts was 10.6%, 3.6% and 4.4%, respectively. As might be expected, older adolescents had a higher prevalence of suicidal ideation however; researchers discovered a dramatic increase in the prevalence of suicidal ideation among youth between ages of 12 and 14 (see Graph 1). These findings suggest that there may be major life changes during this time in adolescence that drive the upward trajectory of suicidal ideation, planning, and consequently suicide attempts.



Graph 1. Proportion of Adolescents at each Age of Reported First Suicide Attempt

CESISM also evaluated the bivariate associations between risk and protective factors and adolescents' reports of major depression episodes or suicide attempts. CESISM found that the risk and protective factors are similar for both outcomes, although they differ in their effect size. The majority of risk factors for both major depression and suicide attempts involved family characteristics and substance abuse; they shared 8 risk factors related to the parents' mental health and physical and psychological abuse in the household. Similarly, they shared 5 of 6 total protective factors: supervision, strict father, spirituality, and communication with mother and father.<sup>25</sup>

### The Case for Medellín

Though the prevalence of major depression and suicide outcomes in Colombia do not seem overwhelmingly high and are generally similar to those of the United States,<sup>26,27</sup> the regional differences within Colombia may be worth exploring. Colombia has long been recognized as having a "culture of violence,"<sup>16</sup> or as they say now in Medellín, "la mala fama" (a bad reputation). Prior to 2001, Colombia was notorious for being the "kidnap capital of the world," and having the highest homicide rate of any country worldwide.<sup>74,75</sup> Colombia has undergone decades of conflict between government forces and antigovernment insurgent groups, with violence escalating in the 1990's.<sup>17</sup> Violence was primarily due to the side-effects of the narcotics industry; by the 70s and 80s Colombia had become the international epicenter of the cocaine trade, with Medellín serving as the hub for cocaine processing and financing.<sup>76</sup> The mid 80s to early 90s represented the most violent phase of the narcotics industry's rise in Medellín; this period was described as a war for political control between the narcotics industry and the state:<sup>76</sup>

"...<it> converted selective areas of Medellín into something resembling a war zone. The city's lower class neighborhoods and in particular its poorer young men emerged as the primary targets of prolonged bloodshed, altering in dramatic fashion the configuration of urban spaces of sociability, communal interaction, and memory." (pg.132).

The death of Pablo Escobar in 1993 did little to abate the violence, as the cartel's demise lead to additional negative economic outcomes.<sup>76</sup> Unemployment and consequently gang violence ravaged the city, as unemployed youth attempted to replace their lost cartel jobs.<sup>76</sup> By the 1990's the city's homicide rate skyrocketed to 381 murders per 100,000 inhabitants, nearly 40 times higher than the United Nations marker of epidemic violence (10 per 100,000).<sup>28</sup> In 2001, the homicide rate in the department of Antioquia among young men ages18-24 was 728 per 100,000.<sup>77</sup> Though violence began to steadily decrease in Colombia in 2002, Medellín still suffers from endemic violence, with homicide rates of 40 deaths per 100,000 inhabitants, 6 times higher than Bogotá.<sup>28</sup> While death rates skyrocketed among men, there have been consequences for women as well. In a recent community study in Medellín, 95% of the women reported exposure to IPV or background trauma (serious disaster, witnessed or had a serious accident, sudden death of a loved one, witnessed family violence, and witnessed a physical attack) during their lifetimes. Of the women who reported

background trauma or IPV, the most frequently reported events were physical attack by a stranger and emotional abuse. <sup>78</sup>

Though adolescents and young adults currently living in Medellín may only have a vague memory of the 1990's and this war-like era in their city's history, clearly the remnants of extreme violence persist today. Consequently, an important manner in which past violent decades may impact youth today is through their parents and adult caretakers, who surely recall *La Violencia*. Adults directly exposed to this violence may also suffer from negative psychosocial outcomes, contributing to the "transmission" of those outcomes to their children.<sup>15,30</sup> Just as family can be a protective factor for depression and suicide, youth who have parents with mental illness are also at risk for those same outcomes.<sup>41</sup> For this reason youth in Medellín are a unique population to study and may have distinct experiences that alter the context of how we understand risk and protective factors for depression and suicide.

Research suggests that Medellin may have a higher burden of suicide than national estimates (see Table 2). Unpublished data from CESISM from a recent study in 2011 with The WHO World Mental Health Survey Consortium found that among adolescents ages 13-18, 15% reported suicidal ideation, 5.2% planning suicide, and 5.8% attempting suicide in their lifetime. This 5 year age group had the second highest prevalence of each suicide behavior, only after adults ages 30-44.<sup>79</sup> These estimates are almost 50% higher than the national average, <sup>29</sup> though comparisons should be made with caution as two separate instruments were used in these studies to measure depression and may have varying sensitivities.

0	Prevale	Prevalence (%)	
	Medellín, 2011 <sup>79</sup>	Colombia, 2009 <sup>25</sup>	
Depression	4.3%	7%	
Suicide Ideation	15.2%	10.6%	
Suicide Plans	5.2%	3.6%	
Suicide Attempts	5.8%	4.4%	

 Table 2. Comparison of National and Medellín Prevalence of Depression and

 Suicide among Adolescents

Sources: Primero Estudio Poblacional de Salud Mental (2012) and Análysis especial sobre Depresión e Indicadores de Suicidio (2010)

During a meeting with Dr. Carmen Restrepo, a previous employee at the Envigado Mental Health Center, she stated that she suspected suicide deaths and attempts in Medellín were underreported due to the stigma of suicide. This idea was is supported by a study in 2008 that hypothesized that Latin American culture may stigmatize suicide to such an extent that suicide deaths are underreported. Researchers compared "undetermined" causes of death to suicide deaths and found significantly higher undetermined deaths in Colombia, potentially acting as a repository for hidden suicides.<sup>80</sup> This employee also mentioned that in Rionegro, a town directly outside the Medellin municipality was recent incidents of suicide among children younger than 10 years old, an extremely rare phenomenon. Consequently, the mental health of youth in Medellín, and its surrounding towns, has become a major concern to the Colombian medical and public health community.

Significant research has been carried out in Medellín to validate the hypothesis that mental health warrants attention and should be significant concern for their population. There is evidence that certain family factors could be protective for Colombian youth, thus a better understanding of that relationship may advance future mental health interventions and the knowledge base for practitioners. In 2001, Kliewer and colleagues suggested that future research in Colombia should work to understand the protective effects of family support, and why family cohesion and parental support appear to be most protective for younger adolescents and girls. Additionally, investigations should focus on gathering information about the closeness of the relationship, not merely the role of the family.<sup>31</sup> This study contributes to this gap in the literature by combining multivariate statistical analysis with the words and experiences of youth who are living in the Valley (see figure 1), hopefully shedding light on how family relationships can buffer adolescent adversity, even in the most extreme life circumstances.

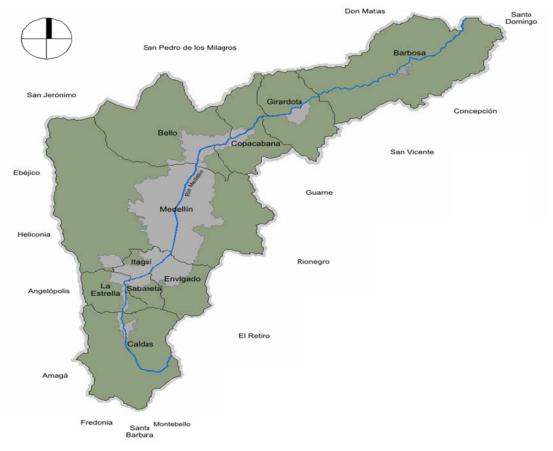


Figure 1. Map of the Aburra Valley

### Chapter 3: Project Content

### Mixed-Methods Study Overview

This study utilized a mixed methods approach to examine risk and protective factors for depression and suicide outcomes among adolescents in Medellín. The study was performed between June 8, 2011 and August 18, 2011. The first phase involved a secondary analysis of data presented in CESISM's unpublished report on the 2009 Medellín Adolescent Mental Health Study (2009 MAMHS).<sup>29</sup> Through the development of eight multivariate models, this phase identified independent risk and protective factors associated with depression and three suicide outcomes; separate models were constructed for males and females. Protective factors included measures of family, religion, and social support. Model trends, as well as distinctions between genders across the models, were evaluated to determine how to best direct the design of the qualitative interviews.

The second phase of the project consisted of qualitative in-depth interviews using a Life History approach. The objective was to gain insight into how multiple risk and protective factors combine in the everyday lives of youth and how they change over time in adolescence. In-depth interviews covering the 'life history' of adolescents ages 15-18 permitted a holistic consideration of how various risk and protective factors might work together, or offset one other, among healthy youth. Delving deeper into youth's lived experience facilitated a fuller understanding of the interplay between risk and protective factors, from their perspectives and experiences, as well as an opportunity to identify resilient characteristics that may provide useful in future mental health interventions.

#### **Quantitative Methods**

The 2009 MAMHS was conducted in 2009<sup>1</sup> by the Center for Excellence in Mental Health in CES University (CECISM). CESISM recruited and surveyed 4,764 youth, ages 10-19 from public and private schools in the Medellín municipality, as well as five surrounding

<sup>&</sup>lt;sup>1</sup> Specific date ranges were not specified in the unpublished report

towns (Santa Elena, Palmitas, Alta Vista, San Cristóbal and San Antonia de Prado) in the department of Antioquia, Colombia. Youth were surveyed with public and private schools; institutionalized adolescents were excluded from the sample. Sample size was calculated in order to establish a drug use prevalence of 15% in the population at the 5% significance level, and to correct for the design effect for cluster surveys in six towns. See Table 3 for a list of original scales utilized by CESISM.

Table 3. Covariates assessed as independent risk factors and their respective scales in the 2009 Medellín Adolescent Mental Health Study Scale Utilized Covariate Stressful Life Events (in the past year). The Coddington list of stressful events No scale indicated Interfamily abuse Conduct disorder Drug Using Screening Inventory (DUSI) Chronic Post Traumatic Stress Disorder DSM – IV At Risk or Dependent on Drugs or Chemical DSM – IV Substances Academic problems Drug Using Screening Inventory (DUSI) No Family and Social Support System Drug Using Screening Inventory (DUSI) Low Spirituality No scale indicated No scale indicated Low or Normal Family cohesion

 Not Living in a Nuclear Family
 N/A

 The survey consisted of fifty-five questions meant to assess and identify the

 prevalence of various psychosocial and mental health conditions, such as conduct disorder,

 violent behavior, chronic post-traumatic stress disorder, gambling addiction, and drug use.

 Questions regarding family structure, family cohesion, religiosity, and social support were

 included in the questionnaire. The survey was completed in private and results remained

anonymous.

For the purpose of this secondary analysis there were four outcomes of interest: symptoms of depression in the past month, self-reported suicide ideation, self-reported suicide planning, and self-reported suicide attempts in one's lifetime. The depression scale utilized in the survey was validated as part of this study and consisted of 38 items originating from the María Kovak and the WS Reynolds Scale. Its psychometric value was very high, with a Cronbach Alpha coefficient of 0.91. A total of 38 questions were used to assess depressive symptoms, each question was answered on a Likert scale.

The suicide outcomes were established based on affirmative responses to three questions, "At any moment in your life have you: 1) Thought seriously about committing suicide? 2) Made a plan to commit suicide? 3) Attempted to commit suicide?"

Several demographic variables were considered covariates in the regression models. School type (public or private school) was used as a proxy for socioeconomic status, since income and other family economic characteristics were not collected. According to local school administrators, most youth attending public school from socioeconomic stratum 1 through 3.<sup>81</sup> In addition to school type, family size (number of children in the household), age, and grade level were contributors to the model. High-risk categories included attending public school, four or more children in the household, being 15 years of age or older, and being in grades 5 through 7 (versus 8 through 11).

### **Covariates**

Primary study variables previously identified as risk factors in bivariate analysis by CESISM were assessed as independent risk factors in the logistic regression models. All variables were taken from the original categorical levels and scales created by CESISM, and then recoded into binary variables so that the levels 'none' and 'low' and the levels 'moderate' and 'severe' were combined.

## **Protective Factors**

Family and spirituality variables, mainly their potential protective effect on depression and suicide outcomes, were the focus of this study. However, they were recoded

so that the absence of these characteristics was considered the high-risk category. Having a family and/or social support system was established based on six survey items responses to the question "when you have difficulties, who do you turn to for support?" Respondents were asked to rate whether they "N/A, never, rarely, some times, frequently, or always" look for support from their father, mother, siblings, other family members, a girlfriend or boyfriend, or friends."

Family type was determined for each respondent based on who they indicated lived in their household. There were a total of eleven different family types identified during the 2009 survey including any combination of extended family members, stepparents and stepsiblings, as well as single parent families. For this analysis, nuclear family was coded as 0 and all other family types were coded as 1.

Investigators from the original study defined spirituality as demonstrating an active personal relationship with a 'Divine being' regardless of religious denomination, and showing a personal commitment to closely adhere to a creed. Levels of spirituality were determined on the respondent's agreement with four statements: 1) I believe in God; 2) My faith in God helps me in difficult moments; 3) I feel that I can always count on God; and 4) I ask God to help me make important decisions. The scale was originally divided into very spiritual, somewhat spiritual, less spiritual, and not spiritual. However, of the entire sample, there were no adolescents that fell in the lowest category of spirituality. Therefore, for the purposes of this analysis, less spiritual was coded as 1 and very and somewhat spiritual were coded as 0.

Family cohesion was assessed on the respondent's answer to eight statements on a Likert scale: 1) We like to spend free time together; 2) Every person easily expresses what they want; 3) We help one another; 4) The ideas of the children are taken into account when solving problems; 5) When problems arise we unite in order to resolve them; 6) We take turns with household chores and responsibilities; 7) The family shares important events with close relatives; and 8) I am satisfied with the relationship I have with my parents. This scale was validated for the Colombian culture in the 2006 Medellín Adolescent Mental Health Study, with a high psychometric value, Cronbach  $\alpha$  : 0.798. 'Low' or 'normal' family or social support was considered the high-risk category during analysis. Low or regular family cohesion was coded as 1 and good or very good was coded as 0.

#### Quantitative Analysis

All analysis was performed in SPSS (PASW 18). A bivariate analysis was repeated on previously identified risk and protective factors associated to each outcome. Comparisons among predictors were reviewed to examine their strength of association of each variable to the outcomes, as well as differences between boys and girls. Variables were selected for the model based on their strength of association, keeping in mind the principle of parsimony. Due to marked gender differences between strength of association across variables and outcomes, we created eight separate models to compare risk factor patterns by gender and outcome.

Logistic regression models were created using backwards elimination. Demographic variables were inserted into the models first, followed by risk factor variables. The risk factors most strongly associated to the depression outcome from the initial bivariate analysis were entered first, descending by their unadjusted strength of association.

We examined goodness of fit using the Hosmer-L test (all tests were non-significant) and assumption violations, including collinearity, variance inflation (all VIF's were lower than 2.0) and Pearson's correlations. Upon review of Pearson's correlations, violent behavior was highly to moderately correlated to conduct disorder, therefore it was removed from all the models. Finally, models were re-evaluated without the violent behavior variable.

#### Connection between Quantitative and Qualitative Methods:

Logistic regression models were reviewed and compared to identify differences in independent risk and protective factors for boys and girls. A qualitative in-depth interview guide was developed that focused on understanding these "gaps" in the models, especially for family and spirituality characteristics that were identified in the literature as protective.

## *Qualitative Methods* Participants

Fourteen male and nine female students between the ages of 15 and 17 presenting academic or disciplinary difficulties in the past year were recruited from a public school located in Sabaneta, Colombia, a peri-urban area in the Aburra Valley, 15 km south of Medellín. Students with known mental health conditions, learning disabilities, or known habitual drug use were not eligible to participate in the interviews. School administrators defined academic and disciplinary problems as failing multiple classes, failing an entire grade, or conflicts with students and/or school staff. Participants included youth living in lowincome families from Sabaneta, Itagui, and Envigado. The Aburra Valley has six socioeconomic stratum and assigns SES to neighborhoods with a number system; one is the lowest SES stratum and six is the highest.<sup>82</sup> Typically, families in higher SES neighborhoods (stratum 4-6) can afford to send their children to private school, thus public school administrators assumed their students lived in strata 1 through 3.<sup>81</sup> All but one participant was from the same high school. The public "educational institution" taught youth in grades 1 through 11, had approximately 1,500 students, and 45 teachers. Due to overcrowding, this school held a morning and an afternoon session; students were interviewed from both sessions.

#### **Participant Recruitment**

Eligibility criteria, including age, mental health conditions, and drug use, was established a priori. However, the decision to recruit youth with academic or disciplinary difficulties was made after discussions with the Envigado Mental Health Center (EMHC). The purpose was to recruit youth with a known risk factor for depression and suicidality, without recruiting on the outcome of interest, in order to better identify protective factors in their lives. Additionally, this was a more feasible and less invasive recruitment strategy considering the limited timeframe. Given the relatively homogeneous population, the original goal was to sample 10 girls and 10 boys for interviews in order to reach data saturation for each gender and provide sufficient data to compare themes by gender.

After developing a preliminary recruitment strategy, I accompanied a doctor from EMHC to present the project to their network of counselors and psychologists in Sabaneta public schools. We requested their feedback on the project aims and recruitment procedures, and wanted to earn their buy-in for the study. The counselors noted that learning disabilities needed to be considered with this population; thus eligibility criteria were revised to exclude these students. This was an important exclusion criterion as we were recruiting students with academic difficulties and did not want that risk factor to pertain to their disability.

Through the coordination of EMHC, the study objectives and procedures were presented to officials from the Sabaneta Ministry of Health. The Sabaneta MOH provided important insights regarding the schools district, informing me that not all public schools in Sabaneta had similar learning environments. Although the same neighborhoods fed into the local schools, officials described some schools as "chaotic" and others as "organized and calm." To avoid introducing school-level variability, aside from one pilot interview, we only recruited students from one school. Once permission was granted from ministry officials, we began recruitment. A letter of non-research determination was received for this project from the Emory University IRB (see appendix 1), as results were not intended to be generalizable to a greater population. Therefore formal 'informed consent' was not required. However, as a matter of protocol, EMHC drafted an informed consent document for the students and their parents. A counselor from the school contacted various students in grades 8-11 to explain the study and invite them to participate. It was explicitly stated both during recruitment and before interviews began that interviews were voluntary, completely confidential, and results would be anonymous. The project description emphasized that the purpose was to better understand adolescent health and the issues that affect Colombian youth by a recounting of their life history. The fact that the greater study was centered on potential protective factors for depression and suicide was purposefully not mentioned, first, because there were no questions involving depression or suicide, and second, for fear that the stigma of suicide would dissuade students from participating. No incentives were offered to participants, but they granted an excused absence from class.

#### **In-depth Interviews**

The decision to use in-depth interview qualitative methods was guided by the themes and topics that would be discussed with youth. With a focus on relationships among family and friends, important life events, and religion, as well as the emotions surrounding these themes, there was potential to invoke sensitive topics of conversation that would be inappropriate for a group discussion.<sup>83</sup> Interview guides were semi-structured and integrated components from a life history approach. This method has been successful among adolescents in past research in facilitating the organization of their thoughts and memories, as well as engaging adolescents in sensitive discussion topics.<sup>84</sup> The purpose of the life history approach was to give the researcher a better view of the major events and relationships that had influenced the adolescents' life in the past and the present, as well as to encourage participant reflections on these events.

The major themes of the interview, family, friends, and religion, were determined prior to quantitative analysis and were based on established findings from the literature surrounding adolescent mental health and suicide behavior. However, the qualitative research questions were refined after a review of the statistically significant risk and protective factors from the logistic regression models. Research questions and interview questions were developed to provide a contextual understanding of quantitative results and, more importantly, gain insight as to how these risk and protective factors are described from the perspective of participants.

The interview guide was developed to understand: 1) How youth overcome stressful situations and challenges in their lives; 2) The role that family and religion play during stressful situations; and 3) How male and female adolescents describe their life experiences and important relationships. Questions on the guide pertained specifically to their community, school, family, friendships, pastimes, stressful events, and religion, with an emphasis on important life changes in these areas and how those changes affected their lives.

A life history grid was created to compliment the interview by tracking significant life events and the ages at which they occurred. The grid listed ages 10-18 vertically and major life areas horizontally across the top; the purpose was to facilitate the identification of trends among participants by showing at what age major events occurred and in which areas of their life the events were most prominent (see appendix 3). The matrix was included as a portion of the methodology as a result of the 2009 National Colombian Mental Health survey finding that girls and boys were attempting their first suicide between the ages of 12 and 14.<sup>23</sup> All interviews were conducted in Spanish, with most questions administered by a medical doctor from EMHC who volunteered her time to assist the researcher. Although the researcher was proficient In Spanish, it was suggested that adolescents would feel more comfortable having these discussions with a native Colombian, and additionally, their slang would be difficult for the researcher to follow, thereby affecting the quality and richness of the data. However, the researcher was present at each interview and was able to interject with questions throughout the process.

The first pilot was held June 28<sup>th</sup> with a 15 year-old girl that had none of the characteristics we were recruiting for in the project, but simply helped to test the overall flow of the interview and ease of use of the life history grid. Initially, the participant was to complete the grid alone and then describe the important events to the interviewers. There was a set of questions the interviewer could use to prompt more discussion or deeper explanations around events. However, the participant in the first pilot stated that remembering the information for the grid was difficult. Additionally, though we were able to discuss the events on the grid for 60 minutes, there was not enough in-depth information in regards to the themes of interest. Consequently, the guide was revised to be more structured and prompt explicit questions around each theme of interest. Furthermore, the process was changed to have the researcher fill in the grid as the interviewer conversed with the participant and then to review the grid together at the end of the interview.

The second pilot utilizing the new IDI guide took place July 28<sup>th</sup> with a 16 year-old student from Envigado recruited by a counselor from EMHC. The quality of this interview was so rich that her interview was included in the sample for analysis even though she was not from the same high school. The remainder of the interviews took place between August 1 and August 15 of 2011 on school grounds; interviews were performed in private, in empty classrooms or the auditorium. Interviews ranged from 40 to 110 minutes in length and were voice recorded.

During the first week of interviews there were two small changes made to the interview process and the IDI guide. First, due to the difficulty in keeping up with the stories of the participants, the grid was not reviewed at the end of each interview, but rather reviewed during the analysis of each interview transcript. Second, two additional 'scenario' questions were added to the guide to illicit more conversation from male participants, who were significantly less talkative than the girls and required more probing. Though these questions were also given to the girls, they were more for the purpose of encouraging conversation with the boys. At the end of three weeks, there were 10 girls and 14 boys interviewed, however, two of the male interviews were extremely short, and consequently, not included in the analysis. Additionally, one girl was uncomfortable recording her interview so field notes were taken during the interview, but were not detailed enough to use for analysis.

### Data analysis

All IDIs were recorded and transcribed verbatim. Every transcript was compared with the original recording to review quality and make edits accordingly. Verbatim transcripts were analyzed in Spanish to maintain the original meanings of words and nuances of participants' stories. I translated segments into English only for the purpose of disseminating results. Any translation clarifications were reviewed with a native Colombian Spanish speaker trained in Spanish to English translation.

Data analysis was performed using principles of thematic analysis,<sup>85</sup> utilizing MaxQDA version 10, (Verbi GMBH, Marburg, Germany). Interviews were reviewed and annotated prior to code development to facilitate the creation of inductive codes. Deductive codes were based on established IDI domains: *family*, *school*, *support/trust*, *spirituality* and *future*. Inductive codes were developed based on annotations and unexpected and repetitive themes that emerged from the data: *relationships, epiphanies, drama/conflict, vicios, plata, mujeriego, abuse,* and *self-concept.* Two functional codes were used to simplify access to specific IDI guide questions:

- What are the most common difficulties youth you're age are going through right now.
- 2. In your own words, how you would describe stress?

Prior to applying codes to the interviews, a fellow Spanish-speaking student familiar with my thesis topic, but not intimately involved in the study, reviewed one transcript and applied the codes, based on the code definitions. We compared coded transcripts to ensure that codes were applied consistently and that their intended use and meaning were clear.

Textual data for all 23 interviews were segmented and coded. After each interview was coded, a brief participant history was completed to summarize the most significant events and characteristics of the participant. These stories were used as a reference during analysis in order to provide context to segments and patterns. One key informant interview with a school administrator was recorded and transcribed to provide contextual understanding of the high school, the staff, and the student body. This interview was not analyzed, but was also used as a contextual reference. The analysis focused on four overarching themes that closely aligned with the original study objectives: 1.) How do youth in Medellín overcome or confront the stressful situations in their lives? 2.)What are the perspectives of youth regarding the role that family and religious beliefs during stressful situations?

No two themes were analyzed in exactly the same way. Participants were categorized and grouped inductively for comparison within each theme; the comparisons did not follow in the same groups for various thematic analyses. For each theme, except resilience, comparisons were first examined across participant gender. Each theme's respective analysis method is reviewed below.

Adversity: Segments were retrieved to review and understand how participants' defined and experienced stress. A brief summary describing each participant's 'adversity' was created and participants were grouped based similar types of adversity and categorized as high, medium, or low levels of adversity. Patterns within and across groups were then compared.

**Familial Relationships**: Segments were retrieved where *support/trust* or *pastime* codes overlapped with *Family*. A closer examination of how each participant described support from family was performed, including participant descriptions of the personal characteristics of trusted relatives, examples of actions family took to support the participant, specific events in which family intervened to support the participant, as well as contrasting explanations regarding why participants did not trust family. Descriptions of the activities and pastimes participants engaged in with family were also reviewed.

**Religion**: Segments related to religion were retrieved and participants were characterized by their belief systems as well as religious activities. Patterns with and across 'spirituality' types were examined.

