The Proactive Effect of Positive Youth Development (the 5C's) that Assisted Youths/Adolescents in Developing Resilience towards Illegal Drugs

By

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Abstract

This study was based on the concept that Positive Youth Development composed of 5c's i.e. competence, confidence, connection, caring and character; and these 5C's can help mitigate Youth /Adolescence risky behaviors specifically marijuana/ homebrew consumption which is a very big problem in the country currently. It is believed that Positive Youth Development and risky behaviors were inversely related. Therefore this research provides evidence that prove the concept of the 5C's and risky behaviours were inversely related. In doing so, it, prove that developing youths positively using the 5C's will reduce Papua New Guinea's problem of drug consumption and its related effects.

Total samples of 105 participants in the study were randomly but clustery selected from 7 Grade 11 class of a National High School in the country. The main instruments used in the study were the two questionnaires followed by interviews.

Findings from the quantitative and qualitative information confirm the significant negative relationship that exists between the 5C's and the risky behaviors. It confirms that adolescents that possess a high level of the 5C's are most likely to avoid drugs. The most important C's discovered were Confidence, Character and competence. These C's had a strong significant relationship with the usage of cannabis. This means the adolescents that have high level of these 3C's are most likely to avoid drugs. Based on this findings, it is recommended that Institutions, parents, and the society must developed these C's in the adolescents in order to reduce drug usage in Papua New Guinea. This can be achieving through the use of afterschool programs or by conducting more researches into the 5C's of Positive Youth Development purposefully to discover most economical and effective ways of developing these 5C's.

Keywords: Adolescence, Positive Youth Development, 5C's (i.e. Competence, Connection, Character, Confidence and Caring), Drugs

Introduction

Positive Youth Development (PYD) has different definitions according to different organisation depending on their programs goals, aims and objectives. This research viewed PYD as a process or an approach in assisting Youth/Adolescents in developing themselves positively into healthy, caring and contributing members in the society. In doing so, it outline and provide evidence that 5C's is an effective tool that can be used by institution and other organizations in combating risky behaviours, or cannabis usage in the context of this study. It applies different research techniques, analyses and presents its information in tables, graphs and paragraphs.

Problem Statement

There has been an increase in the use of illegal drugs. Lots have been reported in the newspaper, evident in educational institution, as well as reported by United Nation Office of Drug and Crime (2008) that Papua New Guinea has the highest cannabis prevalence rate in the world. Therefore the research adapts the concept that 5C's of PYD can help mitigate the problem and assist Youth/Adolescent, the main consumption cohort in developing resilience to this risky behaviour.

Research Objectives

The paramount objectives of this research were:

(1) to provide evidence that 5C's had positive outcome and

(2) to show how the 5 C's can reduce the risk of Drug consumption.

Research Questions

Two basic research questions have been identified as necessary for this research. This two questions act as the pinnacles in which the study was centered around.

1. Whether 5C could reduce drug consumption?
2. How do 5C prevent drug use?

Focus of the Study

The study focuses on providing evidence to confirm, that 5C's have inverse relationship with cannabis usage and can mitigate the problem of cannabis usage. Unlike other studies of PYD which takes preventive approach, this study is more proactive in nature aiming at developing resilience to risky behaviours.

Limitation of the Study

Due to limited resources, only a single National High School students was selected to represent the youth/adolescents populace in the country. This means the result cannot be generalized. Despite this researcher was confident that the information collected was reliable and is useful for any decision making or further research.

Literature Review

Positive Youth Development has passed through 3 different stages of perception since it was formally reorganized in early 1900 (Hall 1904). First phase was dominated by Storm and stress theory, the second stage was problem focused in nature and the third stage, which is the current, tries to developed adolescents as individual. That means all youths and adolescents are perceived as resources to be developed and not a problem to be managed as vowed by the first and second stage of PYD studies.

In this context, PYD is defined as an approach to the process of developing adolescence as they transit to become healthy and productive adults. In that definition, Learner (2005) and his research team came up with the idea that the 5C's of positive PYD can mitigate the problem of adolescents' risky behaviours.

The 5 C's

Positive Youth Development builds upon what have become known as the "Five Cs (5C)" i.e. competence, Confidence, Connection, Character, and Caring (Lerner, 2005). It is often referred to as 'Relational Developmental System' conceptions of human development. Young people who developed these 5C's are considered to be on the developmental path to the Sixth C; Contribution to self, family, community, and the institutions of society (Lerner, 2005). It is a mutual relationship between the individual and their context (e.g. individual and the environment.). With the developmental assets, the adolescent is strongly believe (e.g. Lerner et al 2010) to be on the positive path, growing up to be a healthy, helpful, caring, loyal and law abiding citizens as well as contributing positively to individual as self, the family and the society. Failing to improve and enhance the 5C's puts adolescence at risk on the path to social, moral and behavioral problems.