**Resilience**: Based on intimate knowledge of each participant's life history, I selected five participants that I predicted would demonstrate resilient characteristics and reviewed them separately. Resiliency was explored by retrieving *self-concept*, *future*, *epiphanies*, and *pastimes* codes. After careful examination, three participants were selected as resilient; their characteristics were described in depth. A comparison group was selected by matching each resilient participant with another participant exhibiting similar levels of adversity during interviews. Contrasts between the resilient group and non-resilient group were developed.

# *Quantitative Results* Study Population

Demographic characteristics are described in Table 4. The study population consisted primarily of urban youth, with 20.9% residing in smaller towns surrounding the Medellín municipality. The average age was approximately 14 years old and the majority of respondents were 14 years old or younger. There were statistically significant age differences between female and male respondents. Less than a quarter of youth lived in households with 4 or more children. Slightly over half of the participants were attending secondary school (56.4%) and a similar proportion was enrolled in public schools (54%). On average youth experienced 9 stressful life events during their lifetime, with 61.1% reporting having experienced 8 or more stressful events; a higher proportion of females than males reported 8 or more stressful events and this difference was highly significant (58.7% vs. 41.3%, p>0.0001).

The population presented a high prevalence of severe or moderate chronic PTSD, academic problems, and conduct disorder (61.8%, 58.8%, and 55.1%, respectively). Females were significantly more likely to have severe or moderate chronic PTSD (P<0.0001) and severe or moderate conduct disorder (P=0.004). Smaller proportions of youth reported severe or moderate interfamily abuse (18.6%) or were at risk or dependent on drugs and chemical substances (15.2%). Though a higher percentage of females were at risk or drug dependent, a significantly larger proportion of the total male respondents were in this high-risk category (P<0.0001).

Though over half of respondents did not live in nuclear families, a very small percentage of youth reported having no family or social support system (5.9%) or low or regular family cohesion (7%). However, male respondents were more likely to report no

		Total		emale		Male	P-Value
		$=4,740)^2$	· · ·	= 2,697)		=2,043)	
Variables	No.	$(^{0}/_{0})$	No.	$(^{0}/_{0})$	No.	(%)	
Demographics							
Age							0.007
$\geq$ 15 years old	1,911	(40.3)	1,045	(54.7)	866	(45.3)	
<15 years old	2,827	(59.7)	1,650	(58.4)	1,177	(41.6)	
Children in the family							NS
$\geq 4$	1,130	(24.0)	662	(58.6)	468	(41.4)	
<4	3,569		2,015	(56.5)	1,554	(43.5)	
Urban residence	3,697	(78.4)	2,166	(58.6)	1,531	(41.4)	< 0.0001
Rural Residence (corregimientos)	992	20.9)	9	52.9)	8	47.1)	
Altavista	18	(0.4)	51	(48.1)	55	(51.9)	
San Antonia de Prado	107	(2.2)	210	(51.1)	201	(48.9)	
San Cristóbal	412	(4.7)	116	(52.0)	107	(48.0)	
Santa Elena	231	(4.9)	118	(51.8)	110	(48.2)	
Grade level							NS
5-7	2,073	(43.6)	1,189	(57.4)	875	(42.2)	
8-11	2,663	(56.4)	1,499	(56.3)	1,164	(43.7)	
School Type							NS
Public	2,560	(54.0)	1,457	(56.9)	1,103	(43.1)	
Private	2,180	(46.0)	1,240	(56.9)	940	(43.1)	
Stressful life events	-			~ /			< 0.0001
$\geq 8$ (moderate to severe)	2,768	(61.1)	1,625	(58.7)	1,143	(41.3)	
<8 (low)	1,765	(38.9)	941	(53.3)	824	(46.7)	
Respondent Risk Factors <sup>3</sup>	,						
Interfamily Abuse							NS
Moderate to severe	884	(18.6)	475	(54.0)	404	(46.0)	
None to low	3,861	(81.5)	2,222	(57.5)	1,639	(42.5)	

Table 4. Demographic Characteristics from the 2009 Medellín Adolescent Mental Health Study, Aburra Valley, Colombia.<sup>1</sup>

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Tabl	Δ /	continued	4
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	Total $(N=4,740)^2$		Female (n = 2,697)		Male (n=2,043)		<b>P-Value</b>
Variables	No.	(%)	No.	(%)	No.	(%)	
Severe or Moderate Conduct Disorder							0.004
Moderate to severe	2,713	(58.6)	1,492	(55.1)	1,214	(44.9)	
None to mild	1,921	(41.5)	1,141	(59.4)	780	(40.6)	
Severe or Moderate Chronic PTSD (in lifetime)							< 0.0001
Moderate to severe	2,703	(57.0)	1,671	(61.8)	1,032	(38.2)	
None to mild	2,037	(43.0)	1,026	(50.4)	1,011	(49.6)	
Drugs and chemical substance use							< 0.0001
Dependent or at risk	713	(15.2)	359	(50.4%)	354	(49.6%)	
No risk to low risk	3,983	(84.8)	2322	(58.3%)	1,661	(41.7%)	
Academic Problems		~ /		× ,			NS
Moderate to severe	2,788	(58.8)	1,559	(55.9%)	1,229	(44.1%)	
None to mild	1,952	(41.2)	1,138	(58.3%)	814	(41.7%)	
Family and Social Support System		~ /		× ,		· · · ·	0.002
No	226	(5.9)	106	(46.9%)	120	(53.1%)	
Yes	4,375	(94.1)	2,515	(57.5%)	1,860	(42.5%)	
Nuclear Family	,	~ /	,	· · · ·	<i>,</i>		NS
No	2,599	(54.9)	1,508	(58.0%)	1,091	(42.0%)	
Yes	1,188	(45.1)	1,188	(55.5%)	951	(44.5%)	
Spirituality	,		<i>,</i>	× ,			< 0.0001
Low	261	(5.8)	98	(37.5%)	163	(62.5%)	
Medium to high	4,260	(94.2)	2,490	(58.6%)	1,770	(41.5%)	
Family Cohesion	,	× /	,		,		NS
Low to regular	323	(7.0)	194	(60.1%)	129	(39.9%)	
Moderate to high	4,280	(93.0)	2,419	(56.5%)	1,861	(43.5%)	
Depression and Suicide Outcomes	, -		,		,		
Depression ( <i>past month</i> )	568	(11.9%)	365	13.5%	202	10%	< 0.0001
Suicide Ideation ( <i>in lifetime</i> )	1,153	(24.2%)	786	29.1%	360	17.6%	< 0.0001

		• •
Table	4	continued

		Total =4,740) <sup>2</sup>		Female = 2,697)	(1	Male n=2,043)	P-Value
Variables	No.	(%)	No.	(%)	No.	(%)	
Suicide Plans (in lifetime)	624	(13.1%)	433	16.1%	187	9.1%	< 0.0001
Attempted Suicide (in lifetime)	677	(14.2%)	483	17.9%	190	9.3%	< 0.0001

1: All frequencies and percentages have taken into account missing data; missing data may vary by predictors and outcomes 2: Missing 17 responses for sex of respondent

3: Unless otherwise specified risk factors are based on responses to conduct and behavior reported by the respondent in the last 12 months.

A higher proportion of females experienced symptoms of depression in the past month (13.5% vs. 10%) and suicidal behavior outcomes. The differences between female and male respondents were highly significant for each outcome.

## Associations between Risk and Protective Factors and Depression

All risk factors were associated with the depression outcome; however, there was variation both in significance, direction of effect, and effect size when associations were stratified by gender. Table 5 displays gender stratified unadjusted odds ratios (ORs) representing the association of risk factors with depression and suicidal ideation outcomes. Among females, the highest demographic risk factor for depression was having 8 or more stressful life events (OR=2.23, 95% CI =2.13, 3.76, P<.001). Attending public school and having 4 children in the household each increased the odds of depression by 58% and was highly significant. Being in a lower grade level increase the odds of depression by 28%, while being 15 years or older slightly reduced the odds of depression, though neither of these associations were significant at the  $P \le 0.05$  level. These age indicators differed between female and male respondents. Males in grades 5-7 had more than double the odds of depression (OR=2.44, 95% CI=1.03,1.60, P<.001), while being 15 years or older was protective and reduced the odds of depression by almost half (OR=0.53, 95% CI =0.39, 0.72, P<.001). Having more stressful events and attending public school had similar associations with depression among females, and were highly significant (OR=1.75, 95% CI=1.27, 2.41, and OR=1.65, 95% CI=1.22, 2.23).

Females exhibited more risk factors for depression and generally, higher ORs for each variable. The risk factors most strongly associated with depression for females in order of strength of association were low or normal family cohesion, moderate to severe interfamily abuse, chronic PTSD, and academic problems; these risk factors tripled or quadrupled the odds of depression and were all highly significant. On the other hand, most risk factors for males did not have such large effect sizes, though interfamily abuse increased odds by 4.25 times (95% CI=3.11, 5.81) and was highly significant (P<.001). Low family cohesion and academic problems also increased the odds of depression among males (OR=2.74, 95% CI=1.72, 4.36 and OR=2.08 95% CI=1.50, 2.90). Reporting a low level of spirituality had similar associations among females and males, though females with low spirituality had slightly higher odds of depression than males, (OR=2.74, 95% CI=1.74, 4.31 vs. OR=2.23, 95% CI=1.45, 3.44).

### Associations between Risk and Protective Factors and Suicidal Behaviors

All risk factors significantly increased the odds of suicidal ideation among females. Additionally, of those shared by both genders, females typically demonstrated stronger associations with suicidal ideation. In Table 5, the most drastic difference between genders is in sociodemographic risk factors. For males, no sociodemographic risk factors reached significance with the exception of experiencing greater than 8 stressful events, though female odds were still higher for that predictor, (OR=2.84, 95% CI=2.17, 3.70 vs. OR=3.09, 95% CI=2.53, 3.79). The only demographic variable that was not significantly associated to suicidal ideation for females was attending public school. Low family cohesion (OR=4.15), being at risk or drug dependent (OR=3.47), chronic PTSD (OR=3.37), and conduct disorder (OR=3.01) highly significantly increased the odds of suicidal ideation among females. Chronic PSTD was most strongly and significantly associated with suicidal ideation for males (OR=3.69, 95% CI=2.87, 4.77) and conduct disorder (OR=2.94), academic problems (OR=2.74), and low family cohesion (OR=2.72), produced the next strongest odds of suicidal ideation among males. Academic problems displayed the most similar odds of suicidal ideation for males and females (OR=2.74, 95% CI=2.10, 3.58 vs. OR=2.79, 95% CI=2.33, 3.35, respectively). The relationship of low spirituality with suicidal ideation inverted between females and males with this outcome, becoming stronger for males; males

had 2.72 times the odds of suicidal ideation (95% CI=1.51 - 3.07], P<.001) versus females with 1.76 times the odds of suicidal ideation (95% CI=1.51, 3.07, P<.01).

In Table 6 we examined the association between risk factors with both suicide plans and suicide attempts. Demographic variables were no longer significantly associated to either outcome for males, but remained significantly associated to suicide outcomes for females, albeit weaker associations. Additionally, the effect of grade and age reversed for females in all suicide behavior outcomes (comparing Tables 5 and 6), so that being in a lower grade was protective and older age increased the odds of suicidal behavior. In Table 6, males and females had the most similar levels of risk for suicide plans, both in strength of association and significance level. Stressful life events, conduct disorder, chronic PTSD, and academic problems all more than tripled the odds of suicide plans for both sexes, and the associations were highly significant; of most prominence for females was stressful life events (OR=4.07, 95% CI=3.05, 5.42). On the other hand, males with conduct disorders had the highest odds of suicide plans (OR=3.84, 95% CI=2.56, 5.78). Females exhibited higher odds of suicide plans with most risk factors in comparison with males, with the exceptions of conduct disorder, low spirituality, and no support system; associations that were similarly stronger for females than males with previous outcomes.

All demographic variables were associated to suicide attempts among females, except grade level. Having 4 or more children in the household was most strongly associated with suicide attempts for females, even more so than not living in a nuclear family (OR=1.63, 95% CI=1.32, 2.03, P<.001 vs. OR=1.48, 95% CI=1.21, 1.82, P<.001, respectively). Risk factors that were most similar for males and females included stressful life events (OR=3.15 vs. 3.06), chronic PTSD (OR=3.68 vs. 3.21), and academic problems (OR=3.27 vs. 3.02); however, each of these risk factors were more strongly associated to suicide attempts for

males than females. Conduct disorder strongly increased odds of suicide attempts among males (OR=4.69, 95% CI=3.04, 7.21, P<.001), yet the strongest predictor for females was low or normal family cohesion (OR=3.51, 95% CI=2.58, 4.78, P<.001). Low spirituality was only marginally significantly associated with suicide attempts for males.

-	sion	00101000 10	leation	
Crude OR (9	95% CI)	Crude OR (95% CI)		
Female	Male	Female	Male	
(n-2,192)	(n-1,558)	(n-2, 505)	(n=1,760)	
1 28 (1 03 1 60)	2 44 (1 03 1 60)**	0.74 (0.62 0.87) **	0.94 (0.62 - 0.87)	
1.28 (1.03 – 1.00)	$2.44(1.03 - 1.00)^{11}$	0.74(0.02 - 0.07)	0.94(0.02 - 0.07)	
1 58 (1 26 – 1 99) **	1 65 (1 22 – 2 23) **	1 34 (1 13 – 1 58) **	0.89 (0.71 - 1.12)	
1.50 (1.20 1.55)	1.05 (1.22 2.25)	1.5 (1.15 1.50)	0.07 (0.71 1.12)	
1.58 (1.23 – 2.01) **	1.05(0.75 - 1.49)	1.52 (1.26 – 1.84) **	0.82(0.62 - 1.09)	
0.93 (0.74 – 1.17)	0.53 (0.39 – 0.72) **	1.34 (1.13 – 1.59) **	1.13 (0.90 - 1.42)	
2.23 (2.13 – 3.76) **	1.75 (1.27 – 2.41) **	3.09 (2.53 – 3.79) **	2.84 (2.17 - 3.70) **	
4.12 (3.20 – 5.31) **	4.25 (3.11 – 5.81) **	2.64 (2.14 – 3.25) **	1.96 (1.51 – 2.55) **	
2.87 (2.22 – 3.71) **	1.88 (1.36 – 2.61) **	3.01 (2.50 - 3.62) **	2.94 (2.23 – 3.87) **	
	//			
3.67 (2.75 – 4.90) **	1.75 (1.29 – 2.36) **	3.37 (2.77 – 4.10) **	3.69 (2.85 – 4.77) **	
2.94 (2.24 – 3.84) **	1.19(0.82 - 1.72)	3.47 (2.76 – 4.37) **	2.05 (1.57 – 2.69) **	
2 05 (2 25 2 0() **	2 08 (1 50 2 00) **		274 (210 250) **	
3.05 (2.35 - 3.96) **	2.08(1.50-2.90)	2.79(2.33 - 5.36)	2.74 (2.10 – 3.58) **	
2 34 (1 47 3 73)**	1 80 (1 1 2 3 18)**	2 20 (1 40 2 26) **	2.03 (1.34 - 3.09)*	
$2.34(1.47 - 5.75)^{14}$	$1.07(1.12 - 3.10)^{+1}$	$2.20(1.47 - 5.20)^{++}$	$2.03(1.34 - 3.09)^{\circ}$	
2 74 (1 74 – 4 31)**	2 23 (1 45 - 3 44)**	1 76 (1 17 – 2 65)*	2.15 (1.51 – 3.07) **	
	Female (n=2,192) 1.28 (1.03 – 1.60) 1.58 (1.26 – 1.99) ** 1.58 (1.23 – 2.01) ** 0.93 (0.74 – 1.17) 2.23 (2.13 – 3.76) **	$(n=2,192)$ $(n=1,558)$ $1.28 (1.03 - 1.60)$ $2.44 (1.03 - 1.60)^{**}$ $1.58 (1.26 - 1.99)^{**}$ $1.65 (1.22 - 2.23)^{**}$ $1.58 (1.23 - 2.01)^{**}$ $1.05 (0.75 - 1.49)$ $0.93 (0.74 - 1.17)$ $0.53 (0.39 - 0.72)^{**}$ $2.23 (2.13 - 3.76)^{**}$ $1.75 (1.27 - 2.41)^{**}$ $4.12 (3.20 - 5.31)^{**}$ $4.25 (3.11 - 5.81)^{**}$ $2.87 (2.22 - 3.71)^{**}$ $1.88 (1.36 - 2.61)^{**}$ $3.67 (2.75 - 4.90)^{**}$ $1.75 (1.29 - 2.36)^{**}$ $2.94 (2.24 - 3.84)^{**}$ $1.19 (0.82 - 1.72)$ $3.05 (2.35 - 3.96)^{**}$ $2.08 (1.50 - 2.90)^{**}$ $2.34 (1.47 - 3.73)^{**}$ $1.89 (1.12 - 3.18)^{**}$	Female (n=2,192)Male (n=1,558)Female (n=2,303)1.28 (1.03 - 1.60)2.44 (1.03 - 1.60)** $0.74 (0.62 - 0.87) **$ 1.58 (1.26 - 1.99) **1.65 (1.22 - 2.23) ** $1.34 (1.13 - 1.58) **$ 1.58 (1.23 - 2.01) **1.05 (0.75 - 1.49) $1.52 (1.26 - 1.84) **$ 0.93 (0.74 - 1.17)0.53 (0.39 - 0.72) ** $1.34 (1.13 - 1.59) **$ 2.23 (2.13 - 3.76) ** $1.75 (1.27 - 2.41) **$ $3.09 (2.53 - 3.79) **$ 4.12 (3.20 - 5.31) ** $4.25 (3.11 - 5.81) **$ $2.64 (2.14 - 3.25) **$ 2.87 (2.22 - 3.71) ** $1.88 (1.36 - 2.61) **$ $3.01 (2.50 - 3.62) **$ 3.67 (2.75 - 4.90) ** $1.75 (1.29 - 2.36) **$ $3.37 (2.77 - 4.10) **$ 2.94 (2.24 - 3.84) ** $1.19 (0.82 - 1.72)$ $3.47 (2.76 - 4.37) **$ 3.05 (2.35 - 3.96) ** $2.08 (1.50 - 2.90) **$ $2.79 (2.33 - 3.36) **$ 2.34 (1.47 - 3.73)** $1.89 (1.12 - 3.18)**$ $2.20 (1.49 - 3.26) **$	

Table 5: Unadjusted Odds Ratios for Risk Factors Associated with Depression and Suicide Ideation in Adolescents ages 10-20,Aburra Valley, Colombia 2009.

Family Cohesion				
Low to Normal	4.29 (3.10 - 5.95) **	2.74 (1.72 – 4.36) **	4.15 (3.07 – 5.62) **	2.72 (1.85 - 4.01) **
Living in a Nuclear Family				
No	1.64 (1.30 – 2.07) **	1.18 (0.88 – 1.59)	1.28 (1.08 – 1.52) *	1.16 (0.92 - 1.46)
Chi Square Fishers Exact Test †P<0.1	10;P<0.05; *P<0.01; **P<0.001. Statis	stically significant associations >2	2.0 are highlighted in bold	

	Suicide	e Plans	Suicide	Attempts	
Risk Factors (High Risk Category Listed)	Crude OF	с (95% CI)	Crude OR (95% CI)		
	Female (n=2,301)	Male (n=1,760)	Female (n=2,301)	Male (n=1,760)	
Grade level	(, -, -, -, -,	(, • • • )	(, -, -, -, -,	(, • • •)	
5-7	0.65 (0.53 - 0.81)**	0.91 (0.67 - 1.24)	0.83 (0.68 - 1.01)*	1.21 (0.89 - 1.63)	
School					
Public	1.13 (0.92 – 1.39)	0.86(0.64 - 1.67)	1.41 (1.16 – 1.73)**	1.00 (0.74 – 1.35)	
Children in the family					
$\geq 4$	1.37 (1.09 – 1.72)**	1.06 (0.74 – 1.51)	1.63 (1.32 – 2.03)**	1.04 (0.73 – 1.48)	
Age					
15-20	1.52 (1.23 – 1.87)**	0.95 (0.70 – 1.29)	1.42 (1.16 – 1.73)**	0.86 (0.63 – 1.16)	
Stressful Life Events					
$\geq 8$	4.07 (3.05 - 5.42)**	3.49 (2.38 - 5.13)**	3.06 (2.38 - 3.94)**	3.15 (2.17 – 4.57)**	
Inter-family Abuse					
Moderate to Severe	3.44 (2.73 – 4.35)**	2.70 (1.95 – 3.74)**	2.74 (2.18 – 3.45)**	2.11 (1.52 – 2.95)**	
<i>Conduct Disorder</i> Moderate to Severe	3.42 (2.67 - 4.39)**	3.84 (2.56 - 5.78)**	2.0((2.25 2.72)**	4.68 (3.04 - 7.21)**	
Chronic PTSD	$3.42(2.07 - 4.39)^{111}$	$5.64(2.50-5.76)^{++}$	2.96 (2.35 - 3.72)**	4.08 (3.04 - 7.21)	
Moderate to Severe	3.64 (2.79 - 4.74)**	3.48 (2.46 - 4.93)**	3.21 (2.51 – 4.09)**	3.68 (2.60 - 5.23)**	
Drugs and Chemical Substances	3.01 (2.7) 1.71)	5.10 (2.10 1.55)	5.21 (2.51 1.67)	3.00 (2.00 3.23)	
At Risk or Dependent	3.72 (2.90 - 4.78)**	1.96 (1.39 – 2.77)**	3.30 (2.59 - 4.21)**	2.32 (1.66 - 3.24)**	
Academic Problems					
Moderate to Severe	3.62 (2.82 - 4.66)**	3.31 (2.26 - 4.85)**	3.02 (2.40 - 3.80)**	3.27 (2.24 - 4.77)**	
Family and Social Support System					
No	2.33 (1.52 - 3.58)**	2.67 (1.65 - 4.35)**	2.46 (1.62 - 3.72)**	2.18 (1.31 - 3.62)*	
Spirituality	````	```'	· · · · ·	```'	
Low	2.01 (1.27 - 3.17)*	2.77 (1.82 - 4.20)**	1.95 (1.25 – 3.05)*	1.54(0.96-2.48)†	

Table 6: Unadjusted Odds Ratios for Risk Factors Associated with Suicide Planning, and Suicide Attempts in Adolescents ages 10-20, Aburra Valley, Colombia 2009.

Family Cohesion				
Low to Normal	3.53 (2.59 - 4.83)**	2.67 (1.67 – 4.27)**	3.51 (2.58 - 4.78)**	2.20 (1.35 - 3.59)*
Living in a Nuclear Family				
No	1.45 (1.17 – 1.79)**	1.24(0.92 - 1.69)	$1.48 (1.21 - 1.82)^{**}$	1.52 (1.12 – 2.07)*
Chi Square Fishers Exact Test †P<0.10;I	P<0.05; *P<0.01; **P<0.001. Stati	stically significant associations >	3.0 are highlighted in bold	

#### **Multivariate Analysis**

To highlight the effects of risk factors such as low family cohesion, spirituality, substance use, conduct disorders, family abuse on depression and suicidal behaviors (i.e., ideation, planning, and attempts) when adjusting for different sets of covariates (e.g., sociodemographic variables), four gender stratified alternative models were conducted as shown in Tables 7 and 8.

### Depression (Model 1)

While there are fewer significant predictors of depression for males than females, both genders shared the same significant predictors associated with this disorder. As seen in Table 7, only lower grade level and public school sociodemographic variables remained significant in multivariate analysis. For both males and females being in grades 5 through 7 (approximately 10 through 12 years old) significantly increased the odds of being depressed, though the strength of association was larger for males than females (AOR = 2.67, 95%CI=1.91, 3.74, P<.001 and 1.53, 95% CI =1.17, 2.00, P<.01 respectively) and highly significant. Attending public school also had significant associations with depression for females but not males (AOR = 1.42, 95% CI=1.09, 1.86, P < .01). The strongest predictors of depression for females and males were interfamily abuse (AOR=2.73, 95% CI =2.02,3.69, P<.001 and AOR=3.23, 95% CI =2.26, 4.62, P<.001, respectively), low family cohesion (AOR=2.09, 95% CI =1.38, 3.15, P <.001 vs.. 2.24, 95% CI =1.33, 1.77, P <.01), and low spirituality (AOR= 2.20 95% CI =1.27, 3.82, P<.01 vs. 2.07, 95% CI =1.28, 3.35, P<.01). Family abuse was strongly related for both genders, though low family cohesion was more significant for females and larger effect for males. Conduct disorder and academic problems were also associated with depression for both genders after controlling for all other variables in the model. However, conduct disorder increased the risk of depression in females by 75%compared to males with a 48% increase and was highly significant for females (P<.001);

academic problems increased both gender's risk by about 50%. It is noteworthy that more predictors were associated with depression among females than males.

Chronic PTSD was also found to be associated with depression, particularly among females as opposed to males. Additionally, females who are abusing or are dependent on drugs had a 66% increased odds of depression. Lacking family or social support and not living in a nuclear family were only marginally significant for females.

### Suicidal Ideation (Model 2)

Model 2 indicated the risk factors associated with suicidal ideation, after adjusting for the other highly significant covariates. The suicidal ideation model displayed greater significant predictors for both genders when compared to model 1. For example, chronic PTSD, a predictor that was not significant in the previous model for males more than doubles the odds of suicidal ideation for males (AOR=2.28, 95% CI =1.69, 3.06, P <.001). As seen in Table 7, several predictors emerged in this model that were not previously significant for males in model 1. Low spirituality, low family cohesion, and conduct disorder each almost doubled the odds of suicidal ideation (AOR: 1.90, CI = 1.29, 2.80, P <.01; AOR=1.84,CI 1.17, 2.90, P <.01; and AOR =1.78, CI =1.30,2.42, P<.001, respectively), while stressful life events increased the odds for suicidal ideation by 65% (AOR = 1.65, CI =1.21, 2.24, P<.01).

The strongest predictors of suicidal ideation among females were low family cohesion (OR=2.03, CI = 1.40, 2.94, P<.001) and drug dependency (OR=2.01, 95% CI = 1.53, 2.63, P<.001). Similar to males, females displayed greater odds for suicidal ideation compared to males if they reported a conduct disorder, chronic PTSD, or experienced family abuse. Stressful life events increased female's odds of suicidal ideation by 61%, (AOR=1.61, 95% CI = 1.27, 2.06, P<.001). Attending public school continues to be a risk factor for females and not males in this model. Interestingly, having more than 4 children in the family unit

demonstrated a protective effect in the model for males (AOR=0.68, 95% CI = 0.49, 0.93, P<.05), contrary to females that displayed greater odds (AOR=1.26, 95% CI =1.00, 1.58, P =<.05). A prominent finding in model 2 revealed that academic problems and low spirituality dropped completely out of model 2 for females, but remained significant risk factors for suicidal ideation among males. Additionally, not living in a nuclear family was no longer significant for either gender.

### Suicide Planning (Model 3)

As youth make the transition from suicidal ideation to suicide planning, several interesting shifts occur in the models. Fewer sociodemographic predictors remained in the model; older females, for instance, showed increases in the odds of planning suicide by 38%; however, the opposite effect occurred for older males, whose odds were reduced by 30%. Attending a public school was also protective for males, but the association was only marginally significant (AOR = 0.71, 95% CI = 0.51, 1.01, P < .10).

For both genders, lacking a family and social support system increased the odds of suicide planning (female AOR=2.49, 95% CI =1.47, 4.23, P<.01; and male AOR = 2.55, 95% CI =1.48, 4.37, P<.001). Family abuse also increased the risk of suicide planning for both females and males alike (AOR=2.33, 95% CI =1.75, 3.11, P<.001 and AOR = 2.11, 95% CI = 1.45, 3.08, P<.001, respectively). However, important differences between the genders continued to arise. Among males, having low spirituality increased the odds of suicide planning 2.37 times compared to normal to high levels of spirituality; it was not present in the model for females. Conversely, females who were abusing or dependent on drugs display greater odds of making plans to commit suicide, yet the predictor did not remain significant in the model for males. Conduct disorder, chronic PTSD, and stressful life events remained significant predictors for both genders in the model; however conduct

disorder and chronic PTSD was strongly associated to suicide planning for males, while stressful events was highly associated to suicide planning for females.

### Suicide Attempts (Model 4)

In Model 4 females and males differed most in terms of sociodemographic predictors. On the one hand, females who attended public school and who had more children in the family were at 40% increased odds of attempting suicide; these predictors did not remain in the model for males.

Predictors among males and females explained most of the variance on suicide outcomes; aside from sociodemographic risks and low family cohesion, males and females revealed similar patterns of risk for suicide attempts. Family cohesion increased the odds of attempted suicide by 49% in females, but was not present in the model for males. For females, the strongest predictors for attempting suicide were lacking a support system (AOR=2.43, 95% CI = 1.46, 4.04, P<.001), drug dependency (AOR=2.06 95% CI = 1.55, 2.74, P<.001), and family abuse (AOR=1.98, 95% C=1.49, 2.62, P<.001). Lacking a family and social support system was a similarly strong risk factor for males (AOR=2.19, 95% CI = 1.27, 3.77, P<.05). However, for males, having a conduct disorder (AOR=2.67, 95% CI = 1.67, 4.27, P<.001) or chronic PTSD (OR=2.18, CI =1.45, 3.27, P<.001) was more strongly associated to suicide attempts than any other predictor. Unlike females, drug dependency and academic problems were only marginally significant predictors for suicide attempts for males.

	Model 1: I	Depression	Model 2: Suicide Ideation Adjusted OR (95% CI)		
Risk Factors (High Risk Category Listed)	Adjusted C	DR (95% CI)			
	Female	Male	Female	Male	
	(n=2,192)	(n=1,558)	(n=2,303)	(n=1,760)	
Grade level					
5-7	1.53 (1.17 – 2.00)*	2.67 (1.91 – 3.74)**		<u></u>	
School type					
Public	$1.42 (1.09 - 1.86)^*$		1.37 (1.12 – 1.68)*	<u></u>	
Children in the family					
$\geq 4$			1.26 (1.00 – 1.58)	0.68 (0.49 – 0.93)	
Age					
15-20					
Stressful Life Events					
$\geq 8$			1.61 (1.27 – 2.06)**	1.65 (1.21 – 2.24)*	
Inter-family Abuse					
Moderate to Severe	2.73 (2.02 - 3.69)**	3.23 (2.26 - 4.62)**	1.79 (1.38 – 2.33)**	1.62 (1.18 – 2.22)*	
Conduct Disorder					
Moderate to Severe	1.75 (1.28 – 2.40)**	1.48 (1.01 – 2.17)	1.92 (1.54 – 2.41)**	1.78 (1.30 – 2.42)**	
Chronic PTSD					
Moderate to Severe	2.53 (1.79 - 3.57)*		1.86 (1.46 – 2.35)**	2.28 (1.69 - 3.06)**	
Drugs and Chemical Substances					
At Risk or Dependent	1.66 (1.20 - 2.29)*		2.01 (1.53 - 2.63)**		
Academic Problems					
Moderate to Severe	1.55 (1.13 – 2.11)*	1.52 (1.04 – 2.22)		1.44 (1.05 – 1.96)	
Family and Social Support System				. ,	
No	1.69(0.97-2.95) †		1.78 (1.09 - 2.92)		
Spirituality					
Low	2.20 (1.27 - 3.82)*	2.07 (1.28 - 3.35)*		1.90 (1.29 - 2.80)*	

Table 7: Adjusted Odds Ratios for Risk Factors Associated with Depression and Suicide Ideation among Adolescents ages 10-20, Aburra Valley, Colombia 2009.

Family Cohesion Low to Normal Living in a Nuclear Family	2.09 (1.38 – 3.15)**	2.24 (1.33 – 3.77)*	2.03 (1.40 – 2.94)**	1.84 (1.17 – 2.90)*
No	1.29 (0.98 - 1.69) †			<u></u>
†P<0.10;P<0.05; *P<0.01; <b>**P&lt;0.0</b>	01. Statistically significant associate	ions >2.0 are highlighted ir	n bold	
Analysis produced using Unconditio	nal Logistic Regression modeling a	nd backward elimination. I	Entrance into the model requ	ured P<0.05.
Model 1. Outcome consists of all ad	olescents displaying symptoms of c	depression within the past i	month.	
Model 2. Outcome consists of all ad	olescents who had experienced suit	cide ideation during their li	fetime.	

Model 2. Outcome consists of all adolescents who had experienced suicide ideation during their lifetime. Model 3. Outcome consists of all adolescents who had reported making plans to commit in their lifetime. Model 4. Outcome consists of all adolescents who reported attempting to commit suicide in their lifetime.

•	Model 3: Su	uicide Plans	Model 4: Suid	cide Attempts	
Risk Factors (High Risk Category Listed)	Adjusted C	PR (95% CI)	Adjusted OR (95% CI)		
	Female (n=2,301)	Male (n=1,760)	Female (n=2,301)	Male (n=1,760)	
Grade level					
5-7				1.37 (0.97 – 1.92) †	
School type					
Public		0.71 (0.51 – 1.01) †	1.37 (1.08 – 1.73)*		
Children in the family					
$\geq 4$			1.36 (1.05 – 1.76)		
Age					
15-20	1.38 (1.08 – 1.75)*	0.70 (0.49 – 0.99)			
Stressful Life Events					
$\geq 8$	2.02 (1.45 – 2.82)**	1.85 (1.19 – 2.87)*	1.62 (1.20 – 2.18)*	1.69 (1.09 – 2.61)	
Inter-family Abuse					
Moderate to Severe	2.33 (1.75 – 3.11)**	2.11 (1.45 – 3.08)**	1.98 (1.49 – 2.62)**	1.54 (1.04 – 2.27)	
Conduct Disorder					
Moderate to Severe	1.78 (1.33 – 2.38)**	2.01 (1.29 – 3.14)*	1.79 (1.36 – 2.35)**	2.67 (1.67 – 4.27)**	
Chronic PTSD					
Moderate to Severe	1.67 (1.22 – 2.30)**	2.09 (1.40 - 3.13)**	1.80 (1.34 – 2.43)**	2.18 (1.45 – 3.27)**	
Drugs and Chemical Substances					
At Risk or Dependent	2.13 (1.59 – 2.85)**		2.06 (1.55 – 2.74)**	1.43 (0.95 – 2.22) †	
Academic Problems					
Moderate to Severe	1.80 (1.34 – 2.41)**	1.65 (1.07 – 2.56)	1.58 (1.20 - 2.07)**	1.45 (0.95 – 2.22) †	
Family and Social Support System					
No	2.49 (1.47 – 4.23)*	2.55 (1.48 – 4.37)**	2.43 (1.46 – 4.04)**	2.19 (1.27 – 3.77)	
Spirituality					

Table 8: Adjusted Odds Ratios for Risk Factors Associated with Suicide Planning and Attempts in Adolescents ages 10-20, Aburra Valley, Colombia 2009.

Low	2.	$37 (1.50 - 3.74)^3$	**	
Family Cohesion				
Low to Normal	1.42 (0.95 – 2.11) †		1.49(1.01 - 2.20)	
Living in a Nuclear Family				
No				
<sup>†</sup> P<0.10;P<0.05; *P<0.01; **P<0.001. Statistically significant associations >2.0 are highlighted in bold				
Analysis produced using Unconditi	onal Logistic Regression modeling and b	ackward eliminati	on. Entrance into the model required	P<0.05.
Model 1. Outcome consists of all a	dolescents displaying symptoms of depre	ession within the p	bast month.	
Model 2. Outcome consists of all a	dolescents who had experienced suicide	ideation during th	eir lifetime.	
Model 3. Outcome consists of all adolescents who had reported making plans to commit in their lifetime				

Model 3. Outcome consists of all adolescents who had reported making plans to commit in their lifetime. Model 4. Outcome consists of all adolescents who reported attempting to commit suicide in their lifetime.

## Qualitative Results

#### Adversity

All the participants interviewed revealed instances of adversity in their past and present that were important factors in the continuum of their lives. The details surrounding these situations typically arose from probing questions related to family relationships and stressful events. Participants, and their respective stories, could be grouped into three distinct types of "adversity": Extreme chronic adversity, situational conflict, and life events. These categories were not mutually exclusive, i.e., a participant might have several situational conflicts going on in tandem with significant life events, all of which contributed towards chronic adversity.

## <u>Chronic Adversity</u>

Youth experiencing chronic adversity shared four overarching characteristics. Participants in this category had an emotionally taxing family environment; this included a parent who was physically or emotionally "absent." Additionally, the majority of these youth experienced some form of emotional or physical abuse from a family member and while telling their stories several exhibited symptoms of an emotional or behavioral disorder.

## Absent Parents

Among youth experiencing chronic adversity, at least one parent was physically or emotionally absent from their lives. In the case of Victoria and Isabela, they never knew their fathers; Victoria did not mention her father once during the interview, but Isabela briefly skimmed over the fact that her father lived in the same town, that she occasionally saw him drive by, but they did not speak or have a relationship. Thus, for Isabela and Victoria, their fathers were always absent and their upbringing relied on their mothers and other extended family members. Gabi, Aleja and Pablo each had very complicated living situations, but resided in "nuclear" households. However, it could be argued that one parent was emotionally absent from their lives; these strained relationships often caused some form of anxiety or stress in their daily lives.

## Gabi

Gabi's parents divorced a year prior to the interview leaving her father with legal custody of Gabi and her younger sister. Unfortunately, due to their poor economic situation he was unable to physically separate from her mother and move into another house. Even with close physical proximity, Gabi's parents did not speak to one another or acknowledge each other's presence; when her father was home her mother secluded herself to her bedroom or left to be with her boyfriend. Gabi admitted that the living situation was tense and uncomfortable, however "one gets used to it." Gabi's mother kept a completely separate presence in the house and stepped down as the caretaker for her daughters; she cooked her own food, did her own laundry and cleaned up after herself, but did not perform any typical motherly duties for Gabi or her sister. Gabi seemed nonchalant about the situation, but said "One time we were living with my mom and it was really good and everything, but she got a boyfriend, she was finished with her daughters." However, Gabi's younger sister still expressed disappointment when her mother left them to be with her boyfriend "my sister 'you always have to be with the boyfriend, you don't look after us'." Her mother's responses to these comments were either silence or to self-defense, primary by blaming her daughters "yes she has time for us, but that we are really rude to her" Gabi admitted occasionally being rude to her mother, but clearly these were cries for attention from her sister.

# Aleja

Aleja's parents were married, but her relationship with her father was strained; she described her father as "jealous" and "aggressive." She also explained that one of her father's major qualms was that she stayed out too late, strangely, he never spoke with her about it directly and instead argued with her mother constantly "*he doesn't say those things to me, instead he says those things to my mom, and then my mom suffers from the pressure and she get sick.*" Aleja described her father's acts of physical violence against her mother and sister, but said when this occurred the family's reaction was to cut off all communication with him; once her older brother threw him out of the house. The dysfunctional family dynamics isolated her from her father, as did the birth of her recent nephew. She stated, "*Then my little nephew was born…so he and I grew apart and then, well he would bring me lots of little things, and now everything he brings is for my nephew*." Nonetheless, Aleja states that she loves her father very much and believes that he loves her in return.

### Pablo

Pablo's biological parents left him with his baby-sitter when he was a young boy. He had no memories of his mother, but when he was younger his biological father used to visit him. Pablo explained "*my father, nevertheless, doesn't want me...one time he told me and everything when I was eight years old... that I was something that wasn't planned and that's it.*" His father stopped seeing him after that conversation, but by that point Pablo already considered his baby-sitter to be his mother. Pablo never mentioned whether his biological family paid his caretaker to raise him, or why his baby-sitter agreed to take him, yet being adopted was a source of conflict in his house as he aged. He was constantly reminded of that fact "*if they served me something they'd throw it in my face and each time they reminded me that, that I wasn't part of the family.*" In this way, he was missing both his biological parents, as well as parental support from the adults whom he considered equivalent to parents.

## Abuse in the home

Each of these youth recounted stories of interfamily abuse. They all experienced physical and/or emotional dimensions of abuse, as well as violence in their homes. Abuse

was always perpetrated against them, but sometimes they also witnessed violence against other family members. The fact that abusive situations were discussed so openly during interviews suggested that violence in the household was normalized among these youth. Typically, the type of abuse youth described taking place in their homes was directly linked to an emotional or behavioral disorder, so that as they related their stories it was clear that the violence had a direct effect on them.

## Aleja

Aleja witnessed many fights in her home, but her father is always the perpetrator of the physical abuse "*we always fight like that with him and there have been many fights, he has hit us.*" Aleja emphasized that her mother never physically hurt her and that she provided a protection against the abuse "*from one moment to the next what comes to my mind, me without her my mother*?, *like I'm nobody, because the fights in my house.*" Her father was abusive towards all family members and this behavior appeared to be related to a drinking problem, however, her mother received the largest dose of physical abuse "*he has always hit my mom*" and when he was angry with other family members, he took it out on Aleja's mother. Aleja describe an instance when her father hit her sister in the face, provoking her to run away from home. When Aleja told her mother and grandmother about the incident, she says "*my mom got really sick, I also got sick, so she had to come back so we could feel better.*" Aleja and her mother had a sudden onset of somatic symptoms. Twice in the interview Aleja mentioned that her mother became ill after physical violence, even if she was not the vicitm. These behaviors are often symptomatic of other mood disorders and PTSD. Consequently, by imitating her mother Aleja was learning an unhealthy approach to responding to stressors.

### Victoria

Victoria on the other hand was frequently beaten and emotionally abused by multiple family members. Due to the constant conflict, Victoria made the decision to move out of her mother's house and live with her grandparents. Unfortunately, since they lived on the same street, this physical separation did not distance her enough from regular contact with her abusers. She frequently experienced emotional abuse and belittling. Victoria felt that her main source of stress was feeling useless and that all she could do was to perform well in school. However, her family made her feel that these efforts were not sufficient, "*my aunt* '*abh this girl is worthless,*' *my brothers 'abh this damn fatty is worthless.*" When we asked her to describe the most stressful or difficult period in her life, she responded "…*in school there has been a lot of noise…but I prefer that noise, because I arrive from school, the shouting starts, the fights with <i>my aunt start,…my mom fighting with my grandfather…my brother fighting…with me…every day.*" Every day in her house was stressful and she was adamant that no one time was worse than another, "*the fights in my house…are really intense so …it*'s *not like one day in particular, but like every day.*"

Victoria's main motivation for living with her grandparents was to avoid the constant berating and physical abuse she endured from her brother, "my brother kept hitting me…or calling me a bitch or fat...so one feels super bad...I was getting depressed too much...there were times I didn't sleep or eat because of that...and then I would go a lot of time without eating, or what I did eat I threw up (silence) like...'if I vomit I don't get fat."

## Isabela

Isabela's relationship with her mother was festering, deteriorating since Isabela could remember, but since her grandmother passed away the arguments were more frequent. Isabela described how small day-to-day petty arguments with her mother became volatile; she said her mother becomes "*hysterical*" and "*enraged*." Isabela told the story of how her mother wanted to commit suicide and kill Isabela as well, "I was really young and she was going to do it (panse) like yeah to kill us both, I don't know what problems my mom had." However, Isabela used the memory as a weapon against her mother when they fought, saying "you were going to kill me, you don't remember?!" Isabela knew her mother still felt guilty for it, yet her mother still threatened to kill herself during their arguments "like T'm going to take I-don't-know-what' and I'm like 'go ahead and take it but at this hour you're not going to find a pharmacy that's open." Isabela laughs as she tells us about these exchanges. She was receiving negative attention and hearing negative comments from her mother on a regular basis, however, it seemed that she purposefully reacted in ways that heightened the intensity of the arguments, increasing the pressure on their relationship.

Though Isabela acted out to upset her mother, she admitted that she felt like a burden "*At times I feel like a problem for ber...for example, that she is really sick, really stressed and everything.*" Earlier in the interview Isabela questioned why her mother had not "admitted" her yet; assuming that her mother was on the verge of admitting her to and institution for youth such as a foster home or a mental hospital. Isabela realized that her mother had a problem, but did not see how her own actions were contributing to the problem or how they were equally unhealthy. Of all the youth interviewed, she exhibited the most extreme emotional and behavioral symptoms, which were ignited as a result of her family stressors. Isabela provided examples of binge drinking to deal with sorrow and twice mentions that during arguments with her mom "*she thonght I was going to hit her*" implying that she was behaving aggressively towards her mother. Isabela went into detail regarding an extreme argument they had when she was told she could not leave the house, "*I grabbed a knife and I was like hitting it on the plate...when my mom started to yell in the bouse 'look this girl has gone crazy'....my mom was saying that I was going to kill her, that 'here here she is with a knife...I'm going to* 

call the police so they take you out of here' and I'm like 'oh thank God, then they can get me out of here'...I had the knife, and I was like, doing like this to the wall."

In addition to her violent behavior, Isabela confided that she attempted suicide when she was 10 years old by poisoning herself; she had to be rushed to the hospital to have her stomach pumped. When we asked why, she said she was jealous of her mother, who seemed to always be out socializing, meeting people, and was not paying her enough attention; her mother would go out at night and not be home in the morning. Finally one time when her mother decided to take a trip to Bogota, Isabela said "*I saw that I was like on the side, so I don't know, I took that <the poison> after some time, and my friends were there but they didn't realize anything, when after a bit, I was all scared (langhing) I started to cry and call to my aunt and I told her I had taken some of that, so then they took me to the hospital...they put some tubes in me to get everything out.*" Though she had no intention of attempting suicide again, she was regularly confronted with her mother's threats that had become a regular part of their dialogue during arguments.

# Pablo

Pablo experienced emotional abuse with constant reminders that he was not part of the family "my mom kind of started to...throw a lot of things in my face, like to call me bad names and everything, and then she got cancer, which itself, cancer effects the personality a lot ... then she got worse... "you have to leave the house," ... I got tired of it... two years of the same. At fifteen... I went to talk to the police. The police investigated the case, met with my mom ... and I was right because my mother was very sick.... She fought with everything." Pablo also describes his 22 year old sister as being "vulgar," with a similar temperament as his mother, "She's like... let's say, like her mother... she has a cold heart. For any little thing she will start cursing, she says this and that. When she cleans the house she has a very aggressive temperament. Someone slightly steps on something and, "Oh... go... go to your room, this one is such a son of a whatever." Considering both the mother and daughter were verbally abusive, it is questionable whether his mother's cancer diagnosis was responsible for her abuse or the deterioration of her personality, as Pablo believes, but rather that this "personality" trait was more of a behavioral disorder on the part of his family members.

Similar to Victoria and Gabi, Pablo moves out of the house to escape the conflict, which has consequences of it's own because unlike Victoria and Gabi, Pablo has no other family or friends to stay with. Pablo rents a room and supports himself for 3 months, but it is no surprise that he fails a grade in school that year. However, as his mother's condition worsens after he returns home.

## Gabi

It was unclear whether Gabi was emotionally or physically abused at any point in her life, aside from a neglectful mother. However, regardless of the presence of abuse, the conflict between her parents had a significant impact on her emotional wellbeing. We learned that her father was a recovered alcoholic and that her parents' separation was as a result of both his alcoholism and her mother's extramarital affair. When her parents divorced she struggled getting along with either parent and after being sent from one house to the next and fighting with each of them, she and her sister left their parents to live with a friend in a group home for two months. Gabi described this as a difficult period in her life, but eventually she returned home to her father. Gabi and her sister have lived with him ever since and it was quite clear that her loyalty lied with her father, which may have accounted for why she did not discuss prior negative family dynamics involving her father or expand on his alcoholism. Several of the youth spoke about their parent' divorces, however Gabi's experience leading up to the divorce, as well as the physical separation, may have been worse than most because at the end of the interview Gabi admits that she attempted suicide multiple times after her parent's divorce: "when I was having a lot of problems, I 'oh no, I want to die' and yes I have attempted, but not anymore...the problems in my family, that was what led me to do that...I was thinking about it and then I attempted it... by slitting my wrists, taking pills, and drowning myself, all of that."

#### When it rains it pours

Several participants had multiple life events or situational conflict co-occurring with their taxing family environments that contributed towards the adversity they faced. Victoria was the most prominent instance of a participant that dealt with multiple struggles as gave described four friends being murdered or dying over the past couple of years. When she was 12 years old her boyfriend mysteriously fell out of a five-story window and went into a coma. When his parents did not have the financial means to keep him in the hospital on a ventilator, he was removed from life support one week later. Her next boyfriend was involved with a gang and drugs and was murdered during a drive-by shooting. She also lost two close girlfriends: one died as a result of a health complication and another who visited a *finca* for the weekend with some boys and was found dead.

Isabela had gone through several changes in the past year as well. First, Isabela witnessed her grandmother die; she watched her asphyxiate as the emergency medical personnel tried to revive her. No one realized that she had seen it all happen through the door crack. This death prompted a series of other changes in her life, for instance, her extended family splitting up (they had all lived in her grandmother's house) and her mother moving them to Sabaneta. More recently, she had a physical fight with a classmate and was accused of smoking marijuana on school grounds. Not surprisingly, with the death or her

grandmother, the recent move to Sabaneta, and the chronic conflict in her house, she is also currently repeating the 10<sup>th</sup> grade.

Pablo had the most extreme life event of all the youth, the death of his adoptive mother 20 days prior to the interview. However, in addition to the grief was the accumulation of past events and stressors, such as conflict in the household with his mother and sister, having moved out to live on his own for a short time, and failing 11<sup>th</sup> grade. Though after losing his mother, a positive thought emerged from his family; they realized that they should be more "united" and "support one another."

### Managing Adversity

Youth who experienced chronic adversity often developed coping strategies to manage stress. Strategies typically involved activities that took the focus off of the stressor, removed them from stressful spaces, or served as mechanisms to increase social support, physical catharsis, or self-confidence. Gabi and Victoria referred to a strong social network of friends and family that they could rely on; both girls said they had a trusted confidant that they could tell anything. On the other hand, Pablo did not count on his friends, but said that his godmother was very supportive of him. Pablo also stated that he knew how to deal with stress and "*I'm like one of those people who when I have a problem I think… because if I start to think about it more, it's worse, so instead I try to like… get out of it quickly.*" Pablo loved electronic music and soccer, both activities he said he used to take his mind off of life. Until very recently, he also practiced martial arts. He had incorporated his martial arts and the 'Far East' mentality into his life; though he was not religious he did claim to be spiritual and to have a more holistic sense of self, as it pertained to the cosmos and Mother Nature. Victoria chose to focus on school and was taking intense and condensed courses through *validación*. Similar to Pablo, she had developed diversion techniques to manage stress: "*I try to like calm myself, like*  to be alone...think hard about things, or...to liberate myself like in the gym o in things like...classes....I don't think about the problems."

Part of Gabi's strategy involved her faith, as she was very spiritual in a nontraditional way. Gabi was catholic, but she attended *cultos* instead of "Mass" with her father and sister every week. *Cultos* were evangelical, including more praise and worship. She was very active in this group and said that attending these services had greatly impacted her life, allowing her to see the happiness in life. Gabi also volunteered for a hospital in their medical records department.

### Situational conflict and life events

This aforementioned group of five youth represents only a portion of all the participants, however, there was evidence that several participants had similar stressful household situations that they were less willing to discuss or to elaborate on. Male interviewees hinted that they were undergoing similar family struggles. For instance, Roberto agreed that he had been stressed many times "*when for example I fight with my mom, I have already fought with her many times…she yells at me a lot, so I tell her…so that stresses me out…*" Armando defined stress as "*to have problems and difficulties*" and said that his school problems in the previous period were an example of stress in his life. His reaction to the stress was "*I didn't want to do anything…I wanted to be in the house and that's it.*" Participants did not always expand upon the severity of stressors, but across multiple interviews youth identified adverse events and difficult periods in their lives pertaining to the domains of school, family, romantic relationships, and deaths in the family.