In Support of 5C and healthy youth development, basing on both the experiences of practitioners and on reviews of the adolescent development literature (e.g. Eccles and Gootman 2002; Lerner 2005; Roth and Brooks-Gunn 2003 and Lerner, et al 2010) claims that the 5C's were hypothesized as a way of conceptualizing Positive Youth Development (and of integrating all the separate indicators of it, such as academic achievement or self-esteem). In addition, these ''Cs'' are prominent terms used by practitioners, adolescents involved in youth development programs, and the parents of these adolescents in describing the characteristics of a ''thriving youth'' (Learner et al. 2010).

For example, Instead of searching for the conditions that may decrease problem behaviors or prevent problems from occurring, the PYD perspective broadens the scope of research to include an assessment of the individual- context relations that promote thriving across adolescence and that, as well, may have a preventive effect. From this perspective, thriving in adolescence is not seen as the absence of problems (i.e. thriving is not conceived as the absence of bullying, drinking, unsafe sex, school failure, or substance abuse, etc.). Instead, thriving is seen as the growth of attributes that mark a flourishing, healthy young person, e.g., the characteristics termed the ''Five Cs'' of Positive Youth Development—competence, confidence, character, connection, and caring (Eccles and Gootman 2002; Lerner et al. 2005) and youth contributions to self, family, community, and the civil society (Lerner et al. 2005; Lerner et al. 2010). When the adolescents manifest these behaviours, than it confirms the youth has developed positively. In this case, the behaviour demonstrates the development and the possession of the 5C's.

The First C (Competence)

Learner (2005) describes competence as a positive view of one's actions in domain specific areas including social, academic, cognitive, and vocational. Social competence pertains to interpersonal skills (e.g., conflict

resolution). Cognitive competence pertains to cognitive abilities (e.g. decision making). School grades, attendance, and test scores are part of academic competence. Vocational competence involves work habits and career choice explorations (Learner 2005). Benson et al (2006) in line with Learner (2005), clearly identify 5 main areas adolescents must be compatible in; specifically social, emotional, cognitive, behavioral, and moral competencies. Competence help prevent other negative outcomes at the same time is seen as an outcome itself for positive youth development.

The Second C (Confidence)

Confidence the second C was define as 'Internal sense of overall positive self-worth and self-efficacy (Learner 2005).' It is the belief adolescent has about self rather than general views. Researchers like Learner (2005) Damon (1997), Benson, (2003) further describe confidence as the development of self-efficacy and a positive belief about the future. Self-efficacy is the perception that one can achieve desired goals through one's own action. Learner (2005) further states that a person with stronger self-efficacy set higher goals and firm their commitment towards that goal. Other studies showed that people who lack self-efficacy lack confidence and simply develop stress, anxiety and other problematic behaviours (e.g. Benson et al 2006, Damon, 1997; Lerner, 2005)

The third C (Connection)

Connection refers to bonding. Benson (2006) describes it as 'the emotional attachment and commitment a child makes to social relationships in the family, peer group, school, community, or culture. Child development studies frequently describe bonding and attachment processes as internal working models for how a child forms social connections with others (Ainsworth, et al. 1978; Bowlby, 1982, 1979, 1973; Mahler et al., 1975, quote in Learner 2005). Bonding is crucial for positive youth development since adolescence is a stage of exploration and discovery; without a good guidance, the adolescents are in danger of making risky decision that can affect the youthful stage and most likely into the adulthood.

The Fourth C (Character)

Learner (2005) define character as respect for societal and cultural rules, possession of standards for correct behaviors, a sense of right and wrong (morality), and integrity. Lerner (2005) further emphasis; character in Positive Youth development is the development of clear standards to behave in a range of approach in the society. These include providing youth with data about the small numbers of people in their age group who use illegal drugs, so that they decide that they do not need to use drugs to be "normal;" encouraging youth to make explicit commitments in the presence of peers or mentors, not to use drugs or to skip school; involving older youth in communicating healthy standards for behavior to younger children; or encouraging youth to identify personal goals and set standards for themselves that will help them achieve these goals (Hawkins et al., 1992, quoted in Lerner 2005).

The fifth C (Caring)

Caring and compassion was the 5th C. Learner (2005), added that in line with other C's, caring is an important component of Positive Youth Development. It is the showing of love and sympathy towards self and others. Learner (2005) believes that after all these 5 C's are met, than the adolescents will act responsibly to the societies standards and furthermore be able to contribute fully back into the society.

Research Methodology

Research Deign

This study employs a survey method of conducting research into Positive Youth Development and Risky Behaviours which is a common method use by many Developmental Psychologists in the third Phase of Positive Youth Developmental Studies; and far more, is more appropriate since the study aimed at establishing the relationship between drugs and Positive Youth Development.