All youth in this group had experienced academic difficulties in high school, but some also faced punishments for bad behavior or violating school policies. Thus, school related problems generated anxiety for these youth in a variety of ways. For instance, Roberto describes math being stressful because it was difficult to understand "*you have a lot of*  *things in your head and you start to not understand anything, everything starts to get clouded.*" On the other hand, when Luis did not want to sit in class he would skip school. His excuse was "*all this heat stresses me out…like being here all closed in.*" Several participants also mentioned conflict with professors and classmates that lead to arguments, suspension, physical fights, and even informal requests to leave the school. One participant, Antonia, was accused by the principle of selling drugs on school grounds and was fighting the accusation with the help of her mother. Her conclusion was that classmates were spreading rumors about her, and worse, this struggle in school put her in jeopardy of failing another class due to one teacher's personal relationship with the principle.

Paola shared the details of her recent change in school, prompted by a classmate that brought the school administrator's attention to Paola's Facebook page; she was asked to leave the Catholic private school for posting a provocative reggaeton YouTube video. Due to her transfer mid-school year, she was struggling to adjust and pass her classes and when she started performing poorly in school, her mother also removed her from all her extracurricular activities.

While one negative life event could introduce stress in a participant's life, some participants identified stress as an accumulation of these events and multiple negative situations occurring at once, "when many things are happening or...one has a lot...of like, worries, that one has something that is unresolved, responsibilities." Another male discussed school work in a similar manner "in school when sometimes from one moment to the next there's a lot of homework....a lot of assignments... Also, sometimes in the house (pause) with...all the obligations of being the oldest...'look, straighten this out, take care of that...look and make sure that it's fine'...you feel so full of obligations that you stress out." Similarly, Paola refers to stress as "having a lot of worries, having a lot of things that one...doesn't know what to do with; when I have assignments like all on the same day...and I don't know

how to start...When I have things with my family that, or like everything piles up, school, my family, my

*friends.*" Participants saw stress not as one particular event or problem, but a combination of events, responsibilities, and mishaps occurring simultaneously.

# The Role of Family

Family cohesion is defined in the literature as shared affection, support, helpfulness, and caring among family members.<sup>86</sup> When youth discussed the manners in which family supported them, they discussed in whom they confided, the qualities of those individuals, as well as the critical events in their lives when family members offered support. Most participants did not have every component of "family cohesion" in their families, but most youth could speak to at least one or two important elements of family support or closeness and how these relationships with family members served them in a variety of occasions.

# Family Support

Typically when participants discussed the type of support their family provided, it was in the context of a situation that was happening or had recently occurred in their lives. During their stories, youth identified 'practical' and 'emotional' instances of family support. Most instances of practical support were related to school, financial, or daily needs; though we assume these types of support accompany the raising of children, due to high unemployment, poverty, and burdensome work schedules in this community, it was not always possible to obtain these resources from family.

# Practical Support

School and academic support manifested itself in several forms for these participants, including help with schoolwork and learning, or academic decisions. For instance, two female participants in the group decided to validate one year instead of attend a public school. Liliana validated because of low academic performance, in an effort to catch-up with classmates, while Victoria chose to validate to avoid conflicts with classmates in her previous school. Both girls had a family member who was against the transfer, as well as one who advocated for allowing them to make their own choice. Their advocates (a mother and a grandmother) also supported them academically by offering to hire tutors. Victoria explained that due to her mother's long work hours and her grandparents low education levels, she could not rely directly on family to help her with schoolwork. However, her grandmother found her a tutor when she was struggling with math. Paola, on the other hand, said that after her move to a new high school she began failing classes. In order to refocus Paola, her mother removed her from all extracurricular activities. Whether taking her completely out of soccer and her band was necessary, or the best option, it is clear that her mother was concerned about her education and her academic performance. Coincidentally, during the interview Paola did not seem bitter or upset at her mother's decision.

At the same time, it is interesting to note the contrast between Paola's punishment and male participants. Among all of the male participants that played soccer, many had failed a grade or were in dire straights academically. However, among the 10 of 12 boys we interviewed, only one boy mentioned that his mother 'threatened' to remove him from soccer, but that his coach convinced her to let him stay on the team. Boys who played on a soccer team practiced two hours every day, thus their participation could be seen as protective in that it kept them out of trouble. However, in these situations it could also be viewed as detrimental to their academic performance. In this same vein, the theme of school support was more evident among female participants; boys stated that their parents supported them, that they wanted them to "*get ahead*," or that when they got in trouble for doing poorly in school their parents scolded them, but only one male participant provided a concrete example of how his parents supported his studies.

When school disciplinary problems arose, two female participants provided detailed examples of their mothers defending them. Paola previously attended a Catholic all-girl private school before we interviewed her, but was asked to leave for posting a popular reggaeton video called 'Sex Addict' on her Facebook page; a classmate had notified the school administrators. Though this was not on school grounds, unrelated to school activities, and clearly a tactic of the classmate to get Paola in trouble, the nuns decided that it did not represent the morals of the student body and the institution. Paola explained that her mother was upset at first, but after speaking with administrators realized that it was an unfair decision on their part and stood up Paola. Although Paola still left the school, it was because her mother felt it was the better choice. Similarly, Antonia tells us how the school recently accused her of selling candy and drugs on school premises; she admits to the candy, but says she was not a drug dealer. Her mother and family were indignant, so her mother went to school to confront the principal. Antonia said "when my mom showed up...she < the principal> said to her I don't understand what you are doing here' and then my mom said 'well what did you think...that I was going to leave my daughter alone with this problem like we were going to leave it as if it were nothing."" Antonia knew her mother would come to her aid and said that no one even in her family bothered to ask if the accusation was true—they all assumed she would never sell drugs. She said if they had doubted her it wouldn't have affected her, but "I don't know, for me it's important what they think." This indicated that her family's support was important beyond it's functional purpose, but it also mattered that they had confidence in her abilities, values, and actions.

Practical support also consisted of aiding participants to acquire or do things they were incapable of obtaining on their own. Juan says that he occasionally worked in his father's business and even though his father could not consistently pay him, his father would often purchase him new shoes or other gifts in exchange for his time. When Roberto described his grandfather's death, he described it as emotionally difficult, but to add to the emotional component, he depended on his grandfather for other things "*he took me around everywhere when I needed something...when I went to train <soccer practice> in Itagüí...he was the only one who would take me.*" Francisco admitted that when he left his mother's house to live with his cousins, he expected to enjoy it and to have more freedom, but instead he realized how he had taken for granted the extent that his mother provided for him. Victoria spoke similarly about her grandfather as a source of practical support, "*My grandpa is super good with me...my grandfather comes and if I need stuff my grandpa gives it to me, "oh pa I need a folder for school*" *he comes and he gives it to me...if I need some medicine...he helps me.*"

When Liliana lost her virginity, her mother helped her obtain birth control. Though this was a practical type of support through the facilitation of finding the services, more importantly her mother's actions reassured an already worried girl. Liliana's example of practical support was a clear example of how practical and emotional support might overlap, however for all youth there are emotional implications for not having this support. Youth who spoke positively about these experiences exuded confidence when they told us how their parents came to their aid, provided for them, or believed them. There was assurance when their family stood beside them. For some of these youth, actions from family may speak louder than words.

# Emotional Support

All participants were asked to explain who they trusted most in their family and why. Most often the trusted relative was a female relative. Many of the qualities that girls and boys attributed to these trusted individuals were similar regardless of gender; they had similar characteristics that made them trustworthy. The positive qualities youth attributed to

supportive individuals were based on personality traits and how well they handled the information participants shared with them. Gabi, Victoria, and Liliana described their father, grandmother, and mother, respectively, as being "like a friend" because they could talk to them about anything. Aleja saw gender and age determining who she could relate to, and explained that "You're mom understands more....as a woman, I tell more stuff to my mom and sister...more than anything to my sister, like intimate things... my mom is no longer the <right> age." Another common phrase was "she understands me." Maria gave the example of her cousin as her trusted confidant because "she < the cousin> went through a stage that was like bad...it was a really bad stage for her and (pause) maybe she, she knows and she understands more...they listen < her friend and cousin> to you without judging. Without saying anything, on the other hand if you tell something to your parents, that's a problem...they punish you...and that's not what you're looking for." The fear of parents' reactions was a common theme among adolescents who chose a grandparent or other family member to confide in. Often a grandparent or aunt provided a buffer between the adolescent and the parent. For instance Armando explained, "If I have to tell her something... I know that she's not going to tell anyone else, but instead try to see that things improve. Or she tells my parents and then they understand and talk to me." In this way, Armando had a confidant, and consequently, a mechanism to reach out to his parents through his grandmother who could communicate his problem more effectively.

An important attribute of supportive family members was their ability to provide guidance in difficult circumstances. Participants assigned characteristics to these individuals or gave examples of their advice during stressful times. Jairo told us that his aunt and uncle generated the most trust because "my aunt is a very serious person, a person that you tell her something and she is one of the people who keeps quiet. A person that watches what is happening without anyone noticing, she tells you what you have to do or the solution, and my uncle because he is one of the people that *looks at problems and knows how to confront them.*" He associates his aunt's seriousness to an ability to better evaluate the situation and provide better guidance. Victoria gave us examples of how her grandmother provided advice as well, "*my grandma comes,* "*my dear, look at this, don't do that, behave sensibly' like my grandma is like, more than anything, all the support I bave...I come to calm down and she says to me 'no, such and such, look at things the way they are' and she explains to me and like she understands me...my grandmother is like a friend, she's not so much like 'oh no, if I tell her that she's going to scold me.*" Similar to what Maria and Armando expressed regarding their confidants, Victoria explained how her grandmother spoke to her when Victoria came to her with a problem. Importantly, her grandmother did not yell or punish her, but helped her to understand the situation at hand. The confidant's reaction to the participant's problem was viewed as a vital component of emotional support. For example, when Jairo was arguing with his sister, his uncles console him, "don't feel like that, you are not alone, we are with you, and if you want you can come here and live with us." They not only sympathized with his feelings, but offered a concrete solution to his problem; another instance when emotional and practical support intersect for youth.

In all of the aforementioned examples, communication was an important element of emotional support; the precursor to receiving emotional support was the ability to trust the confidant enough to discuss sensitive issues with him or her. Liliana described the context of her mother's support during her recent break up, "*I broke up with my ex—boyfriend about... about six or seven months ago already... well, since then my mother and I have been super close...because I didn't dedicate any time to anything... to my mom or to anything...everything was with my boyfriend... and, well... she supported me a lot and I told everything to my mother." Her mother acted as a sounding board and eventually Liliana realized that her mother had been there for her the entire time, but Liliana had not given them the opportunity to become close. In the descriptions shared* 

by Jairo and Liliana, confidants demonstrated unconditional support. In Jairo's case, his uncles went above and beyond their obligations as extended family members to assure him he was supported, while Liliana's mother still accepted Liliana, even after all the time Liliana had prioritized her boyfriend over her mother.

Simon and Paola also referenced specific events in which a family member supported them. Paola discussed her grandmother's close encounter with death and said "my other uncle was the one who most gave me strength...he told me that...if God was going to take her it was because she had accomplished...like her purpose." In a similar situation, Simon described his grandfather's death as the saddest moment in his life; he did not want to go to school or see people, but his father help him by talking him through it "my dad talked to me a lot...so a lot of family members have died, but this was like, the hardest one for me and it was the first time, so he talked to me a lot, <explaining> that I had to go to school, that it was going to happen to me and that's it." Though Pablo does not have one particular stressful event, his arguments with his mother were constantly occurring. He told us that he reached out to his godmother to talk and get advice, "she's like my second mother. She knows everything about me. I care about her a lot. She has supported me a lot and I've had a lot of valuable things and... and so many... physically as well as mentally, things on her part.... Let's say that she always used to take me out. When... when she came to the house she used to tell me that if the problems with my mom were like that... but to... to try to understand her, that this and that, and not to do anything really bad like raise my hand at her or disrespect her as well...Those are the things that my godmother gave me." Even within these emotional support systems, it is clear that these adults offer "practical" kinds of advice that youth can use or follow to help them during the stressful times in their lives. These adults guide them on how to think about their problems, how to manage their problems, and in some instances offer concrete solutions for the participants.

# Some things I keep for myself

Though many participants had a trusted confidant, several clarified that not all issues were up for discussion with family, or even friends. More sensitive and emotional issues some participants chose to keep for themselves. Although participants were not explicit about what kinds of topics were off limits, topics typically involved very sensitive feelings or negative behaviors. For example, two male participants identified family members that they trusted or told everything to, but later in the interview they provided instances in which they could not talk to those same individuals. For instance, Diego said, "the majority of the time I talk with my sisters... I talk a lot to all three of them, I tell them a lot of things." Later in the interview, as he was describing his mother's recent surgery complication, he admitted being fearful that his mother would die and crying about it, but specified that he did not share his worries with anyone, not even his sisters because they were also feeling badly and it did not makes sense to put his worries on them. Similarly, David shared with us that the deaths of his grandfathers, both of which occurred within one year of each other, were the saddest time for him. He says "I was living with one and the other I talked to every day, so...no (pause) it was really hard for me but you can't do anything about it." When we asked who he talked to about this difficult time he says "no, like cry, vent...no", We asked him three times what he did or who he spoke with to vent and each time he just said "no, just me."

Participants also noted that there were things they kept for themselves or another person outside of the family. Aleja explained that although she is close to her mother and sister, there were things she would always prefer to tell her friend instead. Like Aleja, Francisco clarified that the type of problem determined whom he confided in. For Francisco, very personal topics he shared with his girlfriend or kept to himself. Bad situations regarding school he preferred not to convey to his mother unless the situation was beyond his control, "*depends, like if good things happen in school, my mom. Also en the family, 'ma look*  this happened to me with so and so' to my mom...more personal...sometimes I keep those things for me or my girlfriend...if it's in school I don't tell it to my mom...if things are really bad, yeah I tell my mom."

On the other hand, three participants were explicit about the kinds of things they would not share with anyone else. Isabela kept the conflict occurring in her household to herself, "there are things that yes I tell like to my friends and everything, but...let's say a problem with my mom...or like en the house, I don't tell anyone." Maria stated that "I have more trust in some people but I don't tell them everything...a cousin and another friend, everything else to no one." For Maria, she said that she did not tell people everything, especially not things she has done under the influence and normally would not consider, "bad things are like let's say that going out to a club, one can get drugs, alcohol, one may even meet someone and, and through the alcohol and all that stuff no, reach a level in which, it doesn't matter if you just met him, you feel good with him...consciously those are bad things, they are things one wouldn't consciously do." Roberto who had also tried cigarettes and marijuana chose not to tell his family about his experiences, his reason being that he didn't like it and why worry his family over something he did not plan on doing again. For these three youth, it appeared that the actions or events that they were not proud, they did not chose not to share. It was also possible that these behaviors or situations were so highly stigmatized that they did not dare to share them with others. For example, if Isabela were to admit that her mother had threatened to kill herself it could lead to negative attention regarding the stigmatizing behavior of her mother. Maria's behavior in the nightclub seemed to be related to sexual activity and drugs, which for young girls is very likely associated to promiscuity. Additionally, it is noteworthy to mention the contradiction that existed between drinking, drugs, and its consequent behavior. Based on interviews and observation, underage drinking in Medellín was not a major concern nor highly stigmatized. Participants, and young people, drank alcohol at parties or festivals, and sometimes with their family. Thus, drinking was not

of major concern of adults, however, the behaviors that potentially ensued (such as additional drug use or sexual behavior) as a result of drinking were not acceptable.

Participant interviews demonstrated that even when youth had a trusted family member, there were still topics that youth chose to share with friends or keep to themselves. However, those personal topics varied by participant, for instance, some participants could talk to their family about romantic relationships, while other did not feel comfortable sharing those details of their lives. Likewise, some youth purposefully kept school-related problems from parents, while others could seek guidance from them. Thus, the extent to which youth trusted family members may be influenced by individual characteristics of the confidant. Likewise, the social norms and the acceptability of having certain feelings or exhibiting particular behaviors appeared to play a role. Participants also considered the severity of the consequences if they disclosed too much information; for instance, would they be judged, scolded, or punished for their actions by family. Among some male participants, it seemed that they were more willing to confide in family members regarding the normal daily occurrences of their life, but very emotional topics were out of the scope for family members. Disclosure of romantic relationships was another area that varied, as discretion was often based on how well they believed the adult would manage the information. For instance, Liliana told her mother she lost her virginity at 13, while Aleja had a boyfriend that she kept a secret from her father. On the other hand, smoking marijuana, major family conflict, and other negative behavior may be stigmatized to the extent that youth did not feel comfortable confiding those details to anyone.

#### Quality time with family

Regular quality time was an important element of closeness and family relationships. Quality was demonstrated by genuinely positive attitudes towards time spent with family. Participants listed a variety of activities that they did regularly with family members, varying from church, to eating out, to watching TV. Gabi said that her sister and father went with her to *culto* every Sunday. She attributed her improved perspective on life and having a relationship with God to being involved in the *culto* and personally valued being active in *culto*. Additionally, Gabi attributed a positive change in her father to his participation in the *culto*; according to Gabi he had a girlfriend at one point, but because he was involved in the *culto* he looked for God instead of a relationship. Considering Gabi blamed her mother's romantic relationship for her mother's disinterest in the family, Gabi may have believed her father's participation in church was important for maintaining her close relationship with her father. Carlos also brought up church as one part of his family's weekend routine and stated that spending time with his family was enjoyable, *"every Sunday we go to mass in the morning the whole family…we go out on the weekends like to the pool, to a finca, also the whole family and like these two things more than anything…so to me it seems really cool that we have that to share because…I like the unity.*"

Juan and Jairo provided similar examples of quality family time. When we asked Juan how the family spent time together, he laughed telling us how his family gathered around the television every night, "*piled up*" on their parents bed to watch a popular *telenovela*. His family had carved out this time in the evenings to be with each other. However, even more pronounced in his story was when he shared the most fun time in his life being with his parents, specifically his father, "*no the best is being with my dad and my mom together and if not, with him...with him you walk a lot, I have walked a lot with him, so it's really great, everything... Shooting pool, like that the best in the world.*" Jairo, on the other hand, lived with his mother and sister, in addition to other extended family, but had similar feelings about spending time with family. Jairo had moved several times over the years, but he was grateful for it because "you can be with cousins...grandparents and you can share more time with them, not be alone...it's a good advantage."

Quality time did not need to be exciting or out of the ordinary, but rather a regular occurrence. Gabi and Carlos said "every Sunday we go to church," Juan said "every night we watch TV," and Jairo likes his moves because they allow him to "share more time" with family. Consistency was important to other participants, for instance Armando said that his family supports him when he played soccer and that "*if I have a game they comes to see me…almost always.*" Roberto, whose parents were divorced, was confident that his parents would be there to spend time with him, "*we spend <be and his father> all night and in the morning <together. > While I study he works and on the weekends we spend time together or when I'm not with my dad I am with my mom.*" Though his parents were divorced and he lived with his father, he and his mother also maintained a close relationship. When he did not have class he called his mother to come get him and that "*we <be and his brother> go every 8 days where my mom is, we go out us three over there, to go swimming, things like that.*" Regularity, consistency, and quality time generated security and confidence in the participant's perspective of his or her family. It facilitated support and trust, as well as an acknowledgment that their family was always there for them.

It is important to distinguish that spending time with family was not always an accurate indicator of family cohesion or closeness. Some youth did not have dedicated "family time," but still had close relationships with family members, while others claimed they spent a lot of time with their family members, but it was unintentional. For instance, Liliana described her mother as her confidant and spoke in a very positive manner about their relationship throughout the interview, but when we ask her what kind of space was dedicated to the family, she said that due to different schedules, there really is not one time during the day that they could all be together. Alternatively, Francisco and his family ate together all the time and watched TV together every night, but it seemed less to do with

choice and more with their circumstances, "*it's that sometimes we don't even go out, we're all on the same block, so most of the time we spend together...the house is small so no, everyone eats in the room or dining room, whatever.*" In other words, this time spent together may be more related to small spaces and close proximity, than desire. David echoed Francisco when we asked if he and his family did things together, he said that once in a while the entire family gathered for special occasions, and he was always with his grandmother because she almost never left the house. However, some adolescents with more space or freedom to separate themselves from family, like Luis and Maria, say that their families made the decision not to do anything together, "*sometimes maybe a gathering, a birthday, something like that...almost always we're all on our own.*"

#### Socially acceptable opportunities for "closeness" among males

With few exceptions, the majority of participants said their closest family member was a female relative. However, while exploring 'family' and 'pastime' text segments, a clear pattern arose among male participants and how they spent time with other males in their family. Not surprisingly, men in Medellín grew up idolizing soccer and all of the male participants interviewed were either currently playing soccer on a team or had played soccer a year or two prior. Therefore, it was not surprising that this popular pastime created an acceptable space in for men to spend time together, even if participants were not "emotionally" close to the male relative. Luis told us that he talked to his dad "*once in a while. When we watch the games*" and Diego hung out with his older brother "in the morning when we go to the court" Interestingly, the only other time that Diego spent time with his brother and father were when they drank together. Thought these "spaces" do not seem to facilitate actual communication or necessarily be healthy activities, they were an important space that men could share with one another. When fathers came to watch their sons play soccer, it was another way to display support. When we spoke to Carlos about his participation in soccer, he said that his parents "*they support me*, ... *they like always say I play well, the come to see me*  play, yes the support me a lot in that." But when his Carlos' father was away working in Ecuador for 5 years, he said that his absesnse was felt most when he played soccer and that he felt bad that his father was not there with him "I always felt a gap…because I play a lot of soccer, I was going to all the games, I would see how…fathers were coming with my friends, and I always went (pause)… almost always I went with…a friend, or I was alone or with his father…but anyway the fathers of all my friends went, I didn't like that very much."

While these gendered spaces were important and created a socially acceptable place for men to be "close", it was difficult to delineate whether soccer generated a true sense of closeness or was simply a simply space filler activity for men. Furthermore, because there were no obvious examples of similar spaces for fathers or grandfathers to share with female participants, if it was indeed protective and led to a greater sense of family cohesion and support, this begs the question what are girls missing who do not have the same opportunity for that shared "space."

# Reciprocity in Trust and Support

Discussions with participants suggested that trust and support should be reciprocal. Some participants stated that one reason to trust a relative was that he or she confided in them in return; there was as much value in providing support or being trusted as their was in receiving the support and trust. Victoria and Simon discussed reciprocity the most during their interviews. Victoria's example had to do with supporting her grandmother by accompanying her to a senior citizen health support group, "*my grandma suffers from*... *epilepsy* ....I am like the support for my grandma, like the cane...I also get along really well with my grandma and we go out for walks...like it's super good because my grandma...she needs support...she doesn't have the agility like before...for example when I go to that <center>, I come, I help the elderly that need stuff...there I feel really good...when I go there with my grandma, I have a really good time...I always go with her." emotionally through this activity. Victoria also gained a sense of self-worth by helping others.

Simon had a similar relationship with his grandmother and desired the same reciprocity from his father. Simon named his grandmother as his most trusted relative, and when asked to expand on their relationship, he not only said that she is very caring, but that "she has had so many problems...I love her a lot, so for that she confides a lot in me, then that's why if I have something I always talk to her and see what she tells me." To Simon, demonstrating that he loved her allowed her to trust him in return. Simon explained that his uncle (her son) was a drug addict and that because she was open about this hardship in her life, he could respect her experiences and her advice, thus, her advice to stay away from drugs held more weight. This exchange of information and confidence generally lead him to trust her judgment more than he would other family members. Simon implied that he wanted a similar relationship with his father. He said that he always sought permission to leave the house and continued to obey him because in order to maintain the trust he had, he understood he had to respect his rules. However, Simon had similar expectations for his father and stated that one of the things that made him most angry was when his father lied to him about what he was doing, ""where are you" and then "ah no, I'm working " and he's over there drinking beer. To me, to me it doesn't make me mad that he goes out on Fridays and drinks some beers, I mean that is normal because he works all week...but that makes me angry." For Simon, he was angry about the lie, but was more upset that his father would assume he could not sympathize with him. For these youth, it seemed that family cohesion or closeness was a two-way street; they expected to give back and be treated as confidants in return.

Just as the reciprocity of support and trust may enhance closeness between youth and their families, a lack mutual trust may be detrimental to family cohesion and closeness. Maria explained that the reason she was not close with her parents was because she felt like they were manipulative; she did not trust that their rules are well intentioned, but instead were in place to control her. When she quit swim team, her parents assumed she was getting into trouble, she said they told her "*if you're going to live here it is because you're going to do what we say'...they can't always be like that, not everything is what they say, they also make mistakes and not everything they say is fine.*" They did not trust her reasons for quitting and as a result, she did not trust their restrictions on her. Luis said it very succinctly when he explained why he rarely spoke to his parents "*I barely speak to them...I don't like to...since I can remember...my mom says that I don't trust her but it's that...it's that they don't trust me.*"

### Cohesiveness and Closeness: past, present, and future

It is evident from these participants' stories that familial relationships changed, improving or deteriorating over time, and these changes either had a major impact on their lives, or had the potential to make an impact. Sometimes changes were spurred by the addition or the loss of a family member, be it death, birth, or divorce. However, it was not simply the change in family structure that had an effect, but the context surrounding those changes and in some cases, the unintended outcomes that transformed family dynamics.