Source of Data (Samples)

The main source of data collected in the study came from a sample of 105 grade 11 students randomly but clustery selected in one of Papua New Guinea's National High School.

Methods of Data Collection

There were 3 instruments used in the data collection. The instruments include Frequency of Drug use Questionnaire, the 5C's Evaluation Form adapted from Learner et al (2010) and a follow up interview.

Frequency of Drug Use Questionnaire

The questionnaire was divided into 3 sections; Section A, contains the participants personal details, Section B contains the 3 major quantitative questions and section C was qualitative in nature to collect further details. Furthermore the questionnaire was design purposely for identifying and differentiating drug users from the non drug users, cannabis specifically [e.g. Have you a) seen, b) seen and touch, c) see, touch and consume cannabis, d) Haven't seen at all]. By indicating Have not seen means the participant is not a cannabis user. If the participant indicates have seen, touch and consume it that means the participant is a drug user. Similar questions were used all throughout to find out if the person has contact with cannabises or has not.

5C's Self Evaluation Form

The 5C Self Evaluation form (checklist) contain questions and statements the participants have to check against if the qualities mention were possessed, and to rank the quality from 1 to 4 or 1 to 5 according to how best it fits or describes them by indicating on the different sections in the form, (For example, I got lots of encouragement from my school a) Strongly agree b) Agree c) Not sure d) Disagree e) Strongly disagree. This example was used as a measure for adolescents' connection specifically school Connection. Other similar questions were asked to measure other C's). The measures used were relevant to the assessment of the latent structure of the Five Cs of PYD adapted from Learner (2005).

Interviews

Interviews were done for data triangulation and validity. Information collected agrees with the questionnaires.

How 5'Cs and Drug Consumption were measured.

The 5C's Evaluation form contains 34 items. An average of 6 to 8 items were design to measure each of the 5Cs. By indicating for example, strongly agree was given (5 points), agree (4), not sure (3), disagree (1) and

strongly disagree (0) as it indicates the availability or absence, the strength of the asset the participant's possess. Same was applied to the Frequency of Drug Use Questionnaire, section B that contains quantitative questions, for example, have not seen drugs (0), seen drugs (1), see and touch (3) and see, touch and consume (4). All this data were analyzed using SPSS version 17.0

Validity and Reliability of the data collection instruments

 To ensure the validity of this research, questionnaire was adapted from Learner (2005), the expert in the field of study and modified (question 26 and 32) to suit the area of study under expert's supervision.

To ensure the reliability of the instrument used, several questionnaires were developed and piloted to fellow colleagues. The final results collected were similar to the other researchers' findings including the piloted study. This proves that the instruments were reliable. In addition an interview result affirms the findings from the questionnaires.

Results

Personal Details/ Demographic Information.

Of all the 105 participants, 51.4% (n=54) of the participants were males while the other remaining of 48.6% (n=51) were females. Most of them were aged between 16 – 20, 92.4% (n=97) a valid mid adolescence age group while the other 7.6% (n=8) were ranging from 20 – 25 years old or into the late adolescent stage. In relation to the residential status, the data collected indicated that 88.6% (n=93) of the participants resides with their biological parents, 11.4% (n=12) resides with close relatives meaning.

In response to the period of residence, the respondents have reside in that locality either with the biological parents or the close relative, 1% (n=1) of the respondents' resides in that particular locality for less than 1 year, 21.9% (n=23) resides for less than 5 years, 5.7% (n=3) resides for less than ten years and the majority, 71.4% (n=75) of the participants resides in the particular locality for more than 10 years. The period of residence is also an important factor to consider as it provides timing for the respondents to know the environment, the surrounding and the network of cannabis movement and usage in the area.

Since cannabis is consumed all throughout the country, respondents region were collected from the students. 33.33% (n=35) were from the Highlands, 29.52% were from Momase, 20.01 (n=21) New Guinea Islands and the remaining 17.14% (n=18) were from Papuan region. The region of participants indicated that it was a good sample representing Papua New Guinea youth population.

Cannabis Prevalence, Access and Consumption rate

From the frequency of drug use questionnaire, the respond, 1.9% (n=2) indicated that cannabis was very easy to obtain, 15.2% (n=16) indicate easy, 65.7% (n=69) average, and 17.1% (n=18) indicated that it was not very easy to get cannabis. None of the respondent state that; it was not very easy to access cannabis from around the participants' area of residence. That result supports the data reported by United Nation World Drug report (2006) stating that Papua New Guinea has a very high cannabis prevalence rate

In addition to access, participants were asked if they have been introduced to marijuana, in response 15.2% (n=16), have seen and manage to touch it but have not consume it, 50.5% (n=53) have seen, touch and went

further into consuming it either for fun or as a way of satisfying their addiction. The remaining 24.8% (n=26) have not seen, touch nor taste cannabis in other words; they have not seen cannabis at all. From the result, the researcher found out that cannabis was easily accessible in Papua New Guinea. At the same time most of the participants manage to see and touch cannabis. However, in this research, the researcher found out that it is the presence of the high level of 5C's that prevent the participants from using cannabis.