## Additions to the family

Aleja and Luis, both the youngest siblings in their household, briefly discussed how their relationships with their parents changed once their older siblings started having children. They felt displaced by their nephews, as their parents seemed more involved with their grandchildren and no longer as concerned with them. Aleja said her father loved her a lot and then "my nephew was born ... so he <my father> and I became distant...he would bring me many little things and, now everything he brings is for my nephew." She saw similar changes in her mother, but still remained close to her. Luis claimed not to be close with either parent, but was still affected by the addition to the family. He admitted that his parents stopped paying as much attention to him because of the new child, but assured us that it did not matter to him either way. He may genuinely not have cared that all attention shifted to his nephew, but the fact he made a point of mentioning it during the interview, suggested otherwise.

The scenario of Carlos was slightly different from Aleja and Luis in that his father was technically present all his life, though not physically present until recently. Carlos' father worked in Ecuador for five years and was sending money back to the family in Colombia. However, when he returned home to live with the family it initiated a series of conflicts between Carlos and his father, as well as his father and mother. Carlos was aware that the issues with his father put strain on his parents' relationship; he claimed his father always wanted to blame him for things and this placed his mother constantly in the position of defending him. To add insult to injury, his younger sister and father were getting along and Carlos believed that his father paid more attention to her than to him. This additional element of jealousy did not improve relations with his father. Although his father had returned and he should have been happy, instead he said "I know longer have the same trust in him since he returned, like I barely tell him anything. So there have been various clashes with him because of that, because of trust. Because I feel more love...for my mom, than...with him." His father's return to Colombia caused feelings of resentment to resurface, "I was lacking like the love from a father during all that time...like I didn't have it." Though this scenario was rather bleak, considering unlike other participants in this group Carlos had gained a potential support figure in his life, his relationship with his father seemed to be on the mend. Carlos believed that the relationship had improved slightly and that there were efforts on both of their parts to have fun together, just the two of them. For instance, Carlos recently invited his father to go to a

concert with him during Feria de las Flores and says "Dad, I want to spend some time with you, since you let me be with my friends.' He told me sure, that it seemed very nice on my part that I had him in mind." Though Carlos was struggling with the changes in his house, clearly the potential for him to have a better relationship with his father was possible, as they already expressed the interest to spend time with one another.

## A Loss in the family

As would be expected, the loss of a close relative drastically changed family dynamics. However for Isabela and Pablo, their losses demonstrated polar opposite outcomes. Isabel's grandmother died approximately one year prior to the interview. Her grandmother's death was an event fragmenting the family further than it had been to begin with. It affected several family members and had unintended consequences, hindering closeness and initiating depression and conflict within Isabela's household: "like they don't get along anymore *<aunts and uncles>*, like there's no more order. Then we say that everyone has to put in some money that, for the groceries, utilities and everything and then...they fight that 'why does one give more and another give less...ah no, then I'm going to buy food only for me." Her grandmother was an equally important person in her daily life, not only as a confidant but also her grandmother served as a buffer between Isabela and her mother, "for example...my mom worked all day... I spent all day with my grandma, like watching  $TV \dots I$  fight a lot with my mom, so she  $\leq$  grandma> would tell me things...she would give me advice." Isabela's grandmother kept the family together and functioning well. When she died the family could not manage their finances and fought amongst each other, which was one of the reasons Isabela said she and her mother left the extended family situation and now lived alone. However, without her grandmother to act as a buffer, and now living solely with her mother, the relationship with her mother worsened. Their interactions quickly escalated to arguments and often precipitated violence or

emotional abuse, which went both ways between Isabela and her mother. Isabela's relationship with her mother was never a strong one, but losing her advocate and being in a living situation that isolated them exacerbated the already damaging aspects of their motherdaughter relationship.

Pablo's story demonstrated that even with significant losses, there was hope for improvement within families. While discussing the recent death of his mother, an event that occurred a mere 20 days prior to the interview, Pablo recounts the grief he and his family went through. However, the years leading up to her death were also difficult, with Pablo facing verbal abuse on a daily basis. However, after the funeral his family realized that they needed to be more united. This did not imply that this family would recover immediately from years of household conflict, but they had the motivation to improve their relationships. Unfortunately, this event was so recent, thus how their family dynamics did or did not change was unknown.

## Parents Separation

The way parents managed their marriage, including their separation or divorce, had ramifications for their relationship with their children. Antonia and Liliana watched their fathers betray their mothers, ultimately causing them to lose respect for their fathers, as parents and as individuals. Changes in their parents' relationship and treatment of each other, filtered down to them, altering their father-daughter relationships and causing them to take notice of their fathers' character flaws. Antonia provided the history of the economic roller coaster her father put her family through. He blackmailed her mother into leaving the family business, but when he took it over mismanaged it to the point of destruction. This caused the family to decline in socioeconomic terms and forced Antonia to return to the public school system. When Antonia's mother realized that her own husband had deceived her, she left him. At first Antonia admitted that she resented her mother for leaving her father because her whole life she was very attached to him. When her mother tried to explain how her father truly was, Antonia said "I prayed...that my father would come back to the house...I told her <my mother> 'no you're just vindictive." She felt guilty for blaming her mother for their separation, but after everything, she sided with her mother. She called her father 'shameless.' Antonia accused him having many business ideas, but was inept at following through and managing them. Furthermore, when he actually made a profit, the rest of the family never saw a penny of it. Since the break up of her parents the relationship with her father worsened as she became more bitter about her family's financial situation and his lack of responsibility "I mean, I talk to him...but when he calls me, but I don't reach out to him...anyway the relationship with my father has always been very normal because I love him and I adore him, but my dad is very... I mean he only likes that one does what he wants and that's it. So he doesn't like that I go out, he doesn't like anything, or it's like he is only happy with me being in the house, eating, and sleeping, and that's *it.*" She came to relate her father's need to control their family's business, to his need to control her as well, and considering his mismanagement of money and business administration, she was not keen on following through on his opinions regarding her life.

Unfortunately, Liliana watched her parents' relationship fall apart when her father began having an affair. Liliana never explained why her parents did not divorce, but stated that her mother eventually accepted the extramarital relationship. Additionally, her mother was unemployed and could not find steady work and they were still dependent on her father to support the family. Eventually, he began to spend more time with his girlfriend than the family, and according to Liliana, he only came home so that her mother could do his laundry. Frequently his paycheck did not accompany his laundry. Her father's persistent disrespect for her mother made her extremely angry and resentful, and contributed to her loss of respect for him. To add insult to injury, he sometimes brought his girlfriend around her neighborhood. Liliana said that he was once the parent she went to when asking permission to go out, but recently had grown closer to her mother. For both Antonia and Liliana, the once positive image of their fathers had diminished completely. However, at least in Liliana's case, this negative shift in her family solidified a new sense of camaraderie with her mother. Antonia still did not claim to be close with her mother, but she gained respect for her mother's capabilities as a business-minded person, the provider for her family, and a woman who could pick up all the pieces her father left behind and move on. Unfortunately, it seems that in the process of losing an important person in her life, she had not gained any emotional closeness with her mother.

While the separation of Antonia and Liliana's family was still in progress and the outcomes were mostly negative, two other participants benefitted from their parents divorce and the subsequent improved family dynamics. Roberto served as an example of how a clean separation between couples could actually create a more healthy family dynamic. Roberto described his parent's divorce as one of the most stressful periods in his life because they fought all the time, but he and his brother went through it together. The sense of empathy with his brother was important during the process of his parents' separation. Equally important for Roberto was how his parents communicated to him about the divorce. They told him that "everything is going to stay the same, but be different" and they would still see each other all the time. Roberto told us that he saw his mother at least every 8 days and when he had a day off he would call his mom to to pick him up. The divorce reduced his exposure to arguments and family stress, but the way his parents handled the changes preserved a sense of support and security for Roberto.

The divorce of Gabi's parents was the beginning of a life-changing event for her entire family, sparking a series of events that saved her life and changed her father's life. At the time of the interview, Gabi described her living situation as often "uncomfortable" and "tense" because of her estranged parents who were forced to live in the same house. However, prior to the separation, her parents argued constantly, as her mother was maintaining an extramarital relationship and her father had a drinking problem. When her parents separated, she still could not get along with either parent and fought to such an extent that she and her sister stayed in a group home for two months. At the very end of the interview she confided to us that she had attempted suicide multiple times and that her parents divorce was the reason she was so unhappy. Gabi admitted to wanting to die and attempting multiple times and methods of suicide. She did not specify how her parents realized what was happening, but says that her whole family was involved in bringing her back to good health "they supported me, they told me that... I was not bad, they helped me, they sent me to a psychologist and everything." She did not make a direct link between her suicide attempts and changes in her family, but throughout the interview she talked about how close she now was with her father and sister. She told us that her father no longer drank and that the three of them attend *culto* every Sunday; she attributed their involvement in this religious organization to changing her father's priorities (being less focused on a girlfriend) and helping her to find God and be happier. Though her suicide attempt must have been devastating for her family, it may have brought the attention that was needed for her father to make Gabi and her sister a priority.

### Religiosity

Participants tended to cluster into three levels of "religiosity" based on how they discussed their beliefs: there were the "spiritual," the "skeptics," and the "generic responses." Five participants were regarded as spiritual, however, none of them would be considered religious in traditional catholic terms. The majority of participants fell into the latter two categories. Seven participants believed that God existed and that he was important, but had varying levels of interest in church or activities associated to church; they were also more likely to harbor doubts regarding their faith. Lastly, eight participants provided very generic responses to our questions when we asked about their beliefs. There was only one female participant who had come to the conclusion that she did not believe in God at all.

#### <u>Spiritual</u>

Across the first two groups, participants gave varying indications of doubts in their faith, either in the institution of religion or the teachings of the church. Those who were very spiritual seemed to have already overcome the incongruence of what they were originally taught and what they now believed. They found a way to balance their need for faith with their sense that something was wrong with the church as an institution. This often involved adhering to certain catholic traditions or customs, but not engaging in others. For instance, Victoria says "I know that there is a God…but to go to a church to listen to someone that maybe could have more problems than you or, more sins than you. That is what I don't understand, but yes, I know that there is a God and that you have to pray to him and you have to believe in him." Antonia goes to mass every Sunday, but says that she never confesses to a priest and that she does not agree with how the church preaches the teachings of Jesus, "<church> does not like what Jesus came to teach, like love…brotherbood…they…don't put it that way." Antonia also believed the church used religion to make a profit off of people.

Both Jairo and Gabi had strong religious beliefs and were active in prayer and worship groups. They were catholic, but both attended a type of service that was not a typical mass. They found great comfort in these groups, while the typical mass was described as "boring" or "the same routine," these prayer groups were dynamic, different every time, and included more singing and worship. Jairo says, "*that prayer group…they make you feel God.*" Both participants described how the religious groups had helped them through difficult times; after looking for God Gabi said she became, happier, and that she was no longer depressed. Jairo talked about an instance when he was extremely angry and after a particular prayer session with this group, his anger went away. Interestingly, both say they felt "empty" before attending these services.

Pablo was unique from this group of participants because he adamantly disagreed with Catholicism; however, he maintained a sense of spirituality regarding nature, philosophy, and oriental beliefs. He said "*I like the whole spiritual aspect but mainly nature... the energy that comes from nature, the breaths...like the movements... that calm you and everything... more energetic in and of itself in the body and the mind.*" Though Antonia was more aligned with catholic religion she also had incorporated some non-traditional beliefs and practices into her personal belief system. She told us about a spiritual retreat that she would be attending that included, shamans from the Amazon. In addition to this retreat, she also recounted the story of a miracle involving her sister and a mystical woman who appeared on the scene of a car accident; the woman placed a rose and a statue at her sister's feet and prayed over her. According to Antonia, her sister was declared brain dead by the doctors, but 5 days later woke up from her coma repeating the word "rose." Antonia attributed her sister's survival to this event.

These five youth have strong convictions and a belief system; whether they pray, attend retreats, or simply have a strong sense of their place within the cosmos, their faith plays a positive role in their lives. Additionally, these participants managed to integrate faith into their lives in a meaningful way that allowed them to take what they felt was beneficial from religious teachings and activities, and ignore what was not.

# "I believe in God, but..." (The skeptics)

Upon initial questioning, all participants but one stated that they believed in a higher being, or God. However, after probing, a small subset of them eventually made statements inconsistent with their initial responses. Following more discussion, it was clear that several participants had their doubts about what to believe, or their actions exhibited contradictions to previous statements. For instance, Paola told us upfront that she was a practicing catholic, that she believed in God, and that she went to church. But after a few minutes she almost completely reversed her statement within the same sentence, "I mean, the scientific stuff has interested me, not so much the religious, but either way I practice it... I base more on what I can see... there should be something that guides us. But I don't know if it's God." Aleja responded similarly, saying that she believed in God and was attending catechism courses to be confirmed. But when we asked her to describe her beliefs, she explained "I don't pay attention to that" and "I have a lot of questions...I ask him...the instructor...and sometimes he responds, but one continues having doubts...I don't know I believe it that much." Armando attended church every week with his family and claimed he enjoyed it, but admitted that religion still left him a little doubtful, "all the things that happen ... all the things they do, the priests... so I think about all of that." One participant stated that his family was catholic, therefore he held the same beliefs, but later followed that statement with "but I'm not so much of a follower of it, the church and all that." For these participants, it seemed that many of them were going through the motions to do what was expected, but did not actually have faith, or a relationship with God.

While some skeptics openly doubted their beliefs, others simply were unable to support their statements with actions. Usually this implied they did not attend mass or pray,

"I don't go to mass, I don't go to any of that, I don't confess, nothing, but I believe in God." On the other hand, several youth said they believed in God and prayed, but chose not to attend mass, "when I go to bed, well, when I lay down, I pray like normal and I cross myself. If I pass by a church, I cross myself...but no... I don't go to church." Others talked about religion and God as protective of them and their families, or that religion added a sense of value to their lives, "it fills me with joy to know I have God on my side, that he protects me most of the time." Isabela believed she had a guardian angel and joked that she knew the angel existed because it had not let her down yet. However, Roberto seemed very spiritual when he began to expand upon his beliefs; he said that when he felt bad he spoke to God and that God helped him. However, when we asked him to give us an example he proceeded to share the story of how he once stole 5,000 pesos from his father and felt really bad about it, he says "Oh God, forgive me <laughter>...don't let my dad find out." Initially, he gave the impression he prayed to repent, but in actuality he did not want to be punished; he never told his dad that he took the money. Finally, the majority of skeptics stated they did not believe that their religion or their faith had any importance or impact on their lives. Consequently, though these participants perhaps retained some religious beliefs, it was questionable whether they understood what they "believed," and whether it could be considered "faith."

# Generic Responses

Another large majority of participants provided seemingly canned responses to our interview questions. They were adamant about their beliefs in that they did not contradict themselves or admit to having doubts, but they also lacked the ability or desire to expand on what they believed or how their beliefs impacted their lives. They made general statements, such as, "yes, I'm a believer" or "I pray, I ask him to help me," " I thank him," "<I believe > in God, in the virgin, and the saints. In everything," "You have to follow the commandments." These

participants also performed all the catholic rites of passage, or were in the process of finishing them. All had received their first communion and several were confirmed or were planning their confirmation. The answers we received from these participants did not come easily and even with probing they were not inclined to expand upon them. These modest responses might indicate that they purposefully conceded to socially acceptable answers. However, this group only consisted of boys, who were generally less talkative during interviews and less apt to expand on their responses to any questions we asked. Though it is possible that their answers were "learned" and "expected" because they did not follow them up with complex explanations, it is equally plausible that they genuinely believed in what they were telling us and simply had nothing more that they wanted to say.

#### Resilience: "Chose your path"

After speaking with twenty-three adolescents about their lives, there were three who stood out from the rest. Though many of these youth had incredible stories and several faced extreme adversity in their lives, there were three who seemed determined to persevere. They had a positive aura about them, leaving no doubt that Victoria, Antonia, and Pablo were resilient youth. The next section identifies common characteristics exhibited by these participants and how they dealt with extreme adversity in their daily lives.

### <u>Perspective</u>

First, it is important to note that these youth experienced chronic adversity and/or an accumulation of situational stressors. Pablo and Victoria were both abused by family members; for all three participants, every major domain in their life was under duress. Nonetheless, they maintained a positive perspective on their lives. They were able to look at what they had been through, see the silver lining, and impart that knowledge during interviews. Antonia, whose life had been turned upside down by her parent's recent separation and was attending a school that she despised said, "*If I wanted, then I could look at*  being in this school, no like a jail... and make things worse for me, but so it's better I see it like, ah, so I have more time for me, I have more time to read, more time for many things." Victoria, on the other hand, said that she was given strength when she realized that there were other people in worse circumstances who persevere, "there are children that don't have anything, like there are people who have more problems than me and they are able to cope with it so like...that gives me strength... that there are people who have nothing, that withstand the cold, they're in the street, there are times they go through the day with agua panela, with water, with what they can get there from the street..." Similarly, Pablo admitted to going through a lot with the recent passing of his mother, but said he was calming down and "I know that I have to keep moving forward because those things have to happen to... to a lot of people." After his mother's death, Pablo could look back at his life and be grateful that his adoptive parents took him in when his biological parents did not want him. However, he adds a deeper dimension to this by saying that what he had gone though had taught him life lessons, "in fact, it has made my life better...it helped me to, like, confront life better and have a braver attitude about life." Whether the strategy was to take a positive angle when thinking about a problem, or in Victoria's case, step outside her own situation to realize she had power over her life, these three participants integrated a positive outlook to their situation.

## Confidence and self-efficacy

Another aspect of resilience among these youth was that they believed in their own capacity to deal with problems. They discussed similar strategies, whether it was tackling the problem directly "*I try to look for the…the most…viable decisions, and that they are the most adequate ones*" or to avoid fixating on it, "*I'm like one of those people who … if I start to think about it more, its worse, so instead I try to like… get out of it quickly.*" These participants made their own decisions and trusted themselves, perhaps more than they trust others. They relied on their

own abilities more than on other people. For instance, when Pablo was experiencing more verbal berating than he could handle from his mother, he made the decision to move out and provide for himself. This was not an easy choice and was probably responsible for him failing a year at school; however, he could work and provide for himself, knowing that he had that option. Similarly, when the abuse in Victoria's house intensified, she moved in with her grandparents. She also chose to ignore her abusers and to rise above her brother's negative comments; instead she focused on schoolwork or would "liberate" herself by engaging in physical activity. Antonia made a choice to have same-sex relationship and decided not to hide it from her family, "*they don't accept it…but the truth is that I'm not anything for anyone…I am very conscious of the decision I'm making and for me that is fine and I know that it's fine, because I am not hurting anyone.*" These participants were strong-willed; they decided what was best for them, they acted upon it, and they did not waiver when confronted with obstacles, emotional or otherwise.

Throughout their life stories, Antonia, Pablo and Victoria revealed positive selfconcepts, exuding confidence and self-respect. Victoria told us that she was an excellent student and recognized her own abilities, saying that she performed well in school and placed second in her class. Antonia said that she admired herself "*because I always achieve what I want and because I really like who I am.*" Pablo knew that teachers assumed he had family problems or was hyperactive because he goofed off in class, but insisted that really "I like to *live my life, laugh and everything.*" Pablo believed adults assumed he was into trouble, yet he made several statements throughout the interview about drugs in the electronic music scene and in his group of friends, saying, "I think that I have a lot of self control, but I tried it <drugs> and that 's it. From then on, nothing. A friend says, "Let's go over there," nothing… it seems kind of absurd to me.... Like, the majority of the people are in that <drugs> because of problems. Like they try to free themselves from those problems by way of that... of those vicios and all of that."

Considering Medellín's history, it is not surprising that drugs had pervaded this community, as almost every participant mentioned "vicios" (vices) during the interviews at some point. However, these three participants dealt with its presence, learning from their experiences and allowing those experiences to shape their attitudes towards drugs and themselves. Antonia elaborated on the theme of drugs and shared her feelings about them, "drugs no, I don't like them (pause) because... I have seen many things... I have an appreciation for them <drugs> and that they destroy their lives like that. So, no, I love myself too much...for that." Though Pablo did not discuss loving himself, both of these youth realized what using drugs could do to a person, took what they had seen around them, and learned from it. For this reason, Antonia was personally offended that the school would accuse her of selling drugs, primarily because she was not that type of person. "My personality is really different from that of a drug dealer. My God... I party, I go out like normal, but once a week, no. I dance ballet, I read books and like, a totally different personality from someone like that." Even Pablo tried to explain why he was above drug use, though the music he enjoyed was associated with it, "many people say ... that the people who go to those things are on drugs, all of that stuff. But, nevertheless, the people that go... to those concerts and everything like for the drugs, it's really not for the music but for the drugs...and I say that the drugs are the music, what makes you... what leads you to think, to feel the energy and everything is the music."

Victoria did not discuss using drugs or alcohol, but was strongly affected by its reach in her community. She shared the story of her boyfriend that she had helped to get rehabilitated; though she did not lose her boyfriend to drug addiction per se, he was eventually murdered for his involvement in the drug business. Victoria stressed that when she got older and had her own family that if she had a boy she will tell him "*if he is lacking*  something he should tell me, not look to make easy money," a statement that is clearly drawn from her knowledge and past experience. She added, from personal experience, that if she had a girl she would "treat her well...I'm going to advise her, about men..." This was another point that she learned from speaking with several teenage girls with children. She said, "no one knows the life of others... things happen, fine, but I'm responsible."

## Wise beyond their years

Each participant had an inspirational story and each seemed to say something profound or wise beyond his or her teenage years. What stood out was that they took their life experiences and applied them in such a way that they could reject the typical social norms of their peers, or at least see beyond them.

Antonia examined the environment of her school and how her classmates behaved. When asked what was the biggest difficulty youth face today, she said that youth lack consciousness "*all the girls who end up pregnant, all the youth that lose themselves in drugs…there are a lot here in this school…they <teachers> give the same <grade> if they do the homework or if they pass it in and it's copied, or like yeah, that their lives go on like that, like it's nothing.*" Similar to her discussion around drugs, she saw her classmates wasting their lives, though they did not realize it.

Similar to how Antonia acknowledged a problem of consciousness among many of her peers, Victoria learned the difficulties of teen parenting, both the harsh judgment the girls received, as well as the difficult situations they were in. However, Victoria realized that no one truly understood the perspective of these girls. From talking with them, she learned their lives were not what they had anticipated, she said "*they feel and are like 'what a bummer to come home, I have to…carry the baby, change his diaper…take him to my mother, whatever…I can't go out partying and I can't go out anymore'…the boyfriends change and start like 'ah no' and then they leave them*  *locked up and they go and find another <girl>*." Victoria could sympathize with her peers, but concluded that kind of life was not what she wanted.

Pablo had one of the most enlightening perspectives on life, its purpose and what he had learned from his own life:

" let's say that I think about the past and all of that... how would the future be with them <biological parents>. But I know that I wouldn't have learned the same things that this life has given me, well, the problems and everything like I would have there, because, at this moment I feel like many things in my life... I like to live a lot. I've never thought that before, people that commit suicide and all of that. Let's say that no one really knows what they're thinking about or how... they don't have... like they haven't experienced any of the good things about life, not that it's happened to me, but like, think about life and how... that they don't see life. Well, everything... everything that exists in life, for me, is something, I don't know, incredible. Life, in and of itself seems incredible because, well, I don't have words to describe it... with life I've had so many things happen to me that you say to yourself, "Wow, this exists in this the world," well, I guess life is beautiful."

Later in the interview he added, "to have a good life we have to live through bad situations... good nevertheless. Something bad always has to happen and from the bad things we always learn something. I think that we learn more from the bad things than from the good ones."

#### <u>Ambition</u>

One very noticeable characteristic among Antonia, Victoria and Pablo was their ambition. Many of the other participants talked about having dreams or plans for the future in an abstract sense, while these youth had concrete goals, as well as reasons for their goals. They were also realistic about their lives and understood the environment they were living in, yet still strived for more and were hopeful about what they could achieve in the future. Antonia and Victoria were more detailed than Pablo regarding their plans, but all three had a strong desire to move forward with their lives.

The recent death of Pablo's mother prompted him to take school more seriously. The past year he failed a grade, but recently he had been motivated to work harder in school. Pablo admitted that failing another year would be bad and made the choice to stop working, playing soccer, and practicing martial arts so he could study in the mornings for the Pre-ICEFs college entrance exams. He said that his god mother would say "*that I had to study well, that I had to become someone important and everything because she wants to see me that way, and of course my mother wants to see me that way as well, even though I had many problems with her, but that's what I'm trying to do…I will try to do when I get of school.*" His dream job was clearly grounded in his passion for music; he told us that he wanted to be a DJ or a music producer and study sound engineering, but if that did not pan out, he was also interested in 'systems.' He added for good measure that he wanted "to know a little bit about everything, I've always liked to know…well, a *lot about many things.*" These goals were based on many of his own interests, as well as the motivation he received from loved ones.

Similar to Pablo, Victoria's life experiences were driving her future ambitions. She was detailed about what she wanted from her life, both professionally and personally, thinking beyond school and about her life as a whole. She discussed schooling as well as the desire for a family, and how she would raise them. However, Victoria was adamant about the fact that she needed to be self-sufficient, in addition to fulfilling her dream, "*my dream is...to be a doctor... maybe I will specialize in pediatrics, forensic medicine, or general medicine...get my diploma, get ahead, have my things, like my house, my car, yes and yes I'm going to have a family...my children...I would like to have a family, but after I finish my studies. I know that medicine is long, because medicine is your whole life...but I would like to have, like my house, my car, so not to depend on men because he can say* 

*I gave you the house so I can throw it away.*" Her goals for the future were a reflection of her past and an effort to avoid the same trap that she saw her own family members fall victims to. As mentioned earlier, she also spins off into how she will raise her children, treating her daughters well and warning her sons about the dangers of drugs, clearly these are themes that arose in her life and impacted her greatly.