Note that even there were a high percentage of the participants use cannabis, further findings indicated that most of those participants were not addicted or regular consumers of cannabis.

Consumption rate

 From the result, 50.5% (n=53) of the participants that at least consume cannabis, 21.0% (n= 22) consume it just to experience its taste and fantasy while the other 30.5% (n=32) were weekly consumers. The other not part of the 50.5%, the remaining 48.6% (n=51) were part of the participants that have seen or have seen and touch cannabis but have not consume it. None of the participants use it on monthly or yearly basis.

In addition to weekly consumption, the weekly consumption participants stated qualitatively that each weekly consumer's (30.5%, n=32) at an average consumes a range of 2 to 3 rolls a day. If the rolls were up to four as participants 1 stated,

> *"…than I will skip a day and consume it the next day. If the roll is short or not many, than it is a consistent consumption depending on cannabis availability. Sometimes it's difficult to find it on daily basis but weekly; yes it's possible".*

The statement simply revels that despite the condition of cannabis availability, the consumption rate remains constantly high for an average adolescent consumer in a week even though it is not consume daily. The similar feedback was also provided by participants 2 4 and 5.

Period of Consumption

It is significantly important for the researcher to be familiar with the period each participant use cannabis in order to make a good informative discussion about the findings. The researcher note that off all participants 57.1% (n=60) truly do not use cannabis. Other 42.9% (n =45), even indicated that have see, touch and use it just for the taste and experience its fantasy, the further respond indicate that the cohort continue to use it but inconsistent in consumption. These can be calculated as indicted in percentage and accumulative parentage as shown in the table 4 which 3.8% (n=4) just started using cannabis, 8.6% (n=9), six months. 16.2 (n=17) 3 years of consumption and 14.3 %(n=15) for 5 years.

Main Findings – Relationship between Drug (Cannabis) use and 5C's

Relationship between Rate of Consumption and the 5C's

Generally analyzing the data, it is clearly visible that there was a negative relationship (r=-0.56) between the consumption rate and total mean PYD scores; the higher the rate of consumption, the lower the PYD scores. As the results revealed, weekly consumers have the lowest mean PYD score of 114.78. Participants that use cannabis few times have the mean score of 128.82 and the participants that do not use cannabis at all have the highest mean PYD score of 134.09.

Moreover, these scores mean that if the adolescent lacks Competence, Confidence, Character, Connection and Caring, (the 5 Cs) will have the lowest score. With the lowest PYD score the chances of consuming cannabis increases.

**Graphical representation of Consumption rate and Mean PYD scores**

Mean PYD Scores and Rate of Cannabis Consumption
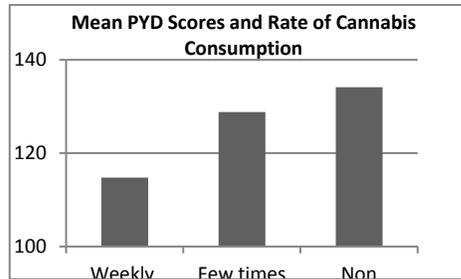
r= -0.56 which means there is a negative correlation between consumption rate and the 5C's

Relationship between Period of Consumption and Drug Use

The research further discovered that there was a negative relationship (r=-0.259) between the period of consumption and 5C's as mean PYD scores reviled. The participants that do not use cannabis have the highest mean PYD score of 132.8. The participants that just stated using cannabis and participants that use cannabis for about 6 months have mean score 123.0 and 123.8 respectively. The participants that use cannabis for 3 years, the total mean score was 122.7 while for 5 years users score 116.4 of mean PYD scores in total. It was also discovered that there was not much difference between the 5C total average score between the participants who just stated using the cannabis and the participants who have used cannabis for about 3 years. But the participants that have used cannabis for about 5 years show greater absence of the 5Cs as the scores reveled.

This indicated that there are some relationships between the period of consumption but is not that strong as the rate of consumption.

Graphical representation of Consumption Period and Mean PYD scores

Relationshp Between PYD (5C's) and Period of Consuption
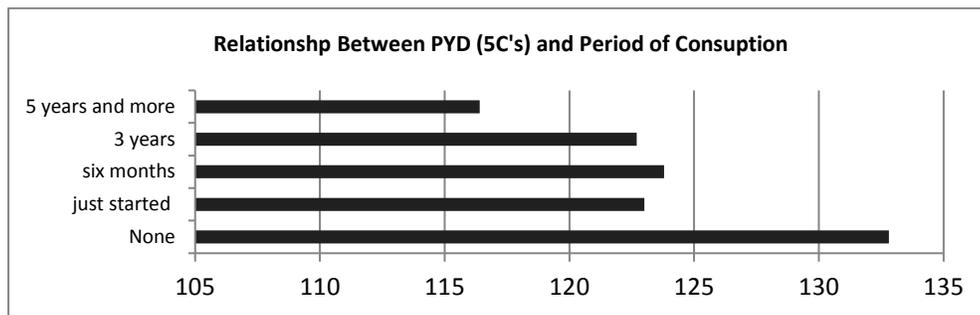
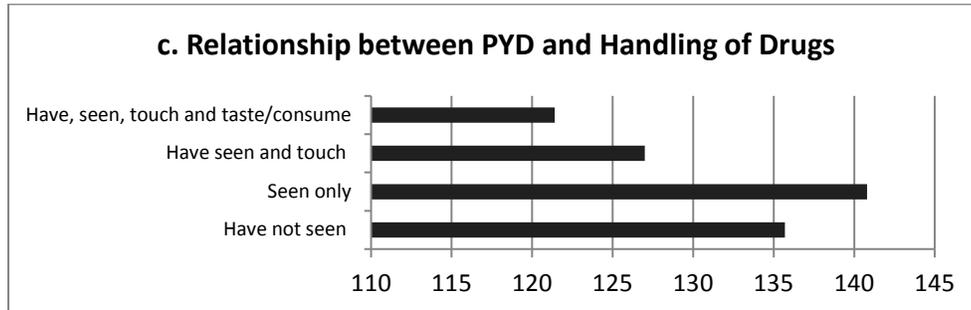r= -0.259* there is a negative correlation between consumption period and the 5C's

Relationship between PYD and Handling of Drugs

Just like the period of cannabis use, there is a negative relationship (n= -0.283) between cannabis use and the way the participants handle drugs. The mean PYD score shows the participants that have not seen cannabis, have the low mean score of 135.7 compare to the participants that have seen cannabis that score

140.80. But because both have very high scores, both cohorts do not participate in consuming or handling cannabis.

The participants that see and touch cannabis have lower score of 127.0 while the participants that have gone further into consuming have the lowest score of 121.4

Graphical representation of Consumption Period and Mean PYD scores

c. Relationship between PYD and Handling of Drugs

r= -0.283** there is a strong negative correlation between consumption rate and the 5C's

Statistical Analysis of Drug use and the Relationship with individual C

Relationship between Question 1, Question 2, Question 3 on Frequency of Drug Use Questionnaire and the 5C's.

The table below provides details of each of the questions and how the respondents respond to it.

Major Table 1: Showing significance and Relationship between each C's and the Handling and Consumption of Cannabis

Question	Total PYD (5C's)	Connection (C1)	Confidence (C2)	Character (C3)	Caring (C4)	Competence (C5)
Q1. Introduction to cannabis	r= -0.270** p= 0.05 df = 104	r=-0.110 p= 0.268 df= 103	r= -0.389** p= <0.01 df = 104	r= -0.366** p= <0.01 df = 104	r= -0.153 p= 0.118 df = 104	r= -0.303** p= 0.02 df = 104
Q2. Cannabis consumption Rate	r= -0.327*** p= 0.01 df = 104	r= -0.123 p= 0.213 df = 103	r= -0.502** p= <0.01 df = 104	r= - 0.369** p= <0.01 df = 104	r= -0.241* p= 0.013 df =104	r= -0.446** p= <0.01 df = 104
Q3. Period of Cannabis consumption	r= -0.260** p= 0.007 df = 104	r= -0.049 p= 0.622 df = 103	r= -0.522** p= <0.01 df = 104	r= -0.319** p= 0.001 df = 104	r= -0.172 p= 0.079 df = 104	r= -0.368** p= <0.01 df = 104
Total score of all 3 Questions	r= -0.303** p= 0.002 df = 104	r= -0.094 p= 0.343 df = 103	r= - 0.511** p= <0.01 df = 104	r= -0.375** p= <0.01 df = 104	r= - 0.197* p= 0.044 df = 104	r= - 0.346** p= <0.01 df = 104

Question 1

According to the findings, question 1 of the drug frequency form has negative but a significant correlations with each of the 5C's except connection and caring which were insignificant; i.e. Connection r= - 0.110, p= 0.268, confidence r= -0.389, p=<0.01, character r= - 0.153, p= <0.01, competence, r= - 0.303 p= 0.02, Total PYD score/All 5C, r= - 0.270, p= 0.05. Even though connection and caring have the insignificant relationship, the total score indicates that there is a significant negative relationship between questions one and the 5C's. Moreover, the findings indicated that as the participants increase the level of each of the 5C's the chances of the participants in using or consuming cannabis decreases.