Antonia had developed a very clear path towards achieving her goals and put thought into each step it required. Like the other two participants, she mentioned personal goals, such as having the money to travel and learn languages, however, she was very realistic about what it would take for her to be successful as an adult. She said that if it were "*for fun*" she would chose to study cosmology, astrophysics or environmental engineering, but Antonia states that those careers in Colombia lead nowhere and "*I don't want to grow up to be no one*." Instead, her plan was to go to school for civil engineering and use her family's construction business as a stepping-stone to ensure she was employed in the future. In the meantime, her immediate goal was to win a grant that Sabaneta presented once a year for a student exchange to Dubai. Antonia's ambition may be driven from watching her mother struggle financially, as well as the financial ups and downs of her family's business. Unlike many of the other participants, she witnessed first-hand how the upper class lived and was determined to get there herself. Consequently, her goals were less focused on her "passions" but more on the standard of living she wanted to attain.

In the instance of these youth, pursuing their future goals and dreams were an approach to processing and re-organizing the negative circumstances of their lives in order to benefit from them in a positive way. Whether the death of a family member sparked the motivation or a strong desire to have a different life than the one they were currently living, Antonia, Victoria, and Pablo were determined to create a better life, and this ambition was an important contributory characteristic of resilience.

# When resilience is not present

Not all youth exhibited resilient characteristics. In order to highlight the differences between resilient youth and other at-risk youth, resilient participants were compared to three other girls with similarly difficult life situations. Aleja, Isabela, and Liliana, like the previous group, were experiencing one or more forms of chronic household conflict, as well as other life stressors. Aleja and Isabela were also living in abusive households. Similar themes were analyzed among these girls to examine their reactions to adversity and how their characteristics differed from the resilient group.

# <u>Perspective</u>

Unlike the resilient group who could see the positive aspects of their life experiences or current circumstances, these three girls never spoke of their lives in such a way. There was no evidence that these girls attributed personal development to their hardships, but rather used those hardships to justify negative outcomes. For example, Liliana and Isabela both describe their interactions with friends and boyfriends as strained after negative experiences with men. Liliana's recent break up taught her not to open herself up to friendships, as friends betrayed her in the past. Additionally, she informed us that after her last relationship, she had learned not to love anyone so quickly. In essence, six months after her relationship, she was still emotionally crippled and what she took away from her break up was to distrust people, she said, "I don't like to confide in anyone… With my mom and my little cousin, yes. And there are times when I tell them something and afterwards I think, 'Oh. I'm so stupid. Why did I tell them that knowing how people treat me?" She even doubts close family relationships.

Similarly, Isabela recounted the story of an older male cousin that tried to sexually abuse her; when she told her mother and grandmother they did not believe her, she said "I

felt like guilty about telling my mom lies and I told her...what Victor wanted to do...that was a problem but, the worst was that I was the one who ended up losing...like I was making everything up." She said that though this occurred when she was younger this experience had negatively influenced her interactions with boys; she described herself as indifferent towards them, "For example, they say something and I don't believe it, understand? Like that 'ah he loves me, no, he wants something from me."

Unlike other participants in this analysis, Aleja lacks any perspective or reflection on the negative events on her life; this theme did not emerge from her interview. While resilient youth could take a holistic view of their lived experiences and explain how it made them stronger individuals, these less resilient youth were not able to see beyond what they were living and going through in that moment.

#### Who am I?

Resilient participants defined themselves and the kinds of people they wanted to be. Pablo said he exhibited self-control under pressure, that he was spiritual, and he loved life. Antonia defined herself as intelligent and someone who always achieves what she works for. Victoria was her grandmother's support, she had resolved to rise above her abusive household circumstances, and to perform well in school. These definitions were shaped by their own self-concept and their strategies for managing adversity; in some instances, a loved one reinforced their definitions. Aleja, Isabela, and Liliana had less positive things to say about themselves, fewer coping strategies to manage the adversity in their lives, and less healthy support systems.

Aleja mentioned that she was the student representative in her social studies class, a leadership role among her peers. Though this role could instill confidence, she did not talk much about it except to say that she spoke on behalf of her classmates and that it justified her regular arguments with the teacher. During the interview, Aleja did not discuss her capabilities or her positive or negative personality traits. Similarly, she had not developed positive coping strategies to rise above the conflict in her home. Aleja was subjected to interfamily abuse both between family members and from her father. However, unlike Pablo and Victoria that escaped abusive households by moving out, Aleja remained entrenched in the conflict and resorted to ceasing all forms of communication with family members, including both her father and brother. Aleja mentioned that when her parents fought, her mother would become physically ill and this was a frequent occurrence. Consequently, she mimicked her mother's behavior when her sister ran away from home. Aleja did not exhibit self-confidence or use her adversity as a motivator to improve her circumstances; rather she reflected the negative behavior she was witnessing in her family.

Isabela on the other hand defined herself by rebelling against anything that other people want her to be. She explained "I don't dress like...with skirts...like all those girls who wear little flowers, I don't like any of that and my mom every time 'look, look, those girls...you should dress like that sometime'... She wants me to do what she wants." Isabela mentioned that recently she was arguing with her mother because she wanted a tattoo. She also had dyed a section of her hair fluorescent pink, wore an eyebrow ring, and had spacers in her ears. The hair and spacers spurred arguments with her mother and Isabela laughed as she recalled her mother's reaction the first time she came home with pink hair, "she almost died." This is not to say that her 'image' was not a positive one because of those traits, however, it is possible that her 'image' was as much based on her personal preferences, as it was an effort to rebel from her mother's standards. Isabela was like Antonia in the sense that she believed she was "not anything for anyone," but her actions and self-image appeared to be more motivated by the desire to oppose her mother.

Isabela believed that others saw her as 'hardened,' but she was proud of being emotionally tough and reinforced this during the interview. She provided three examples of toughness. First, Isabela described a prayer service she attended at a friend's house in which the pastor praying over her told her that she had a "hardened heart." When asked whether she believed him, she described her recent break up with her boyfriend. Initially, he appeared controlling, wanting to know where she was and what she was doing, but then she added, "I don't chase people," and proceeded to describe how he would ask her to call him after school and she would nap instead, upsetting. Her story implied that he wanted attention and she was not willing to provide it. She also explained that as a little girl she was once affectionate with her mother, 'I hugged her, I gave her kisses." Recently, Isabela began calling her aunts by their first names and claimed she became emotionally distant from her mother, her aunts say "let's hope when she dies you don't miss her," yet still Isabela states, "I'm not tender...you know what I mean?... I don't tell anyone that I love them." It is not simply about not being 'girly,' but Isabela has based her personality traits on her cold attitude towards others. As mentioned in the previous section on family cohesion, this may be a result of her lack of emotional closeness with her family, chronic conflicts with her mother, and the feeling of being a burden and problem for her mother. Thus, she has internalized the negative relationships from her home and childhood, and incorporated them into her personality, as well as her interactions with others. Consequently, she was not resilient, but had become hardened and cold.

Liliana was six months post break up with her boyfriend of two years. The break up was the focus of the interview and the relationship had defined her life for two years. Though the break-up provided an avenue to bond with her mother, she explained, "I broke up with my ex—boyfriend about...7 months ago already... since then my mother and I have been super close... because I didn't dedicate any time to anything... to my mom or to anything. And everything... was *with my boyfriend.*" She found herself missing the person she loved and living a completely transformed life, since the person it had once revolved around was not present. It seemed that she was still trying to figure herself out.

Furthermore, Liliana did not exhibit confidence in other life domains. For instance, when she performed poorly in school her mother offered to hire a tutor, but Liliana responded that it was pointless and there was no way she could catch up with her peers. She described her inability to learn stating, "I pay attention to a teacher or something and... I don't understand. It's not that I want to be one of those who says, 'Oh. No. Studying is so boring,' but... there are times that I concentrate and nothing." Unlike Pablo and Antonia who were determined to improve in school or pass that year, Liliana had already set expectations to fail based on her own self-limiting characteristics. Towards the end of Liliana's interview, she was asked what had given her the strength to move forward after the break-up and she responded, "the strength, I don't know. In fact, I don't keep going because of…anything. I don't know what motivates me." Contrary to Liliana, resilient participants had a source of inner strength that motivated them to keep going and face their obstacles. Liliana appeared to be defeated by her experiences, however, Pablo, Antonia, and Victoria only worked harder to rise to the challenges in their lives.

#### Where am I going?

Most participants had goals and dreams, but upon further examination interviews with Aleja, Isabela, and Liliana, the difference between resilient participants and these girls were their lack of ability to look forward, as well as a sense of uncertainty regarding what lie ahead. Liliana faced both of these obstacles when discussing her future. First, she did not know what she wanted after high school stating, "*in grade 11 more than anything they have you do* 

all these projects about what you're going to do ... after college...everyone is very clear on what they want to do and I think about it and no." She claimed she had considered psychology as a future area of study, but still was unsure. Aside from doubts regarding her studies, she mentioned without hesitation that "Sometimes I say, like to fill the void and everything, I would like a son... at the moment I would like it a lot because, well... I'd have that strength, like to... to fight for something." Liliana specified that she did not want a family because she was "over guys" but believed this child would give her a reason to move forward. This was not only contrary to how Victoria and Antonia discussed the issue of teen pregnancy, but also worrisome because it suggested that she was unsure she had a future and that another person would be more worth fighting for. Ironically, she was shifting from a life that revolved around a boyfriend, to one that would revolve around a son; Liliana could not live her life for her.

Aleja did not have clear plans looking forward, and like Liliana, provided an apprehensive reply to the question about her goals and hopes for the future. First, she commented on wanting to study a lot, but then interrupted herself to say that she worried about her mother. A week prior to the interview a relative passed away and this prompted her to think, "*from one moment to the next what comes to my mind, me without her <my mother*>, *like I'm nobody, because the fights in my house*..." What exactly she meant by this statement was unclear, but it was certain that she considered her mother's presence in her future as imperative, perhaps because she was the person currently helping her through her difficult life circumstances. After Aleja's dark thought, she informed us she wanted to be either an airline stewardess or a fashion designer, but that her parents never discussed their hopes for her, "*we almost never talk about that.*"

Contrary to the other two girls, Isabela knew what she wanted in the future, but her strategy for reaching the goal was poorly envisioned and her motivation was less intrinsically

driven. Her dream was to in life was to live alone, with a pretty house that was to her liking. Her rationale was that the sooner she could get out of school, the better her life would become. Isabela believed "school and everything doesn't help anyone for life, like it doesn't help anyone with anything..." Interestingly, the two career paths she considered were graphic design and psychiatry, but said medicine was too hard and required too much schooling, therefore she had ruled it out during the interview. It was interesting that Isabela was set on finishing school because she thought it is worthless, but did not realize that more schooling may be required for her degree. Furthermore, she delayed her goal of finishing school by failing the previous year. Isabela decided her path was one of least resistance, thus she lacked the ambition of resilient participants. It could be argued that Antonia's decision to study civil engineering instead of cosmology<sup>2</sup> was a similar choice, however, Antonia was realistic about her ability to pursue the career she wanted, and since her real dream was to be successful, she chose a path that would get her to her definition of success, not the path of least resistance. Also contrary to Isabela, resilient participants valued the knowledge they were gaining in school, as well as learning in general, and the value it held for their futures. Pablo stated that he wanted to know a lot about many things, Victoria had a dream to be a pediatrician and therefore worked hard in school, while Antonia valued reading books outside of class and was aiming to win a municipality award for a student exchange program. For these youth, ambition and schooling was not simply about getting ahead, but it was an activity they enjoyed.

### Word to the wise: revisited

Although these participants were not resilient, they still had life lessons to share. However, their messages and epiphanies regarding life lacked the positive outlook that

 $<sup>^{2}</sup>$  The branch of astronomy that deals with the general structure and evolution of the universe.

resilient youth demonstrated during interviews. For example, after Liliana lost the boy she loved and consequently all the friends she made through him, she looked back at a the experience and stated "*you shouldn't just give yourself away to someone so easily*." Though this was an important lesson and something she had to learn the hard way, her perspective on her past was very much in contrast to Pablo, who stated that all the problems he faced growing up made him who he was today and a braver person. Liliana considered her relationship as both the happiest and worst time of her life. Nonetheless, she was unable to see how any aspect of her cheating boyfriend or hurtful break-up could have positive repercussions in her life.

Lastly, Isabela offered an interesting idea to understanding the difficulties adolescents faced when she explained, "I think that we are, it is like a test, like yeah it is a stage...a test. One is presented with a lot of things, it's in part drugs, more than anything.... and ... we're not well heard. For example here in the high school...<if> I position myself against a professor...everyone knows...I'm going to be the one who loses." There is much to be said about her perspectives on youth and this difficult time in their lives. Her comments pointed to the fact that youth were struggling with many difficult choices and temptations. Similarly, youth did not have a respected voice among adults. Yet, there was a sense of resignation in her statement; she believed that young people would always lose those battles and there wasn't much they could do about it.

#### Chapter 4: Discussion

This study utilizes a mixed methods approach to examine family-level risk and protective factors for depression and suicidal behavior among adolescents in Medellín. The use of quantitative methods to inform the development of qualitative life history interview guides served to contextualize the associations presented in logistic regression models, as well as create a unique lens to understand how these factors affected the lives of adolescents. To the researcher's knowledge, this is the first study of its kind to take place in Medellín, among an adolescent population, and to focus on these health outcomes. Importantly, it provides an opportunity to explore how quantitative and qualitative data can inform one another to strengthen the validity of research findings, advance future research, and community health interventions.

# Adversity and Family

Findings from the secondary analysis of 2009 Medellín Adolescent Mental Health Study (2009 MAMHS) demonstrate high prevalence of several risk factors among the adolescent population. Over half of survey respondents report experiencing eight or more stressful events in their lifetime, moderate to severe conduct disorder, academic problems, and chronic PTSD; all of which are significant predictors of depression and suicide outcomes in the analysis. Generally, the participant life history interviews support these statistics, as almost all youth recount multiple stressful, and often co-occurring, events in their recent past. This accumulation of events and stressful situations is conceptualized as adversity. Dysfunctional family dynamics is the most salient contributor to the chronic adversity facing participants.

Participants living in stressful home environments allude to physical and emotional abuse from family members, the poor psychological well-being of their parents, and negative family interactions that encompassed their daily lives. Stressful family dynamics are not the only factor underlying adversity, but they seemed to exert the greatest influence.

Additionally, the extreme duress in their homes tends to affect other life domains, especially school performance. The repercussions of family dysfunction are varied, however; among the five participants facing chronic adversity, the topic of suicide emerges in three interviews, with two of these three participants admitting to having attempted suicide. These two confessions, as well as the one casual mention of suicide, arise without any questions or probing on mental health. This finding aligns the 2009 MAMHS's high prevalence of suicide ideation, plans, and attempts, however, participant life histories contextualize the circumstances under which these participants attempted suicide; strengthening the argument that family environment is a major contributor for suicidal behavior.<sup>87</sup>

The emergence of resilient youth in this group is an important element of this study. An in-depth examination of these youth's interviews permits the exploration and identification of personal characteristics through their thought processes and their stories; characteristics that could be fostered among at-risk youth to create intrinsic protective mechanisms against depression and suicidal behavior. Youth who develop positive coping strategies to deal with their adversity generally have more positive life stories to share, however resilient youth present more vivid characteristics related to their self-concept and positive perspectives surrounding their past, present, and future. They are confident in their abilities to deal with the obstacles confronting them, acknowledging what was in their best interest and showing a determination to persevere. However, most inspirational is resilient youths' assessment of their past and present circumstances and the realization that their adversity shaped them into strong and ambitious people. They process and re-organize their negative circumstances to develop a forward looking plan for their lives, full of hopes, dreams, and change for their future.

Qualitative findings align with other studies examining resilience among at-risk populations,<sup>88-90</sup> with slight differences. For instance, Klevens and colleagues interviewed young Colombian men and found that those who were less exposed to serious life stress and perceived stronger support from their families, narrated their past histories with greater detail and affect, and perceive greater degrees of control in their lives.<sup>89</sup> Contrary to this finding, two participants demonstrating resilient characteristics had the most challenging family circumstances of the entire group and had experienced more severe stressful life events, in addition to physical and emotional abuse. For all three participants, strong family support is not as essential as having one strong family advocate, be it a grandparent, godparent, or brother; none of them receive consistent or strong support from a parent. Lastly, this examination of resilience among adolescents touches on Rutter suggestions for future research on resilience. Although this is an adolescent population, it examines resilience in respect to their "life-span" and discusses their coping mechanisms for stress.<sup>91</sup>

### We are what we measure

From a measurement perspective, results from this study carry important implications for future research on family and other protective factors related to depression and suicide. An unanticipated outcome of this study was the capability to compare survey questions and scales used in the 2009 MAMHS to the descriptions of these factors in adolescent's lives and understand how surveys might be altered to improve the validity of findings for the context of Medellin. Relevant to this study is the need to re-frame how we measure family-level risk and protective factors, as well as religiosity.

# Family structure, family cohesion, and support systems

In quantitative analysis, bivariate associations are protective for depression and suicidal behavior outcomes. However, once the data is gender stratified, the effect is only present among females, and once multivariate analysis was conducted it is only marginally protective against depression for females; On the other hand, family cohesion and family and social networks remain protective in regression models. Again, family cohesion proves more protective for females than males, while family and social support networks are equally beneficial. This gender difference may be a result of the cultural expectations of girls and boys in Medellín and their role in the family. For instance, girls may receive more supervision from parents and family<sup>92</sup> or have less freedom to leave the house. Though increased parental supervision has been shown to be protective against risky behavior<sup>14,51,93,94</sup> and exposure to violence,<sup>51,92</sup> if girls are confined to a toxic home environment, the negative and positive effects of family-level risk factors will be more pronounced among girls than boys.

The qualitative data support these findings in multiple ways. First, related to supervision and time spent in the home, almost every male participant plays on an organized soccer team every day after school. Between school and soccer, boys spend a large portion of their day outside of the home. Conversely, there are few girls involved in any organized extracurricular activities. Though girls have hobbies or participate in less organized activities, at the time of the interviews only one female participant is involved in a regularly scheduled and organized pastime, subsequently, the female 'space' is in the home.

Details regarding living situations and family interactions are also expanded upon during interviews. In this low-income area, family structures and interactions are complex; with many participants living with extended family members or in close proximity to them. Therefore, regardless of family structure, most participants spend time with their extended family. Furthermore, it is important to highlight that the poor economic situations of these families often leads to the pooling of resources by extended families. This strategy is necessary to survive and frequently prioritized over improving family dynamics, via separation or divorce. Thus, family structure is no indication of healthy households or the factors that mattered most, such as cohesion or support.

Family and social support becomes an important predictor for suicide plans and attempts in the logistic regression models, but understanding what support means, from an adolescent perspective, is equally important as having the system in place. Participant interviews provide an insightful look at their concepts of support and trust, features inevitably tied to "closeness" with family members even if "family cohesion" is not present. What matters most to participants is having an advocate who treats them as equals and who they can turn to for emotional and practical guidance without judgment. Another important element is reciprocity in the relationship. When the adult reciprocates trust, it legitimizes the adolescent's sense of 'equality' and confirms that support originates from a genuine and not authoritative position. Consequently, "closeness" with a family member or adult may matter more than family cohesion, and demonstrate the extent of support that youth receive. Restructuring the measurement of family and social support beyond its simple presence may provide useful information for research among this population.

#### Religiosity

"Spirituality" as it is measured in this population may represent an oversimplification of how youth view religion and their relationship with God, while inadequately demonstrating the strength and protective nature of religion for depression and suicidal behavior. In a catholic country where religion is deeply engrained in their culture, using *"belief in God"* as an indicator of religiosity (See appendix 4) may not reflect youths' actual beliefs or level of religiosity, but rather their conformation to social norms. However, participants who meaningfully integrate religion into their lives find comfort in their beliefs. Similarly, those who engage in religious activities on their own accord and genuinely value those activities have a stronger sense of faith. Again, questions that measure these

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components of religiosity could be more useful in quantifying the protective nature of religion.

# Limitations

This study is subject to limitations that should be considered when interpreting results. First, data from the 2009 MAMHS is cross sectional, therefore, no assumptions can be made regarding causation between the risk factors presented and depression and suicide outcomes. Survey results are based on self-reported data, thus could be subject to social desirability or reporting bias. Additionally, this dataset contains no information on parent education, income, or other general SES characteristics of respondents. To mitigate this problem, 'school type' is used as a proxy indicator for high or low SES among respondents, as youth in Medellín public schools are typically from stratum 1 through 3.<sup>81</sup> Beyond the fact that more detailed SES information could be useful for future statistical analysis, collecting this data could be immensely valuable in the future. The Colombian SES neighborhood stratification system would create an easily accessible mechanism for targeting neighborhoods at the most risk for depression and suicidal behavior.<sup>82</sup> Given these limitations, this was the first instance of a multivariate analysis of this dataset, providing useful results for the formative nature of this study.

One original objective in this study was to compare themes by gender among interview participants. Unfortunately, due to the lack of rich interview data from male participants, the saturation of themes among boys was not possible, and the comparison proved difficult. However, the few data-rich interviews collected from male participants are extremely insightful and contribute to understanding youths' perspectives. Young male participants were generally less talkative during interviews. Future qualitative research projects should explore other methods and activities to engage boys in conversation; this may require focus group discussions that build on group dynamics or multiple in-depth interviews with each participant in order to gain rapport and trust.

The purpose of this study was to conduct formative research that could be used to inform future research and interventions. Though participant opinions and life histories cannot be generalized to the greater population, the broader concepts of family closeness, support, trust, religion, and resilience should be acknowledged as applicable to future research in Medellín.

#### **Research Implications and Recommendations**

Previous research in Medellín and Colombia establishes a clear mental health burden.<sup>23,25,29,68,95</sup> Given the high rates of violence and the high prevalence of conduct and mood disorders among youth in this municipality,<sup>29</sup> there are clear avenues in which to intervene. However, translational research should be prioritized in order to prevent future mental health burden and building from the data we already have. Researchers should consider the steps required to adapt existing evidence-based interventions for Medellín atrisk youth. This study took one step towards that objective by understanding youths' perspectives regarding several risk and protective factors, as well as identifying resilient characteristics; concepts that could be incorporated into future interventions.

All future interventions and research should account for the low-resource environment of these neighborhoods, the importance of building on existing infrastructure, the implementation of low-cost interventions, and how to incorporate youth's family members into interventions. The school setting presents itself as a straightforward starting point, as it offers a feasible option for both participant recruitment and program implementation;, adolescents and their parents may already consider schools a safe space. At the same time, many public schools are dealing with over-crowding, and budget restrictions that do not permit building additional space or hiring instructors.<sup>81</sup> Therefore, supplementary resources will be required beyond those of current school staff.

Another potential setting to implement interventions, as well as additional qualitative and formative research, is the soccer field. Soccer practice may be a place where social norms and expectations are formed among young boys in Medellín, thus could be an important venue for understanding norms, as well as initiating change. Sports and soccer have been used in programs aimed at improving reproductive health among men<sup>96</sup> and increasing condom use for Latino men in the U.S,<sup>96</sup> thus, may be logical starting points for mental health interventions as well.

Programs that strengthen the relationships between youth and their parents or other significant adults in their lives would be most beneficial in this population, especially given that family conflict is a major source of stress for these youth. Family-strengthening approaches in interventions have demonstrated an improvement in parent-child relationships and adolescent problem behaviors.<sup>97</sup> However, attendance barriers have been documented, and there may be additional barriers in the Medellín context, especially in one-parent households, or for those living in families where one parent provides for multiple extended family members. Mentorship programs could be a suitable and low-cost alternative to involving parents, as they have revealed positive outcomes for high-risk and disadvantaged youth<sup>98</sup> and may foster important trustworthy relationships for adolescents. Similarly, researchers should focus on programs that cultivate protective personal characteristics for youth and mental health, such as self-esteem, self-efficacy, stress management, and future aspiration development. Resources for obtaining proven evidence-based programs already exist in databases, such as NREPP, SAMHSA's National Registry of

Evidence-based Programs and Practices and within organizations like Wyman, however formative research to adapt these interventions is still required.

# Conclusion

Moving from research to practice is a key step for the Medellín public health community. If adolescent mental health is to be improved researchers need to progress from measurement of mental health burden to the translation of their findings into concrete outreach programs aimed at those youth most at-risk. Researchers in Medellín should consider the following broad research phases as next-steps:

- Research institutions establish collaborative relationships with CBOs that are currently working with at-risk youth and are closely tied to school systems and communities, like the Envigado Mental Health Center.
- Investigate evidence-based mental health programs that would most adaptable for Medellín adolescents and perform formative research to initiate the process.
- 3. Compile a list of agencies and CBOs that work with at-risk youth in Medellín and other major cities in Colombia, like Bogotá or Cali.
- 4. Evaluate existing Colombian urban youth programs to determine the elements that are transferable to Medellín; understand the elements that are valuable and why.
- Integrate successful components of current Colombian youth programs into Medellín adaptations of evidence-based programs.
- Identify neighborhoods with the most need for these programs and begin implementation in the public schools.
- 7. Monitor and evaluate the effectiveness of pilot programs in this setting and expand to other communities in need.

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# Appendices

# Appendix 1: IRB Approval Letter



Institutional Review Board

June 7, 2011

Jeanne L. Long Rollins School of Public Health

#### RE: Determination: No IRB Review Required Major Depression and Suicide Among Adolescents in Colombia: Formative Research to Adapt Evidence-Based Interventions PI: Jeanne L. Long

Dear Ms. Long:

Thank you for requesting a determination from our office about the above-referenced project. Based on our review of the materials you provided, we have determined that it does not require IRB review because it does not meet the definition(s) of "research" involving "human subjects" or the definition of "clinical investigation" as set forth in Emory policies and procedures and federal rules, if applicable.

45 CFR Section 46.102(d) defines "Research" as follows:

Research means a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge. Activities which meet this definition constitute research for purposes of this policy, whether or not they are conducted or supported under a program which is considered research for other purposes.