This quantitative finding was similar to the qualitative findings as quoted from respondent 3 during the interview;

> *"I know it is wrong to use cannabis so there is no use seeing or touching it. In fact, I don't want to get myself into trouble with the law."*

This quotation indicated the high level of 5C's specifically character that the respondent possesses that kept him away from using drugs. Similar statements were presented by other respondents (Respondent 6, 7 and 8).

Question 2

Question two was the main question aiming at finding the relationship between actual cannabis consumption and the intensity of the consumption and the relationship it has with the 5C's. The findings show the correlation between Question 2 and each of the 5C is significant including the total PYD scores except connection; i.e. Connection r= - 0.123, p= 0.213, Confidence r= - 0.502 p=<0.01, character r= - 0.369, p=<0.01, Competence r= - 0. 446, p=<0.01, Total PYD score/All 5C, r= - 0.327, p= 0.01.

As the result show, it was as significant relationship. Moreover, all were negative relationship meaning that, the more C the participants have, the less likely will the participant be involve in cannabis consumption. The participations will drop from weekly consumption, down to occasional consumption only once or twice at a time and finally quit if the level of each C increase.

This was in line with the response from the interview which most participants point out that being involve in Church activities, sporting activities and more awareness about drugs and its negative effect not only to the body but with the society and result it will have between the drug users and the community has prompt them to quit using drugs. Analyzing the statement in a 5C perspective, it was the development of character (social consciences, value diversity and personal value), connection (school and neighborhood domain, even though the relationship was insignificant) and caring that resulted in the reduction and eventually quitting of cannabis use within the adolescents. Equal contributions were made by confidence and competence.

Question 3

Last question is on how long the participants have been consuming cannabis. If the participants do not use cannabis its (0) just started (1), 3 years (2), 5 years (3) and more than 5 years (4 points). There were significant negative correlation between question 3 and each of the C's with the exception of connection and character which were insignificant as the results shows: Connection r= - 0.049, p= 0.662, Confidence,

r=-0.522, p= <0.01 character, r= - 0.319, p = 0.001, caring, r=0.172, p=0.079, Competence, r = - 0. 368, p= <0.01. Total PYD score/All 5C, r= - 0. 260, p= 0.007. Connection and caring have an insignificant relationship with question 3 but all the other C's have a very significant correlation. Moreover, the total of all 5C's have a very good correlation with question 3. That means that participants that consume cannabis long period of time lacks Confidence, character and competence and are very significant to the study. Caring and connection was insignificant. Despite that; the total of all questions turn out to have a significant relationship between the 5C's and drug use excluding connection. Even though connection has an insignificant relationship, it falls in line with others in that, all its relationship where negative or in other words, it has a negative correlation with the usage of drug studied.

Total of Questions (Question 1, Question 2 and Question 3)

Total of all questions is the sum of question 1, question 2 and question 3. After adding, the sum   was compared with the points of each of the 5C from the 5C checklist to find the final or total correlation coefficients between 5C's and the questions and its significance. The findings shows that the overall correlations between all the questions and the 5C's were significant except connection alone which was insignificant i.e. connection r= -0.094, p= 0.343, confidence r= - 0.511, p=<0.01, character r=0.375, p=<0.01, caring r= -0.197, p=0.044, competence, r= - 0.346, p=<0.01, Total PYD/5C score, r=0.303, p= 0,002. In conclusion, there was significant correlation between the 5C's and the ability of each adolescent to use cannabis even though there are some insignificant correlation existing between few individual C's and each question posed. The study show that with the decline of the any of the 5C's the chances of the adolescent to use cannabis increases. Opposite was also proven to be true. The findings from the quantitative data were in line with the qualitative data. That proves the presence of the 5C's developed and possess by the adolescents contributes significantly to the prevention and reduction of cannabis use amongst the youths in Papua New Guinea.

Discussion and Recommendation

Cannabis Prevalence rate

The major question in this research is "whether 5C can reduce drug consumption?" In the quantitative data analyses earlier, several evidences were put forward to prove that the 5C's can reduce drug consumption. Firstly, looking at cannabis prevalence rate amongst the sampled population, 1.9 percent of the surveyed population have a very easy access to cannabis, 15.2 percent, easy access, 65.7 percent average access, 17.0 percent not easy and non of the participants' have a very difficult access to cannabis. The data collected from the study reveal that it was not difficult to access cannabis in Papua New Guinea. This data was supported by United Nation World Drug Report (1998) that about 1/3 of Papua New Guinea's population have easy access to cannabis. Papua New Guinea with the highest cannabis prevalence rate means that most of the Papua New Guineans must have once seen, touch or have consumed cannabis in their life.

Not surprisingly, this study agrees with the United Nation Office of Drug and Crime (2008) The study finds that 75.2 percent of the surveyed population have once seen (9.5%), touch (15.2%) and have consumed (50.5%) cannabis in their life. The study confirms that there is a widespread of cannabis in Papua New Guinea as the samples used in the study were from all 4 different regions in Papua New Guinea

Evidence that 5C's can reduce drug consumption

The next question any curious person would ask is, even though the cannabis prevalence rate was high with 82.9 percent of the sampled population having either very easy, easy or average access to it; most participants decided not to use it at all (48.6%), few (20.9%) occasionally at a very low rate and only few took it weekly (30.5%). This study answers the question providing the evidence that it was the 5C's found in the adolescents that resulted in that positive outcome.

In the data analyses, the first evidence was the total mean PYD scores of the 5C's and the rate of cannabis consumption. As the results revel, the consistent and heavy uses of cannabis (weekly consumers) have a very low level of the 5C's. As the level of 5C's increases, the rate of cannabis consumption decreases. This quantitative data was supported by the qualitative data collected through interviews. For example, participant 7 interviewed respond;

> *'I quit drugs because my teacher was so helpful and friendlier. Also I notice that I am good at Rugby and want to improve my rugby skills. Druggies (Drug Addicts) are too skinny, getting tired quickly and are easily tackled.*

The quotation provides a strong evidence of the increase in the Competence (Social domain) and Connection (school connection) that contributes towards the quitting of drugs.

Furthermore, using SPSS version 17.0, one way anova shows that there is a significant relationship between all the 5C's and the cannabis consumption rate ($r = -0.270$, $p = 0.05$). This confirms that if the education institutions, parents, guardians and the society as a whole help the adolescences in developing the 5C's, this will greatly reduce cannabis consumption rate from daily consumers, to weekly, occasionally and eventually stop using cannabis. As Learner (2005) elaborates, the C's include many commonly studied positive psychosocial and relational constructs such as self-esteem, responsible decision making, and connections to family and friends—all of which have been found to protect against substance use.

How 5C's prevent drug use

The finding in this study confirms that 5Cs significantly can contribute towards prevention of drug use by the adolescents'. Analyzing the data about the extended in which surveyed participants have involve in consuming drugs (Introduction to cannabis), the data shows that the students with a very high mean of PYD scores (135.7 and 140.8) kept themselves away from cannabis even though they have seen it as it has the highest prevalence rate. The more the mean PYD scores drops, the more the participant move closer to in consuming cannabis and eventually consume it when the PYD score, the 5C's are at its lowest (127.0, started handling it and 121.4 started consuming it). The result proves that if the 5C's were developed by the adolescents', the probability of the adolescents getting involve in cannabis use decreases. The similar sediments were shared by the student (respondent 6) in a followed up interview;

> *"I saw it when it was up rooted and brought to the Police station."*

Several others (respondent 1, 2, 5, 7 and 8) said something similar to this statement;

> *"I saw it growing in the garden as a normal plant"*

But respondent 6, 7 and 8 stress that firstly, they decided not to touch nor consume it because it is morally wrong and against the law. Secondly, because of the good relationship developed between the participants, their parents and the adults in the community and consuming it will only upset their parents and the adults they have the good connection to. In other words, the participants are describing the high level of the 5C's possessed. These positive qualities help in keeping these adolescents' away from cannabis.

In an opposite scenario the participants with the low PYD scores (respondent 2 and 5) during interview said something similar to each other;

> *'I saw it when I was in grade five. I begin to smoke it when I was in grade seven when it was introduced to me as a normal cigarette by my friends. I have to take it as it please my friend and these are the only friends I got.*

Other participants with the low PYD scores (respondent 1, 4, 9) said that it was use to reduce or relive themselves from pressure such as family problem (parental problems), abuses, or other social and academic problems. Secondly they state that it was use because of peer pressure or to avoid shame, fear or make them extra ordinary to get people's attention. Such respond provided by the participants indicated that there was the absence of the 5C's or if not the 5C's level was very low for example, loosing friends and family problems is associated with lack of connection. Avoid shame and fear means lack of confidence, character, and competence and even caring.

Further analyses using SPSS version 17.0, one way anova shows that there is a significant relationship ($p=0.05$, $r= -0.270$) between all the 5C's except connection and how close were the participants to in using and handing cannabis (Introduction to cannabis). In other words the more the adolescents develop the 5'Cs, further adolescents' will move away from cannabis or in short, the rate of getting in contact with cannabis decrease as the level of C's increases.

Conclusion

5C's of Positive Youth Development is an important psychometric tool developed by psychologist in the third phase of Positive Youth developmental studies to measure Positive Youth Developmental outcome in adolescents. As many studies (Benson, 2003; Damon, 1997; Lerner, 2004; Roth, Brooks-Gunn, 2003) have confirmed, adolescents contain plasticity and having potential to change. It was believe that if the adolescents developed the concept of the 5C's, the risk of being involved in risky behaviors will decrease. Therefore this study conducted into a National High School in Papua New Guinea was carried out and its outcome proves that the 5C's and risk of being involved in cannabis consumption are negatively related.

The findings revel that even though cannabis prevalence rate is so high and can be easily access by most adolescents in Papua New Guinea, most of the adolescence decided not to handle nor consume it because of the high level of 5C's they possess. This was also confirmed by using one way anova analyze that there is significant relation between the 5C's and Handling of cannabis. Similar findings apply to cannabis consumption and consumption rate, the period of consumption and the 5C's. The high level of 5C's the adolescents posses, the further they move away from cannabis consumption, the consumption rate decrease so as the period of consumption.

To conclude, the findings show that there is a significant negative relationship between cannabis usage and the level of 5C's. The high level of 5C's the adolescence poses helps in avoiding cannabis. This proves the concept that risky behaviours in this context cannabis and the 5C's are negatively related. Moreover, the study confirms that firstly, 5C's can reduce drug consumption and secondly, can further prevent cannabis use by keeping the adolescents away from cannabis.

Recommendation

Basing on the findings of this research study, the following recommendations are made as suggestions firstly to the parents, guardians, policy makers and those in authority who want to help adolescents avoid being involve in risky behaviours (in this study, cannabis) and secondly to the upcoming researchers who were interested in conducting research in to this field of study.

1. A guidance officer be attach to each school. The role of the guidance officer has to shift away from traditional guidance and counseling method and more into working very closely with youth/adolescents in developing the 5c's.

2. Teacher's should not be overloaded with teaching loads. Sufficient time should be given to teachers to attend to pastoral care periods and spend time with students in developing the 5C's. Same applies to administration and other stake holders.

3. Schools and societal rules and obligations must be clearly made known and understood by all youth/adolescence as it defines character and sense of responsibility (caring).

5. Spiritual activities and the out of school programs that build the 5C's must be encourage.

Recommendations for Further Research

1. A longitudinal study be done in Papua New Guinea
2. How best youth/Adolescents can develop the 5C's

References

Benson, P. L., etal (2006). Positive youth development so far: Core hypotheses and their implications for policy and practice. Search Institute Insights & Evidence, 3(1), 1–13.

Benson, P. L. (2003). Developmental assets and asset-building community: Conceptual and empirical foundations. Implications for research, policy, and practice (pp. 19- 43). Norwell, MA: Kluwer.

Damon, W. (1997). The youth charter: How communities can work together to raise standards for all our children. New York: The Free Press.

Damon, W., Menon, J., & Bronk, K. C. (2003). The development of purpose during adolescence. Applied Developmental Science, 7, 119–128.55

Eccles, J., & Gootman, J. (Eds). (2002). Community programs to promote youth development. Washington, D.C.: National Academy Press.

Hall, G. (1904). Adolescence. New York: Appleton.

Kukari, A. 1990, School Organization Climate and Student Disciplinary Problems in Provincial High Schools of Morobe Province, BA (Hons) Thesis, UPNG, Port Moresby.

Larson (2002), Positive Youth Development: A Pathway to Healthy Teens. Issue Brief No 15

Lerner, R. M. (2005, September). Promoting Positive Youth Development: Theoretical and Empirical Bases. White paper prepared for the Workshop on the Science of Adolescent Health and Development, National Research Council/Institute of Medicine. Washington, DC: National Academies of Science.

Learner R etal (2010), Positive Youth Development, Participation in the Community Youth Developmental Programs, and Community Contribution of 5th Grade Adoloces: Findings from the First Wave of 4H Studies of Positive Youth Development, Institute for Applied Research in Youth Development, Eliot-Pearson Department of Child Development, 301 Lincoln Filene Building, Tufts University, Medford

McDonald. D, (2004), 'Cannabis in Papua New Guinea', Pac Health Dialog, vol. 11, no. 1,pp. 96-101. (Online). http://pngaa.net/Library/Cannabis.htm

National News (Video Recording) (July 9th 2007). CBC (Canada Broadcasting Cooperation) Television

Roth, J., Brooks-Gunn, J., Murray, L., & Foster, W. (1998). Promoting healthy adolescents: Synthesis of youth development program evaluations. Journal of Research on Adolescence, 8, 423-459.

Roth, J. L., & Brooks-Gunn, J. (2003). What is a youth development program? Identification and defining principles Thousand Oaks, CA: .

Schwartz. J, Phelps. E, Lerner. V, Hendricks. C, Learner. R (Online). (2010).Promotion as Prevention: Positive Youth Development as Protective against Tobacco, Alcohol, Illicit Drug, and Sex Initiation, Applied Developmental Science, 14(4), 1–15, 2010

United Nation Office of Drug and Crime (2008) World Drug Report, United Nations Publication, Sales No. E.08.XI.1 978-92-1-148229-4

Wiersma, W., and Jurs, S.G. (2004). Research methods in education: An introduction, (8th ed.), China: Pearson Education Asia Ltd & China Light Industry Press.