Based on the information included in the submission, the purpose of this project is to provide quantitative and qualitative data about youth depression and suicide in Colombia. The results will be shared with the Colombian Ministry of Health and community based organizations in Medellin, Colombia for the purposes of informing policy for health interventions and designing public health programs for adolescents. This study's aims may best be identified as public health. As such, the IRB has determined that it does not constitute "Research" under the foregoing definition.

This determination could be affected by substantive changes in the study design, including any decision to seek to draw more generalizable conclusions from your work. If the project changes in any substantive way, please contact our office for clarification.

Thank you for consulting the IRB.

Sincerely,

Tom Penna, MTS IRB Analyst Assistant *This letter has been digitally signed* 

Preguntas generales		
Cuéntame un poco de ti	•	Edad Grado escuela
¿Por cuánto tiempo has asistido esta escuela?	٠	Escuela anterior
¿Qué piensas de la escuela?	•	sujeto favorito algo que a usted le gusta y que le cae mal
¿Participas en alguna actividad extra-curricular?	•	Deportes, arte, música, idiomas Si no, que le gustaría hacer Tiempo libre
¿En este momento dónde vives?	•	Vecinos amiguitos en su barrio/unidad siempre has vivido allá Si mudó, como fue la experiencia y el cambio
Familia		
¿Cómo es tu familia?	•	¿Con quién vive? ¿Mayor/menor de los hijos?
¿Cómo son las relaciones en tu familia?	•	¿se llevan bien?
¿Con cuál miembro de la familia te sientes más cercano?	٠	¿Relaciones con la madre o el padre?
¿Cómo fueron sus relaciones con miembros de la familiar cuando era menor en comparación con ahora?	•	¿Cambiaron las relaciones?
¿Puedes darme unos ejemplos de actividades que hacen juntos en la familia?	•	Tiempo libre Durante el año vs la semana la última vez que ustedes hicieron algo divertido o especial
¿Hasta este punto, podrías decir que ha sido un tiempo o época más agradable de su vida?	٠	memorias buenas

Appendix 2: In-depth Interview Guide (Spanish

Me gustaría que me contaras qué harías en la siguiente situación:
Cierto día al llegar del colegio, tu mama se ve triste o angustiada. Esta situación continúa
por varias semanas y además te das cuenta de que en los últimos días está siendo

maltratada físicamente o emocionalmente por alguien en tu familia. Tú le preguntas y ella dice que no ha pasado nada, que todo está bien.

¿Cómo reaccionarías ante esta situación?

¿Cómo crees que esta situación afectaría tu vida?

• *tu vida*...en el colegio, la casa, con tus amigos

Eventos estresantes y el apoyo		
¿Desde tu opinión y lo que has visto con amigos o familia o en tu experiencia propia, cuáles son las dificultades más comunes para jóvenes?	٠	Escuela, barrio, equipo de fútbol
¿A ti, qué te enoja o te molesta más?	•	Escuela, amiguitos, familia unas cosas que le dan más estrés que otras
¿Si tuvieras un amigo con una dificultad muy grande, que le aconsejaría para superar las emociones malucas?		
¿Cuando algo le moleste o tiene dificultades, a quién le acude para buscar apoyo? ¿Por qué?	•	cualidades de tal persona
Otra vez me gustaría que me contaras qué harías en la siguiente situación: Estas viajando en el bus del colegio y otro/a joven comienza a decirte insultos y cosas para ofenderte. Esta situación continúa por varias semanas hasta que se empeora, hasta el punto de decirte que le des tu dinero; si NO lo haces, te enfrentaría al bajarte del bus. ¿Cómo reaccionarías ante esta situación? ¿Cómo crees que esta situación afectaría <i>tu vida</i> ?	•	<i>Tu vida…</i> en el colegio, la casa, o amigos
Cuénteme de una situación real y muy problemática que tuviste en el último año	•	¿por qué sucedió? Emociones y como las manejó
¿Al fin, como la resolvió?	•	Confianza o apoyo Familia
¿Podrías darme un ejemplo de alguna vez que buscaste apoyo de alguien en su familia para una dificultad que tuviste?	•	por acaso que el joven no mencione sus padres durante su historia de situación estresante

Espiritualidad	
¿Cómo describirías tus creencias religiosas?	
¿Me puedes guiar un poco por tus experiencias religiosas o espirituales?	<ul><li>eventos y experiencias importantes</li><li>la familia va a misa juntos</li><li>cambios</li></ul>
¿Qué impacto ha tenido tus creencias o fe en su vida?	¿En qué circunstancias?
Fin	
Revisa al cuadro a ver que la información es correcto y que no hay nada más que agregar ¿Tienes algo más que quieres agregar?	Clarificar detalles o profundizar en temas si sea necesario
¿Cuáles metas o esperanzas tienes para sí misma en el futuro?	<ul><li>Esperanzas que tiene la familia</li><li>cualidades que le ayuda cumplir sus metas</li></ul>
¿Después de la entrevista, cómo sientes?	

Appen	dix 3.	Inter	view I	Life .	History	Matrix

Edad	Familia	Escuela	Amistades	Religión	Actividades	Comunidad	Otro
11	nació mi hermanita +						
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13							
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15							
16							
17							

# Appendix 4: 2009 Medellín Adolescent Mental Health Study survey Questions (Spanish)

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L											P O	b. Menosfeliz quela n			Mucho peor o			
Instruction								М	farca Corr	ecta		c. Tan feliz como la ma		1	Un poco peor	que a a mayo	ria	
* Liene completam * S comete un erro									•		0				Igual			
seleccionada. * Por favor no raye	el formula	rio nì ha	aga dibu						1 2 3		0	d. Másfellz que la may e. Uno de los mástelio			Un poco mejo Mucho mejor			
* Escriba los núme		-										or favor responda teni	endo en cuenta D	URANTEELU	ÚLTIMO	g	NO	i
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O c. Madre y su pa			1 o + abu				Mascota		BINICIO			nolestado o hecho darlo a	los animales. V10	)		0	0	
O d. Padre y su par			Otrosfam									stado muy malgeniado.				0	0	
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2. ¿Quál es 3. ¿Quál es su sexo?; en su	familia?: (l				e usted?		1- month	<u> </u>	ido curs		e.Leh	a dado rabia con facilidad				0	0	
O Hombre herm				Г			F 18	N	- N	9 O 11		echo cosas sin pensar en l				0	0	
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5a. Zona donde	5b. Si viv		ona rural								17. P	or favor responda teni	endo en cuenta E	ÚL IMO A	ÑO	SI	NO	1
vive: O Urbana	O Altav				San Ant		e Prado	0	Santa E	Elena	a. Ha t	enido peleas con sus com	pañeros.			0	0	1
O Rural	O Palm				San Cri	stóbal					b. Ha	lañado intencionalmente	cosas de otras perso	nas.		0	0	7
<ol> <li>Con relación a s mas aproximada.</li> </ol>	su vida fam	iliar, se	nale la c	opción	Nun			unas			c Se h	a sentido inquieto en la m	isma posición. (Inest	able)		0	0	1
mas aproximada. a. Nos gusta pasar ju	intre el tierne	vo libre			C			0085	-cuencia		d. Ha	obado algo.				0	0	1
b. Cada persona exp			e desea.					<u>0</u>	0	8	e. Se h	a sentido frustrado con fa	dlidad.			0	õ	1
c. Nos ayudamos uno					Č			ŏ	ŏ	õ	f. Se h	a sentido triste con fre:ue	ncia.			ŏ	ŏ	1
d. Las ideas de los hij	josson tenid	as en cue	enta para	li soluc	<sup>sión</sup> C		0	0	0	0	g. Ha e	stado nervioso.				0	õ	1
de problemas e. Quando surgen pro	oblemasnos	unimos	para reso	lverios.	c		0	0	0	0	1	entido miedo con facilda	d.			ŏ	ŏ	1
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b. Niños maltratados (con palabras).	verbaiment	°	0		jeres mall Jeres abus				Ĭ			a sido difícil hacer amigos				0	Õ	1
c. Niños abusados se	xualmente.	0	0	d. Hor	mbres ma	Itratado	os físican	nente.	0	0		que otras personas se ha		ted.		õ	ŏ	1
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O Agresiva y viole	enta				) Están												todos	-
O Respetuosa y p O Permisiva, cada			ouiero						or cracuos			sumen alcohol.			0	0	0	-
ontradictoria		io que (	quiere		🕽 Uno d	e los d	os falle	ció				icipan en peleas.			0	0	0	-
us padres vive		O si	O No	0	Nunca	a han v	ivido ju	ntos				den drogas.			0	0	0	-
S su respuesta es S	vaya a la pre	gunta 14	-	10	) Está d	lesapa	recido(	a)				en trampa en los exámene	es en la escuela o el c	olegio.	0	0	0	4
respuesta	esNO contin	nue.									e. Les	lisguntan a sus padres			0	0	0	
											<u> </u>							а,

41289

20. Quantos de sus amigos:	Ningun		unos	Casi todos	respuesta que considere mas adecuada	Deasional- mente	Casi slempre	Semp
f. Tienen problemas con las autoridades.	0	_ (	<b>D</b>	0	a. Estoy de mai humor todo el tiempo.	0	0	C
g. Son mayores que usted.	0	(	<b>D</b>	0	b. Me gusta provocar peleas.	0	0	0
h. Se aburren en las fiestas donde no hay trago.	0	(	o	0	c. Me enfurezco cuando se rien de mi. O	0	0	0
I. Roban en almacenes.	0	(	o 🗌	0	d. Creo que tengo mucha padenda. O	0	0	0
. Pertenecen a una pandilla.	0	(	o	0	e. Creo que se justifica recurrir a la violencia. O	0	0	
k. Consumen licor hasta emborracharse.	0	(	O C	0	f. Quando otros me alzan lavoz yo la alzo más fuerte. O	0	0	0
I. Fuman cigarrillos.	0	(	o 🗌	0	g. Quando alguien insulta a ml familia se mete en problemas. O	0	0	0
m. Usan marihuana.	0	(	0	0	26. Por favor lea cada frase y llene el círculo en la respuesta que con	sidere	a	NC
n. Usan drogas como cocaina, pastillas y otras.	0	(	Ó	0	mas adecuada. ALGUNA VEZ EN SU VIDA		3	
21. Por favor responda teniendo en cuenta ELÚLTIMO AÑO		ación			a. ¿Ha portado un cuchilio o una navaja en la calle?		0	
al LICOR	o contes		a	NO	b. ¿Ha portado un arma de fuego en la calle?		0	
a. Ha sentido deseo intenso de usar lloor.		-	0	0	c. "Ha portado un cuchillo o navaja en el colegio?		0	
b. Ha aumentado la cantidad de licor para sentir el mismo efecto.			Õ	Õ	d. ¿Ha portado un arma de fuego en el colegio?		0	
c. Ha sentido que no ha podido controlar el uso de licor.			ŏ	ŏ	e. ¿Ha tenido una pelea con agresión física?		0	
d. Se ha sentido atrapado por el licor.			ŏ	ŏ	f. ¿Ha sido herído en una pelea?		0	$\downarrow c$
e. Ha dejado de participaren actividades por haber gastado mucho e	en licor.		ŏ	ŏ	g. ¿Ha tenido que ser atendido por el médico debido a una pelea?		0	C
f. Ha pasado por alto las reglas por estar bajo efecto de licor.			ŏ	ŏ	27. Por favor lea cada frase y llene el círculo en la respuesta que con	nsidere	9	N
			ŏ	ŏ	masadecuada. EN EL ÚLTIMO AÑO HA TENIDO EVENTOS			-
g. Tuvo un accidente de transito bajo efecto de licor.			0	ö	a. Cambios en la escuela o casa.		0	
h. Ha herido a algulen bajo el efecto de bebidas alcoholicas.					b. Enfermedad seria o accidentes.		0	
. Ha peleado debido al uso de llcor.			<u>o</u>	0	c. Diffcultades económicas		0	
j. Ha tenido problemas para llevarse blen con algún anigo debido al	licor.		<u>o</u>	<u>0</u>	d. Separación de los padres.		0	
k, Ha tenido dificultad para decir no cuando le ofrecer licor.			0	0	e. Discusiones de los padres.		0	
22. Por favor responda teniendo en cuenta ELÚLTIMO AÑO			g	NO	f. Enfermedad o accidente de padres o hermanos(as).		0	0
preguntas se refieren al uso de MARIHUANA U OTRA DROC	GA		<u> </u>	110	g. Enfermedad o accidente de abuelos(as).		0	10
a. Ha sentido deseo Intenso de usar drogas.			0	0	h. Muerte de padres, hermanos(as) o abuelos(as).		0	0
b. Ha aumentado la cantidad de droga para sentir el mismo efecto.			0	0	i. Muerte de otro familiar o amigo(a).		Ō	
c. Ha sentido que no ha podido controlar el uso de droga.			0	0	. Dificultades o conflicto con un miembro de la familia.		Õ	Ċ
d. Se ha sentido atrapado por la droga.			Õ	Ō	k. Rompimiento con novio(a).		ŏ	t
e. Ha dejado de participaren actividades por haber gastado mucho e	en drocas.		ŏ	ŏ	I. Problemas legales o con la policía.		ŏ	Ť
f. Ha pasado por alto las regias por estar bajo efecto de drogas.		-	ŏ	ŏ			ŏ	t
g. Tuvo un accidente de transito bajo efecto de droga.			ŏ	ŏ	m. Robo de pertenencias personales.			-
h. Ha herido a alguien bajo el efecto de droga.			ŏ	ŏ	n. Fracaso en la escuela.		0	+
			ŏ	ŏ	o. Usted o su pareja ha estado en embarazo.		0	4
la Ha peleado debido al uso de droga.	las droppe		-		p. Abuso físico.		0	4
j. Ha tenido problemas para llevarse bien con algún anigo debido a l	las drogas		0	<u>o</u>	q. Abuso sexual.		0	$\downarrow$
k. Ha tenido dificultad para decir no cuando le ofrecer droga.			0	0	r. Perdida o muerte de mascota.		0	
23. Por favor lea cada frase y llene el círculo en la respuesta que considere mas adecuada	Nunca	Ocasional mente	- Casi siempre	Sempre	s Otro problema serio.		0	
a. Quando juego me pongo impaciente esperando mi lumo.	0	0	0	0	<ol> <li>28. Cada una de las siguientes preguntas se refiere a sucesos específicos como los señalados en la pregunta 27, que usted puede</li> </ol>	.   :	s I	NO
	ŏ	ŏ	ŏ	ŏ	haber experimentado <u>en cualquier momento de su vida</u> E p		stel	
b. Puedo estar sentado por mucho tiempo.					a. Ha tenido alguna vez imigenes, recuerdos o pensamentos dolorosos del		-	~
c. Quando estoy furioso tiro las puertas u otras cosas.	<u>o</u>	<u> </u>	<u>o</u>	0	acontecimiento. ? CVC1-1 ?		2	0
d. Tengo dificultad en seguir instrucciones.	<u>o</u>	<u> </u>	<u>o</u>	<u>o</u>	b. Ha tenido alguna vez pesadillas sobre el acontecimiento.	_ (	o	0
	0	0	0	0	c. Ha sentido que el acontecimiento estaba ocurriendo de nuevo, como si lo	(	o 🗌	0
e. Me gusta hacer cosas peligrosas.	<u> </u>				and a frame of the state		0	ŏ
e. Me gusta hacer cosas peligrosas. f. Me gusta tener toda dase de experiencias, aun cuardo	0	0	0	0	estuviera reviviendo.		J ⊢	-
e. Me gusta hacer cosas peligrosas. f. Me gusta tener toda dase de experiencias, aun cuando sepa que me puede succér algo mailo.	0				d. Hay cosas que se lo hanhecho recordar.			0
e. Me gusta hacer cosas peligrosas. f. Me gusta tener toda dase de experiencias, aun cuando sepa que me puede succiór algo mailo. g. Prefiero los amigos que rumbean mucho.	0	0	0	0	d. Hay cosas que se lo hanhecho recordar.		<b>O</b>   .	
e. Me gusta hacer cosas peligrosas. f. Me gusta tener toda dase de experiencias, aun cuando sepa que me puede succiór algo mailo. g. Prefiero los amigos que rumbean mucho. h. Pienso muy bien antesde hacer algo.	000	0	0	00	d. Hay cosas que se lo hanhecho recordar. e. Ha tenido sensaciones físicas por recuerdos del acorrecimiento. (Como			0
e. Me gusta hacer cosas peligrosas. f. Me gusta tener toda dase de experiencias, aun cuando sepa que me puede succiór algo mailo. g. Prefiero los amigos que rumbean mucho.	0	0	0	0	d. Hay cosas que se lo hanhecho recordar. e. Ha tenido sensaciones físicas por recuerdos del acorrecimiento. (Como sudoración, temblores, mareos, náuseas, diarrea o palpitaciones).		0	-
e. Me gusta hacer cosas peligrosas. f. Me gusta tener toda dase de experiencias, aun cuando sepa que me puede succiór algo mailo. g. Prefiero los amigos que rumbean mucho. h. Pienso muy bien antesde hacer algo.	0000	0000	0000	000	d. Hay cosasque se lo hanhecho recordar.     e. Ha tenido sensaciones físicas por recuerdos del acortecimiento. (Como sudoración, temblores, mareos, náuseas, díarrea o palpitaciones).     f. Ha estado evitando pensimientos o sentimientos sobre el acontecimiento.     g. Ha estado evitando hacer cosas o estar en situaciones que le recordaran el acontecimiento.	( (	0 0	0
e. Me gusta hacer cosas peligrosas. f. Me gusta tener toda dase de experiencias, aun cuasdo sepa que me puede succior algo malo. g. Prefiero los amigos que rumbean mucho. h. Pienso muy bien antesde hacer algo. i. Prefiero ver programasde aspectos violentos en la T.V. 24. Por favor lea cada frase y llene el círculo en la	0000	0	0000	00	d. Hay cosasque se lo hanhecho recordar.     e. Ha tenido sensaciones físicas por recuerdos del acortecimiento. (Como sudoración, temblores, mareos, náuseas, díarrea o palpitaciones).     f. Ha estado evitando pensimientos o sentimientos sobre el acontecimiento.     g. Ha estado evitando hacer cosas o estar en situaciones que le recordaran el acontecimiento.	( (	0	-
e. Me gusta hacer cosaspeligrosas. f. Me gusta tener toda dase de experiencias, aun cuando sepa que me puede sucedor algo malo. g. Prefiero los amigos que rumbean mucho. h. Pienso muy bien antesde hacer algo. i. Prefiero ver programasde aspectos violentos en la T.V. 24. Por favor lea cada frase y llene el círculo en la respuesta que considere mas adecuada	O O O Nunca	O O Ocasional mente	O O O I. Casi siempre	O O O Sempre	d. Hay cosasque se lo hanhecho recordar.     e. Ha tenido sensaciones físicas por recuerdos del acortecimiento. (Como sudoración, temblores, mareos, náuseas, díarrea o palpitaciones).     f. Ha estado evitando pensimientos o sentimientos sobre el acontecimiento.     g. Ha estado evitando hacer cosas o estar en situaciones que le recordaran el acontecimiento.			000
e. Me gusta hacer cosaspeligrosas. f. Me gusta tener toda dase de experiencias, aun cuando sepa que me puede succior algo mailo. g. Prefiero los amigos que rumbean mucho. h. Pienso muy bien antesde hacer algo. i. Prefiero ver programasde aspectos violentos en la T.V. 24. Por favor lea cada frase y llene el círculo en la	0 0 0 Nunca	O O O Casional mente	O O O I- Casi siempre	O O Sempre O O	d. Hay cosasque se lo hanhecho recordar.     e. Ha tenido sensaciones físicas por recuerdos del acorrecimiento. (Como sudoración, temblores, marcos, náuseas, diarrae o palpitaciones).     f. Ha estado evitando pensimientos osentimientos sobre el acortecimiento.     g. Ha estado evitando hacer cosas o estar en situaciones que le recordaran el acontecimiento.     h. Ha sido incapaz de recordar partes importantes del acontecimiento.		0	0
e. Me gusta hacor cosas peligrosas. f. Me gusta tener toda dase de experiendas, aun cuando sepa que me puede succér algo malo. g. Prefiero los amigos que rumbean mucho. h. Pienso muy bien antesde hacar algo. i. Prefiero ver programasde aspectos violentosen la T.V. 24. Por favor lea cada frase y llene el círculo en la respuesta que considere mas adecuada a. Cuando hay una pelea sempre trato de detenería. b. Sin que nadle mo to pida sudo a recoger y ordenarios objetos que se han caldo o están en desorden.	0 0 0 0 Nunca 0 0	O O Ccasional merite O O	O O O I- Casi siempre O O	O O Sempre O O	d. Hay cosasque se lo hanhecho recordar.     e. Ha tenido sensaciones físicas por recuerdos del acorrecimiento. (Como sudoración, tembiores, marcos, náuseas, diarrea o palpitaciones).     f. Ha estado evitando penamientos o sentimientos sobre el acortecimiento.     g. Ha estado evitando hacer cosas o estar en situaciones que le recordaran el acortecimiento.     h. Ha sido incapaz de recoxiar partes Importantes del acontecimiento.     I. Ha tenido dificultad para disfrutar de las cosas.			000
e. Me gusta hacor cosas poligrosas. f. Me gusta tener toda dase de experiencias, aun cuando sepa que me puede succer algo malo. g. Prefiero los amigos que rumbean mucho. h. Pienso muy bien antesde hacer algo. i. Prefiero ver programasde aspectos violentos en la T.V. 24. Por favor lea cada frase y llene el círculo en la respuesta que considere mas adecuada a. Cuando hay una pelea sempre trato de detenería. b. Sin que nadle me lo picia yudo a recoger y ordenarlos objetos que se han calcio o están en desorder. a. Trato de ayudar a las personas cuando lo necesitan.	0 0 0 0 0 0 0 0 0	O Ocasional mente O O	O O O Siempre O O O	Sempre O, d a	d. Hay cosasque se lo hanhecho recordar.     e. Ha tenido sensaciones físicas por recuerdos del acontecimiento. (Como sudoración, tembiores, marcos, náuseas, diarrea o palpitaciones).     f. Ha estado evitando penamientos o sentimientos sobre el acontecimiento.     g. Ha estado evitando hacer cosas o estar en situaciones que le recordaran el acontecimiento.     h. Ha sido incapaz de recordar partes Importantes del acontecimiento.     I. Ha tenido dificultad para disfrutar de las cosas.     J. So ha sentido distante o alejado de la gente			0000
e. Me gusta hacor cosas peligrosas. f. Me gusta tener toda dase de experiendas, aun cuando sepa que me puede succér algo malo. g. Prefiero los amigos que rumbean mucho. h. Pienso muy bien antesde hacar algo. i. Prefiero ver programasde aspectos violentosen la T.V. 24. Por favor lea cada frase y llene el círculo en la respuesta que considere mas adecuada a. Cuando hay una pelea sempre trato de detenería. b. Sin que nadle mo to pida sudo a recoger y ordenarios objetos que se han caldo o están en desorden.	0 0 0 0 0 0 0 0 0 0 0 0	O Ocasional mente O O O	O O O O Siempre O O O O O	Sempre O O	d. Hay cosasque se lo hanhecho recordar.         e. Ha tenido sensaciones físicas por recuerdos del acontecimiento. (Como sudoración, tembiores, marcos, náuseas, diarrea o palpitaciones).         f. Ha estado evitando penamientos o sentimientos sobre el acontecimiento.         g. Ha estado evitando hacer cosas o estar en situaciones que le recordaran el acontecimiento.         h. Ha sido incapaz de recordar partes importantes del acontecimiento.         i. Ha tenido dificultad para disfrutar de las cosas.         j. Se ha sentido distante o alejado de la gente         k. Ha sido incapaz de tener sentimientos de tristeza o de afecto.			00000
e. Me gusta hacor cosas poligrosas. f. Me gusta tener toda dase de experiencias, aun cuando sepa que me puede succer algo malo. g. Prefiero los amigos que rumbean mucho. h. Pienso muy bien antesde hacer algo. i. Prefiero ver programasde aspectos violentos en la T.V. 24. Por favor lea cada frase y llene el círculo en la respuesta que considere mas adecuada a. Cuando hay una pelea sempre trato de detenería. b. Sin que nadle me lo picia yudo a recoger y ordenarlos objetos que se han calcio o están en desorder. a. Trato de ayudar a las personas cuando lo necesitan.	0 0 0 0 0 0 0 0 0	O Ocasional mente O O	O O O Siempre O O O	Sempre O O O O O O O O O O	d. Hay cosasque se lo hanhecho recordar.     e. Ha tenido sensaciones físicas por recuerdos del acontecimiento. (Como sudoración, tembiores, marcos, náuseas, diarrea o palpitaciones).     f. Ha estado evitando penamientos o sentimientos sobre el acontecimiento.     g. Ha estado evitando hacer cosas o estar en situaciones que le recordaran el acontecimiento.     h. Ha sido incapaz de recordar partes importantes del acontecimiento.     i. Ha tenido dificultad para disfrutar de las cosas.     j. Se ha sentido distante o alejado de la gente k. Ha sido incapaz de tener sentimientos de tristeza o de afecto.     I. Ha tenido dificultad para imaginar una vida larga y cumplir sus objetivos.			0000000
Me gusta tacor cosas poligrosas.     f. Me gusta tener toda dase de experiencias, aun cuando sepa que me puede sucedor algo malo.     g. Prefiero los amigos que rumbean mucho.     h. Pienso muy bien antesde hacer algo.     l. Prefiero ver programasde aspectos violentos en la T.V.     24. Por favor lea cada frase y llene el círculo en la     respuesta que considere mas adecuada     a. Cuando hay una pelea sempre trato de detenerla.     b. Sin que nadie me lo picia syudo a recoger y ordenarlos objetos     que se han calcio o están en desorden.     A. Trato de ayudar a las personas cuando lo necesitan.     d. Quando tengo la oportunidad valoro el trabajo de oras personas.	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	O Ocasional mente O O O	O O O O Siempre O O O O O	5 cmpre 2 (2) / 2 / 2 / 2 / 2 / 2 / 2 / 2 / 2 / 2 /	d. Hay cosasque se lo hanhecho recordar.     e. Ha tenido sensaciones físicas por recuerdos del acortecimiento. (Como sudoración, tembiores, marcos, náuseas, diarrae o palpitaciones).     f. Ha estado evitando pensimientos os entimientos sobre el acontecimiento.     g. Ha estado evitando hacer cosas o estar en situaciones que le recordaran el acontecimiento.     h. Ha sido incapaz de recordar partes importantes del acontecimiento.     i. Ha tenido dificultad para disfrutar de lascosas.     j. Se ha sentido distante o siejado de la gente k. Ha sido incapaz de tener sentimientos de tristeza o de afecto.     l. Ha tenido dificultad para lamaginar una vida larga y cumplir sus objetivos.     m. Ha tenido dificultado para inciar o mantener el sueño.     n. Ha estado initiable o hatenido acosos de ira.     o. Ha tenido dificultades para concentrarse.			00000000
e. Me gusta hacor cosas poligrosas. f. Me gusta tener toda dase de experiencias, aun cuando sepa que me puede succer algo malo. g. Prefiero los amigos que rumbean mucho. h. Pienso muy bien antesde hacer algo. i. Prefiero ver programasde aspectos violentos en la T.V. 24. Por favor lea cada frase y llene el círculo en la respuesta que considere mas adecuada a. Quando hay una pelea sempre trato de detenerla. b. Sin que nadle me lo pida syudo a recoger y ordenarios objetos que se han caldo o están en desorden. c. Trato de ayudar a las personas cuando lo necesitan. d. Quando tengo la oportunidad valoro el trabajo de oras personas. e. Dernuestro tolerancia con los que han cometido un error.	0 0 0 0 0 0 0 0 0 0 0 0 0 0	O Ocasiona mente O O O O	Casi siempre O O O O O O	Sempre O O O O O O O O O O	d. Hay cosasque se lo hanhecho recordar.     e. Ha tenido sensaciones físicas por recuerdos del acortecimiento. (Como sudoración, tembiores, marcos, náuseas, diarrae o palpitaciones).     f. Ha estado evitando pensimientos os entimientos sobre el acontecimiento.     g. Ha estado evitando hacer cosas o estar en situaciones que le recordaran el acontecimiento.     h. Ha sido incapaz de recordar partes importantes del acontecimiento.     i. Ha tenido dificultad para disfrutar de lascosas.     j. Se ha sentido distante o siejado de la gente k. Ha sido incapaz de tener sentimientos de tristeza o de afecto.     l. Ha tenido dificultad para lamaginar una vida larga y cumplir sus objetivos.     m. Ha tenido dificultado para inciar o mantener el sueño.     n. Ha estado initiable o hatenido acosos de ira.     o. Ha tenido dificultades para concentrarse.			0000000

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29. Por favor responda teniendo en cuenta que las siguiers	tocciture	cionee	~		31. A continuación se present	a una li	ista de ce	racioner		Casi	Rara			
hayan ocurrido EN CUALQUIER MOMENTO DE SU VIDA.		ciones	a	NO	sobre como se ha sentido en e					nunca	Vez		gunas reces	C sien
iguna vez ha pensado seriamente en suicidarse?		0	0	33. Se quiere a si mismo.					0	0		0	C	
b. Alguna vez ha realizado un plan para suicidarse?		0	0	34. Se quiere morir. X					0	0	_	8	(	
c, Alguna vez ha Intentado suicidarse?		Ō	Ō	35. No tiene problemaspara hace	rlastare	as escolar	es. V		<u>ŏ</u>	Q	+	0	<u> </u>	
d. Alguna vez ha intentado sulcidarse y requirió atención médica o	atención e	en salud			36. Le va bien en el colegio.					<u>ŏ</u>	ļÒ	+-	8	5
para este evento?			0	0	37. Estan bueno como los otros co 38. Hace lo que le dicen	mpaner	os V			0		+	8	6
30. Alguna vez en el ULTIMO MES usted		Muchas veceso	Pocas	Nunca o casi	32. Con relación a las drogas,	Último	Última	Último	Último	Hao	Nünca		Que ed	dad (
a. ¿Estranquilo(a), calmado(a)?		siempre O	0	nunca	usted ha consumido	día	semana	mes	año	maso 1 añ			ando las primera	
b. ¿Tiene miedos?		ŏ	ŏ	ŏ		~	-	~	-			ī		-
c. ¿Se duerme rápidamente, sin problemas?		ŏ	ŏ	ŏ	a. Marihuana	0	0	0	0	0	0			
d. ¿Siente como si le fallara el aire?		ŏ	ŏ	ŏ		-	-	-	-	-	1			
e. ¿B corazón se le acekra?		ŏ	ŏ	ŏ	b. Basuca	0	0	0	0	0	0			
f. ¿Quándo está sentado(a) o acostado(a) puede mantenerse quieto	(a) por											÷	==	_
mucho tiempo?	(a) por	0	0	0	c. Cocaína, perico, perica	0	0	0	0	0	0			
g. ¿Se come las uñas de las manos?		0	0	0	4.11	~	-	-	÷	<del>-</del>				
h. ¿Duerme tranquilo(a) toda la noche?		0	0	0	d. Heroina	0	0	0	0	0	0			
i. ¿Le dan dolores de estórnago o ganas de ir al bañcoon urgencia?		Ŏ	ŏ	Ŏ	- Desert	-	6			-	-	$\pm i$		
j. ¿Esta tranquilo(a) cuando su padre o su madre taidan en llegar a l	ía casa o a		ŏ	õ	e. Popper	0	0	0	0	0	0			
recogerio a alguna parte?		0	-	-	f Inhalablas (mention and					-		+	<b></b>	_
k. Quando le hacen exámenes ¿está calmado(a)?		0	0	0	f. Inhalables (gasolina, sacol, otros)	0	0	0	0	0	0			
i. ¿Le preocupa que puedan suceder cosas malas a sus familiares o a	usted	0	0	0		-			-			+		=
(enfermedades, accidentes, robos, asaltos, etc.)?			_	õ	g. Ruedas, roches	0	0	0	0	0	0			
m. Quando habla, ¿se letraba la lengua?		0	0					$\vdash$		-	+-	+		
n. ¿Le dan dolores de cabeza?		<u>+-×</u>		Q	h. Estasis	0	0	0	0	0	0			
<ul> <li>o. ¿Va tranquilo(a) a lugares o reuniones donde haygente que no o p. ¿Le da picazón por todo el cuerpo?</li> </ul>	onoce /	lo O	0 0	0							-	+ +		
		<u> </u>	0 0	ò	I. Cigarrillo	0	0	0	0	0	0			
q. ¿Se concentra bien cuando hace tareas o exámeras?			<u>o</u>	<u>o</u>			-	-			-	÷		
r. ¿Se siente nervioso(a)?		0	0	0	J. Bebidas alcohólicas	0	0	0	0	0	0			
31. A continuación se presenta una lista de craciones	Casi	Rara	Algunas	Casi	k Pohlden elenhállana hurán								<u> </u>	
espre como se ha sentido en el ÚLTIMO MES	nunca	vez	veces	siempre	k. Bebidas alcohólicas hasta emborrachar	0	0	0	0	0	0			
siente feliz. V	<u>o</u>	<u>o</u>	<u> </u>	Q		-			-	-		Ť		_
2. Le procupa el colegio.	Õ	Q	Q	Q	I.Cacao Sabanero	0	0	0	0	0	0			
3. Se siente solo.	<u> 0</u>	Ŏ	<u> </u>	Q		-						+;	ᆕ	
4. Sente que sus padresno lo quieren.	Q	<u> </u>	<u> </u>	Q	m. Hongos	0	0	0	0	0	0			
5. Se siente importante.	<u>Õ</u>	<u> </u>	0	0		L						4	_	=
6. Siente ganas de esconderse de la gente.	<u>o</u>	<u>ŏ</u>	<u> </u>	Q	34. Las siguientes preguntas s	e refier	ren al con	nsumo d	le cigar	rilios.	(Si no		a	N
7. Se siente triste. X.	<u>o</u>	<u>o</u>	<u> </u>	<u>o</u>	fuma pase a la pregunta 36)							+		
8. Se siente con ganas de llorar. 🔨	<u>o</u>	<u>o</u>	<u>o</u>	<u>o</u>	a. Usualmente fuma el primer diga después de despertarse	irrino dei	i dia duran	nte ios pr	meros	su mini	203		0	0
9. Siente que no le importa a nadie. X	<u>o</u>	0	<u> </u>	0	b. El primer cigarrillo que fuma po	r la maña	ana sería (	fue el m	násdifíci	l de de	lar.	+	0	(
10. Tiene ganas de divertirse con los compañeros. V	<u>o</u>	Q	<u> </u>	Q	c. Encuentra difícil no fumar en lug								ŏ	à
11. Se siente enfermo.	Q	<u>o</u>	<u>o</u>	Ó										_`
12. Se siente querido.	<u>o</u>	<u> </u>	<u> </u>	Q	35. En promedio, cuántos cig	arrillos	fuma al r	tía.				ſ		
13. Tiene deseos de huir.	<u>o</u>	<u>o</u>	0	<u>o</u>								l		
14. Tiene ganas de hacerse daño. X	<u>o</u>	0	<u> </u>	<u>o</u>					-		Rara Alo	unad	Con fre-	. 5
15. Sente que no le gusta a los compañeros.	<u> </u>	<u> </u>	<u>o</u>	Q	36. ¿En general cómo es su re	iación c	xon su M	ALSTRO	? Nu	nca			cuencia	
16. Se siente molesto.	0	<u>o</u>	<u> </u>	Q	a. Estoy satisfecho en la forma con	no me re	laciono «	on mis				-	-	ť
17. Sente que la vida esinjusta. X	<u>o</u>	0	0	<u>o</u>	maestros					ו	0 (	0	0	
18. Se siente cansado. X	0	0	0	0	<ul> <li>b. Me es fácil expresarle lo que sie dificultades académicas</li> </ul>	nto con r	relación a	las	0	Ъ	00	0	0	0
19. Sente que todas las cosas malas son su culpa. X	0	0	0	0	c. El puede saber como me estoy si	intiendo	aiinein			-				+
20. Sente que no vale nada. X	Q	0	0	0	preguntármelo,		- and all			<b>&gt;</b>	0	0	0	
21. Se ve bien.	Q	Q	<u>o</u>	0	d. Si yo tuviera problemas persona	liesme e	escucharía		(	<b>5</b>	0	ot	0	0
22. Hay cosas que le molestan.	0	Q	<u>o</u>	0	e. Si yo estuviera en dificultades co	on mis co	mpañerce	spodría		5		ŏ	ŏ	
23. Sente ganas de hablar con los compañeros.	Q	0	<u> </u>	Q	contárselo,					-	<u> </u>	_	0	1
24. Tiene problemas para dormir. X	Q	Q	<u> </u>	Q	37. Quando comete errores E	NSIFA	MILLA		Nu	nca			Con fre-	
25. Tiene ganas de divertirse. 🧹	0	0	0	0							-		cuencia	-
26. Se siente preocupade.	0	0	0	0	a. المال Ilaman a dialogo?	4.6					-	<u>S</u>	0	4
27. Los dolores y malestares no le preocupan. 🦞	0	0	0	0	b. ¿Le llaman la atención verbalme			-				S ∣	<u>o</u>	4
A	$\sim$	0	0	0	c. الم desaprueban o insultan por	sn comb	ortamient	07	_			<u>2</u>	0	4
28. Se siente aburrido. X	0												~	
28. Se siente aburrido. <u>/</u> 29. Le gusta comer.	0	ŏ	Ō	0	d. على humillan?							<u>S</u>	0	
28. Se siente aburrido. K				0	d. مل humillan? e. مل privan de las cosas a que tie	ne dered	ho o le gu	stan?				5	0	(
28. Se siente aburrido. <u>/</u> 29. Le gusta comer.	0	0	0	States and States	5	ne dered	ho o le gu	stan?	(		0 (			

intrafamiliar

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<ol> <li>Que tan de acuerdo está con las siguientes frases.</li> </ol>		iy de ierdo	Algo de acuerdo	Algo er desacuer	. 1	Muy en esacuerdo	41a. Entre semana (lunes a viernes), ¿cuánto t	-
a. Greo en Dios.	- 0		0	0		0	O Nunca O Menos de 1 hora O Entre	1 y 2 horas O Mas de 2 horas O No Io
	-		ŏ	ŏ		ŏ	41b. En fin de semana (sábado y domingo) ¿cu	ánto tiempo utiliza diariamente internet en la
b. Mi fe en Dios me ayuda en los momento difíciles.			8	ŏ		ŏ	casa?:	
Le pido a Dios que me ayude a tomar decisiones			-		+		O Nunca O Menos de 1 hora O Entre	1 y 2 horas O Más de 2 horas O No lo s
nportantes.		<u>ر</u>	0	0		0	42. Quando visita páginas web, ¿cuáles de los	siguientes contenidos acostumbra consultar?
9. Por favor lea cada frase y llene el círculo e espuesta que considere más adecuada:	n la	Nunc	a Ocasio men		lasi mpre	Sempre	(Esposible marcar mas de una respuesta): O Deportes Juegos Software Noticias Cult	X X
. Sento que soy fisicamente atractivo.		0			0	0	Música Educativos O Adu	X X
b. Tengo dudas de lo que me espera en la vida.		0	(		O	0	43. ¿A qué le ha quitado O Familia	O Estudios O Deporte
c. Le gusto a la gente.		0			0	0	tiempo desde que utiliza	O Televisión O Lectura
d. Soy capaz con mis responsabilidades.		0			o O	0	internet?(Esposible masde O Novio(a)	Ŏ Videojuegos Ŏ A nada
e. Tengo problemas para hacer planes, pues no sé le	que quiero.					0		su respuesta es NO vaya a la pregunta 46
f. Los demás me rechazan fácilmente.		0		) (	0	0	45. El celular le sirve principalmente para(El	
g. Me imagino como será mi vída en 5 años.		0			0	0	O Recibir llamadas	
h. Me siento saludable.		0		2	0	0		mo reloj de Escuhar músic
i. Tengo una pobre opirión de mi mismo.		0		2	0	0		r fotos y/o videos O Ver televisión
j. Tengo dificultades para tener una relación amorora	L	0		)	0	0	¥ X	mar fotos O Otras cosas
k. Mis compañeros me incluyen en sus actividades so	ciales.	0		)   I	0	0	•	abar videos
l. Sé quien soy y que haré en la vida.		0		)   I	0	0	46. Habitualmente, ¿suele jugar con videojue	ps o juegos de computador?
m. Qreo que no soy constante ni disciplinado en las x	osas.	0	1	<b>D</b>	0	0	O Si O No (ir a la pregunta 51)	
n. La gente me ve como persona muy capaz.		Ō		)	0	0	47. ¿Con qué sueles jugar? (Es posible más de	una respuesta)
o. Sento que soy capazde aprender nuevas cosas rig	idamente,	Ō			Õ	Ō	O Videoconsola O Videoconsola	
p. Las personas disfrutan de mi compañía.		ŤŎ			ŏ	Õ	O Computador O En internet (en	
q. Si estoy en problemas se que soy capaz de resolver mismo.	los por mi	0			Õ	0		ión/lucha O Simulación O Otros
40-1. Señale en cual de los siguientes juegos(a	apuestas),	Nu		lenos de		ez/sem	O Rol O Avi O Plataforma O Est	rategia O Arcade (juegos antiguo
ha participado en su vida:.		_	_	vez/ sem		omas	49. En una semana normal ¿cuánto tiempo ut	iliza diariamente los videjuegos? (lunes a
a. Juegos en máquinas tragamonedas, poker, otroj			<u>o</u>  -	8		<u>o</u>	viernes): O Nunca O Menos de 1 hora O	Entre 1 y 2 horas O Más de 2 horas O No lo
b. Apuesta en casinos c. Apuestas en casinos Internet			0	ŏ		0	50. En fin de semana (sábado y domingo) ¿cua	into tiempo utiliza diariamente los videjuego
d. Apuestas en deportes (ganagol, futbol internacion	al)		ŏ	ŏ	+	0		e 1 y 2 horas O Más de 2 horas O No lo
e. Juegos de cartas por dinero			Ō	Ō	(	0	51. En una semana normal ¿cuánto tiempo m	
f. Juegos de dados por dinero			0	0	(	0		1 y 2 horas O Más de 2 horas O No lo s
g. Juegos de bingo por dinero			0	0		0		
h. Juegos de lotería, chance, baloto			<u>o</u>	<u> </u>		0	52. En fin de semana (sábado y domingo) ¿cu	
i. Apuesta en carreras de caballos, peleas de gallos	ded net die		0	8		8	O Nunca O Menos de 1 hora O Entre	e 1 y 2 horas O Más de 2 horas O No lo
j, Juegos de bolos, billar, fútbol u otro juego de habil 40-2. Quando juega con apuestas, ¿Con que ir lo perdido? O Nurca O Algunas veces	recuencia	vuelve	otra vez	a jugar p	ara re	cuperar	53. Si consume o ha consumido cigarrillo, cuál fue el motivo para iniciar el consumo:	54. Si consume o ha consumido alcohol, cuál fue el motivo para iniciar el consumo
40-3. ¿Algunza vez ha afirmado haber ganado						Ciempit	O a. Por curlosidad	O a. Por curiosidad Puede marcar
O Nunca O Si, algunas veces (				a por aio	•		Duodo marcar	O h Presión de amigos yarias
40-4. /Ha tenido alguna vez problemas con el				.igado-ap	nstad	lo mas	O b. Presión de amigos <u>varias</u>	O a Diversión
juego? O Si O No				a? O Si			O c. Diversión respuestas	
				guna vez	-		O d. Consumo en la familia	O d. Consumo en la familia
40.6 (Alcuna vez alquion la ha criticada la		norla	que leo	curre cua	ndo ju	uega?	O e. Olvidar preocupaciones, problemas	O e. Olvidar preocupaciones, problemas
40-6. ¿Alguna vez alguien le ha criticado la manera de jucar o apostar dinero? O si O N	lo jugar o	porio	-	No	-	-	O f. Quitar la timldez	1 F. M. Oudeau la élevilatea
manera de jugar o apostar dinero?O SI O N	lo jugar o	porio	O SI C					O f. Quitar la timidez
manera de jugar o apostar dinero? O SI O N 40-8. ¿Ha intentadoalguna vez dejar de jugar	lojugaro y		O SI C		susfa	amiliares	O g. Rendir en el sexo	O g. Rendir en el sexo
manera de jugar o apostar dinero?O SI O N 40-8. ¿Ha intentadoalguna vez dejar de jugar no ha sido capaz de ello?O SI O No	ہ jugar o y 40-9. زا	la ocul	tado alg				O g. Rendir en el sexo O h. Rendir en el deporte	
manera de jugar o apostar dinero?O SI O N 40-8. ¿Ha intentadoalguna vez dejar de jugar no ha sido capaz de ello?O SI O No 40-10. ¿Ha tenido discusiones en la familia po	y 40-9. j/ r billetes	la ocul de lote	tado alg ería, ficha	una vez a	iestas,	, dinero		O g. Rendir en el sexo
manera de jugar o apostar dinero?O SI O N 40-8. ¿Ha intentadoalguna vez dejar de jugar no ha sido capaz de ello?O SI O No	y 40-9. j/ r billetes	la ocul de lote do en el	tado alg ería, ficha	una vez a as de apu	iestas, idencia	, dinero las de	O h. Rendir en el deporte	O g. Rendir en el sexo O h. Rendir en el deporte
manera de jugar o apostar dinero?O SI O N 40-8. ¿Ha intentadoalguna vez dejar de jugar no ha sido capaz de ello?O SI O No 40-10. ¿Ha tenido discusiones en la familia po dinero o el tiempo hvertido en juego o	y 40-9. j) billetes obtenic apuesta s 40-12.	Ha ocult de lote do en el as? ¿Ha pe	tado algu ería, fidha I juego u dido en a	una vez a as de apu otras evi O si alguna oc	idencia ONC Casión	, dinero ias de o dinero	h. Rendir en el deporte I. Rendir en el estudio	O g. Rendir en el sexo O h. Rendir en el deporte O I. Rendir en el estucio
manera de jugar o apostar dinero?O SI O N 40-8. ¿Ha intentadoalguna vez dejar de jugar no ha sido capaz de ello?O SI O No 40-10. ¿Ha tenico discusiones en la familia po dinero o el tiempo invertido en juego o apuesta?O SI O No 40-11. ¿No ha asistido alguna vez a actividade escolares o de trabajo debido al juego?	y 40-9. j) billetes obtenic apuest: s 40-12. presta	Ha ocult de lote do en el as? ¿Ha per do a alg	tado algu ería, fidha I juego u dido en a guien y lu	una vez a as de apu otras evi O si alguna os uego no p	idencia ONC Casión	, dinero ias de o	<ul> <li>h. Rendir en el deporte</li> <li>l. Rendir en el estudio</li> <li>J. Publicidad en radio</li> </ul>	g. Rendir en el sexo         h. Rendir en el deporte         l. Rendir en el estucio         j. Publicidad en rado
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manera de jugar o apostar dinero?O SI O N 40-8. ¿Ha intentadoalguna vez dejar de jugar no ha sido capaz de ello?O SI O No 40-10. ¿Ha tenido discusiones en la familia po dinero o el tiempo invertido en juego o apuestas?O SI O No 40-11. ¿No ha asistido alguna vez a actividade escolares o de trabajo debido al juego? O SI O No 40-13. SI ha solicitado dinero prestado paraji juego, ¿a quien se lo ha pedido o de donde o a. De la casa b. Del padre o la madre c. De otros familiares d. De amigos e. De quenta de ahorros - banco	y 40-9. j) r billetes obtenic apuesta causa c ugar o pag	Ha ocult de lote do en el as? ¿Ha per do a alg del jueg jar deu	tado algu ería, fidha I juego u dido en a guien y lu go? O si das del	una vez a as de apu otras evi O Si alguna oc jego no p i O No	estas, idencia O No casión pudo p s O O O O O O	k dinero as de o dinero pagarlo a NO O O O O O	h. Rendir en el deporte     l. Rendir en el deporte     l. Rendir en el estudio     J. Publicidad en tadio     k. Publicidad en televisión     l. Publicidad en revistas, prensa, etc.     55. Si consume o ha consumido drogas, cuá     (Puede marcar varias opciones)     a. For curiosidad     b. Prestón de amigos	g. Rendir en el sexo         h. Rendir en el deporte         l. Rendir en el estudo         j. Publicidad en rado         k. Publicidad en revistas, prensa, etc.         l fue el motivo para iniciar el consumo:
manera de jugar o apostar dinero?O SI O N 40-8. ¿Ha intentadoalguna vez dejar de jugar no ha sido capaz de ello?O SI O No 40-10. ¿Ha tenido discusiones en la familia po dinero o el tiempo invertido en juego o apuestas?O SI O No 40-11. ¿No ha asistiko alguna vez a actividare escolares o de trabajo debido al juego? O SI O No 40-13. SI ha solicitado dinero prestado paraju juego, ¿a quien se lo ha pedido o de donde o a. De la casa b. Del padre o la madre c. De otrosfamiliares d. De aventa de antoros - banco f. De la venta de artícuos de la casa o propios	y 40-9. j) r billetes obtenic apuesta causa c ugar o pag	Ha ocult de lote do en el as? ¿Ha per do a alg del jueg jar deu	tado algu ería, fidha I juego u dido en a guien y lu go? O si das del	una vez a as de apu otras evi O Si alguna oc jego no p i O No	estas, idencia O No casión pudo p S O O O O O O O O	k dinero as de o dinero pagarlo a NO O O O O O O	h. Rendir en el deporte     I. Rendir en el deporte     J. Rendir en el estudio     J. Publicidad en tacio     k. Rublicidad en televisión     t. Rublicidad en televisión	g. Rendir en el sexo         h. Rendir en el deporte         l. Rendir en el deporte         j. Publicidad en rado         k. Publicidad en revistas, prensa, etc.         fue el motivo para iniciar el consumo: Ato de well, get alor ig.         g. Rendir en el sexo         h. Rendir en el deporte         i. Rendir en el deporte         i. Rendir en el estudio         j. Publicidad en radio
manera de jugar o apostar dinero?O SI O N 40-8. ¿Ha intentadoalguna vez dejar de jugar no ha sido capaz de ello?O SI O No 40-10. ¿Ha tenido discusiones en la familia po dinero o el tiempo invertido en juego o apuestas?O SI O No 40-11. ¿No ha asistido alguna vez a actividade escolares o de trabajo debido al juego? O SI O No 40-13. SI ha solicitado dinero prestado paraji juego, ¿a quien se lo ha pedido o de donde o a. De la casa b. Del padre o la madre c. De otros familiares d. De amigos e. De quenta de ahorros - banco	y 40-9. j) r billetes obtenic apuesta causa c ugar o pag	Ha ocult de lote do en el as? ¿Ha per do a alg del jueg jar deu	tado algu ería, fidha I juego u dido en a guien y lu go? O si das del	una vez a as de apu otras evi O Si alguna oc jego no p i O No	estas, idencia O No casión pudo p s O O O O O O	k dinero as de o dinero pagarlo a NO O O O O O	h. Rendir en el deporte     I. Rendir en el deporte     I. Rendir en el estudio     J. Publicidad en tadio     k. Publicidad en televisión     t. Publicidad en televisión	g. Rendir en el sexo         h. Rendir en el deporte         l. Rendir en el deporte         j. Publicidad en rado         k. Publicidad en revistas, prensa, etc.         frue el motivo para iniciar el consumo: