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SOCIAL INFLUENCE PROCESSES AND LIFE ORIENTATION IN RISK PERCEPTION OF DRUG USE AMONG UNDERGRADUATES

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ABSTRACT

The current study investigated the role of social influence processes: informational social influence and normative social influence, and life orientation in risk perception of drug use. Using a cross-sectional survey design, 380 undergraduates were recruited using a random sampling technique. Results reveal that within the study sample, which comprised university undergraduates, social influence processes, whether informational or normative, did not influence reported risk perception of drug use. In the same way, life orientation did not also correlate with risk perception of drug use but shows possibility of significant influence at a little above the .05 significant level ($p = .059$). However, gender showed a significant relationship with risk perception of drug use with females more likely to perceive risk of using drugs than their male counterparts. These results could mean very much to researchers on drug use when we consider other levels of interrelationships among variables. The result indicates that differences in how men and women are socialized form an orientation pattern for each of the sexes and each gender continues in the determined path from generation to generation. An important strategy therefore for men to strengthen their risk perception of dangerous situations is to forge a knit relationship with a network of female folks such as mothers, sisters, co-workers, acquaintances and wives. Female relations on their own part should ensure that they keep a tap on their male relatives and associates show absolute loyalty and allegiance to be able to employ either kinship synergies or diverse forms of sexual politics to restrain them from unwanted and risky behaviours.

Keywords: Social influence, risk perception, life orientation, drug use, undergraduates

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INTRODUCTION

In many countries, there have been grave concerns about the way young persons are involved with drugs. Most youths do not readily consider the risks associated with their use of the various forms of substances available to them. For instance, Maricic, et al. (2013) found that younger, rather than older, persons were associated with different aspects of attitudes toward licit and illicit substance use; specifically higher risk perception of drug use was found among young population. According to Bracken, et al (2013), one important benefit of surveying adolescents about drug use is that research and prevention efforts can be focused on drugs that are increasing in popularity (and therefore severity of harm) and any meaningful pattern to drug use trends can be identified. However, the Substance Abuse and Mental Health Services Administration, Center for Behavioural Health Statistics and Quality (2013) of the United States Department of Health and Human Services suggests that adolescents' perception of the risks associated with substance use is an important determinant of whether they would engage in substance use. For instance, it is contended that youths who perceive high risk of harm are less likely to use drugs compared to youths who perceive low risk of harm (Johnston, et al, 2012). However, while there seems to be a high level of risk perception and reduction of use by mono drug users, people who use multiple drugs (polydrug users) still make the campaign against drug use less successful (Balbo, et al., 2017).

The perception of risk is an essentially cognitive process through which individuals assign positive and/or negative properties to a determined object or event (Bejarano, et al, 2011). In the field of drug use research, the perception of risk has been established as a key factor in the decision of whether or not to use a drug (Bejarano et al, 2011). For example, Knoll, et al. (2015) have shown, in a study of adolescents risk perception, that social influence is a factor in adolescent risk-taking, and this influence increases with decreasing age. Perception of risk has also been associated with beliefs, expectations and affective value(s) people attach to the substance of abuse and expectations of key persons in the life of people examining the risk (Rodriguez, 2002). One qualitative study (Kazdouh, et al., 2018) identified, from a number of focus group studies, six common themes that represent the most salient perceived risk and protective factors regarding substance use, such as perceived benefits, awareness and beliefs, family influence, peer influence, easy accessibility and social norms. Other factors such as low self esteem, anxiety, depression, peer pressure and sexual abuse, can generally influence how people perceive risk (Bejarano, et al. 2011).

Developmental stages in drug involvement describe a variety of human characteristics pertaining to cognitive, psychological and physiological functions and how they follow well-defined developmental sequences (Kandel, 1975, Kandel, et al 1978). According to Kandel (1975) and Kandel, et al (1978), major changes of adolescent drug use involve some significant probabilities of adolescents moving from one stage of drug involvement to another as shown in the flow chart below:

The flow chart explains perceived locus of adolescents' drug activities from onset to addiction. At first (stages 2 and 3), adolescents' drug and substance use is

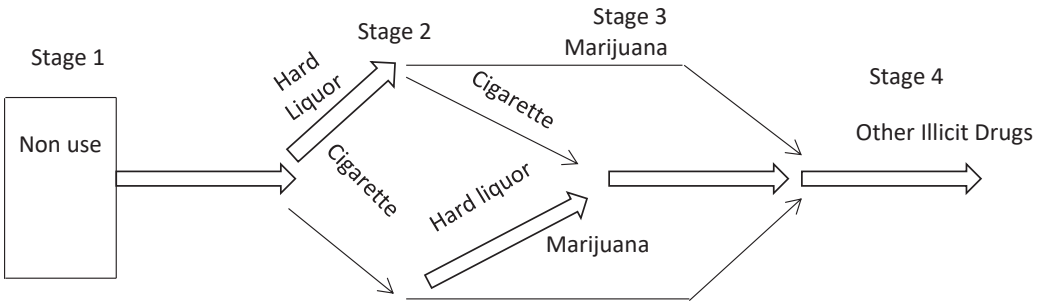

Figure 1. Stages and Major changes of Adolescents' Drug Use (Kandel, 1975)

recreational, and they will be experimenting with different substances from alcohol (hard liquor) to stronger tobacco (marijuana) for purposes such as social conformity and acceptance. At stage 4, they graduate to other illicit drugs (hard drugs) to obtain greater and/or more rewarding effects which are not provided at these stages. Stage 4 is a dangerous route which may lead to addiction and other related risks.

In the Center for Behavioural Health Statistics and Quality (CBHSQ) report analyzing trends in perception of risk and availability of substance use among full-time college students, it was observed that full-time college students aged 18-22 years differed from young adults who are not full-time college students in their perceptions of whether there is great risk of harm from using substances. Perception of risk was also conducted online among 184 young (18-24) and older (45+) people using 11 drugs and 16 drug-related criteria. The 16 harm criteria (Nutt, et al., 2010) were used, with emphasis on the distinctions between harm to the user versus harm to the society. Harms of 11 commonly used drugs were assessed including heroine, crack cocaine, cocaine and others. Results indicated that overall perceived harm rankings identified heroin, crack cocaine and methamphetamine as the most harmful among both young and older people.

Social Influence Processes: Variants and Dimensions

Social influence processes refer to the ways in which the opinions and attitudes of one person affect the opinions and attitudes of another person (Martin, et al., 2007; Martin & Hewstone, 2003). These processes have been delineated to include persuasion, conformity and other forms which are modeled to encourage interdisciplinary collaborations. They can represent either majority or minority influence.

In a study on interactive and higher order effects of social influence on drug use, Stacy, et al., 1992) confirmed the possibility that social influence may predict drug use in non-linear, that is, quadratic forms. This is easily explained by the fact that social influence and social learning theories suggest that individuals learn within a social context, with changes in thoughts, feelings, attitudes and behaviours resulting from interactions with other individuals or groups (Bandura, 1977; Kelman, 1958).

According to Gass and Seiter (2015) social influence involves intentional and unintentional efforts to change another person's beliefs, attitudes or behaviour. It is believed that social influence is ubiquitous in human societies and can be identified in a wide variety of forms such as obedience, conformity, persuasion, social loafing, social facilitation, de-individuation,

observer effect, bystander effect, and peer pressure, reciprocity, commitment, social proof, liking and attractiveness (Gass & Seiter, 2015; Izuma, 2017).The present study is mostly concerned with the two aspects of social influence: informational and normative social influence.

Informational social influence is when a person conforms to gain knowledge or because they believe that someone else is right. Cialdini (1984) was the first to use the term "social proof" to describe informational social influence as a psychological and social phenomenon wherein people copy the actions of others in an attempt to undertake behaviour in a given situation. The place of informational social influence on risk perception has been demonstrated when groups in a risk perception task associated themselves with a social group. In a study of peer influence across five risk behaviours including cigarette smoking, alcohol consumption, marijuana use, tobacco chewing and sexual debit, Maxwell (2002) found that peer influence exerted same influence in the prevention of risky behaviours without aiding drug use.

Normative social influence is also a type of behavioural conformity. Since social life requires some level of conformity to group norms for reasons such as respect, love and approval, this type of social influence remains fundamental to peoples' need to belong to social groups. In choosing to engage in typical behaviours such as drug use, normative social influence may be important. For instance, Rimel and Real (2005) evolved a theory of normative social behaviour which pledges to align with the postulation of normative social influence. Substantiating a study on informational and normative social influences in group-buying behaviours, Kuan, et al. (2014) established the effects of the two (informational and normative) social influence processes on behaviour. A similar finding by Sylvestri and Correia (2016) highlighted the prevalence of self-reported non-medical use of prescription substances and confirmed that normative influence was an important determinant of prescription drug misuse among 18-25 year old college students. Based on these, it was reasoned that social influence may explain differential drug risk perceptions on delineated age groups outlined in Eriksons (1963) "subcultural" theory of psychosocial development. Each age group has been delineated in this study as a subculture.

Life Orientation and Risk Perception of Drug Use

Life orientation is seen as a holistic study of the self, the self in society and an opportunity to develop the emotional side of young people (Finegan, 2011). It has been described by the Western Cape Government's Further Education and Training (FET) Curriculum and Assessment Policy Statement as the study of the self in relation to others and to society. It addresses skills, knowledge and values about the self, the environment, responsible citizenship, health and productive life, social engagement, recreation and physical activity, careers and career choices.

We decided to study life orientation in relation to risk perception of drug use because adolescents or other people who indulge in drugs are like learners. Life orientation is central to the holistic development of learners because it addresses skills, knowledge and values for personal, social, intellectual, emotional and physical growth of people and is also concerned with the way in which these variables are intertwined (Makatu, 2019).

There is a mixed opinion about life orientation. While some see it as something with vast potentials, others view it as very negative (Jacobs, 2011). The South African Department of Education (2002) believes that life orientation is aimed at developing and engaging learners in personal, psychological, neurocognitive, motor, physical, moral, spiritual, cultural and socio-economic areas, so that they can achieve their full potential. How, then, can life orientation be applied in the area of drug use? Relating to drug use, existing literature (Scherzer, 2015) explains that drug use and abuse can occur due to peer pressure, socializing, community mental health, stress and socioeconomic level.

HYPOTHESES

Based on the literature reviewed, the following hypotheses were proposed:

1. Social influence will positively influence participants' perception of risks associated with drugs such that participants on informational influence will report higher levels of risk perception compared to participants under normative influence.
2. Life orientation will positively influence participants' perception of risks associated with drug use such that participants who view their life with optimism will report higher levels of perception on risks associated with drug use compared to participants with pessimistic view about their life.
3. Age will positively influence adolescents' perception of risks associated with drug use such that older people will report higher levels of risk perception on drug use compared to younger people.

METHOD

Design: The study was based on a 2 (social influence: informational vs. normative) × 2 (life orientation: positive vs negative) × 2 (Age: younger vs older) ex post facto design.

Participants: Participants were undergraduates of the University of Uyo drawn from 5 Faculties of Engineering, Social Sciences, Environmental Sciences, Medical Sciences and Arts using the random sampling procedure with a sample size of 380. The characteristics of participants as shown in Table 1 indicate that males were 192 (50.5%) and females 188 (49.5%). A greater percentage of participants were single (91.6%) while 8.4% were married and divorced individuals. The religious affiliation of participants shows that majority were Christians with 95.3%. Participants' age ranges between 17 and 47 years, with average age of 22 years and standard deviation of 4.8.

Informed consent for each participant was obtained by explaining the procedures and reasons for the study to them. They were given the option to either participate or withdraw from the study if they were so convinced.

Instruments

Life Orientation Test-Revised (LOT-R): The life orientation test (Scheier, et al., 1994) was used to measure perspectives of people's optimism versus pessimism about life. It is a 10-item measure with 3 items measuring optimism, 3 items (pessimism) and 4 items as fillers. Respondents rated each item on a 5-point scale: 0 = strongly, 1 = disagree, 2 = neutral, 3 = agree, 4 = strongly disagree. Items 3, 7, and 9 were reverse-scored. Scoring

was kept continuous, that is, there is no benchmark for being an optimist/pessimist. Optimism is a mental attitude tied to the belief that all our actions will have a desirable outcome and is so motivated. The author reported a Cronbach alpha of .78. In this study, the scale had an internal consistency of .59.

Social Influence (Reference Group Influence) Questionnaire: The reference group inference scales (Park & Lessig, 1977) were used to measure social influence dimensions. Previous research has identified three major types of reference group influences – "informational, utilitarian and value – expressive", influence. The 14 items of the scale are subdivided into the following subscales: informational, utilitarian and value-expressive. The scale has a good internal consistency with Cronbach alphas between .43 and .78 across the three subscales and a test retest reliability (between .56 and 91) after two months. The current study reported a Cronbach alpha of .55 indicating a good internal consistency.

The Perception of Risks Associated with Drug Use Scale: This behavioural battery was developed by the European Monitoring body working to campaign against harmful drug use behaviour. It is a 21-item scale on a 5-point Likert-type format. Participants answered the question: "how much risk is there that someone will harm themselves if they….(for instance) (a) try marijuana occasionally, (b) use marijuana regularly (c) try solvents occasionally, etc? A study (Harrmon, 1993) examined the effectiveness of the Drug Abuse Resistance Education (DARE) programme in South Carolina by comparing 24 fifth grade students to a comparable control group. Significant differences were found in prosocial norms, association with drug using peers, positive peer association, attitudes to substance use and assertiveness. No differences were found on tobacco and alcohol use in the last year or during the last month. For the purpose of this study, the scale was revalidated with scale reliability test and the scale presents an excellent internal consistency with Cronbach's alpha of .82.

RESULTS

From the correlation results (Table 1), only gender positively correlates with risk perception, indicating that females perceived more risk in drug use than males. Informational social influence, normative social influence and life orientation did not show any correlation with risk perception of drug use. Moreover, apart from correlating with risk perception of drug use, gender also correlated negatively with informational social influence, positively with normative social influence, negatively with

Table 1. Table of Inter-Correlation among Study Variables of study

S/N	Variables	1	2	3	4	5	6
1.	Risk perception of drug use	1					
2.	Informational Social Influence	–.067	1				
3.	Normative Social Influence	–.027	.016	1			
4.	Life Orientation	–.012	.191**	-.133**	1		
5.	Age	–.066	–.100	–.126*	–.018	1	
6.	Gender	.115*	–.109*	.082	–.076	–.129*	1

life orientation and negatively with age. Informational social influence also correlated negatively with life orientation and age.

Similarly, normative social influence correlated negatively with life orientation, and age. Life orientation associated positively with informational social influence but negatively with normative social influence and gender. The results also showed that age was negatively correlated with all other variables except life orientation. These inter-correlations have implications for the synergy between the independent variables and risk perception of drug use.

In Table 2, the main and interaction influence of social influence, life orientation, gender and age on the risk perception of drug use are reported. The results show that only gender had a significant influence on risk perception [$F(1,323) = 4.345$, $p < .038$). However, life orientation showed non-significant influence at a p-value of .059. Other variables also did not influence risk perception of drug use.

Based on this result, a t-test was conducted to further understand the direction of the influence of gender (Tables 3). From the table, it was found that female participants perceived a higher risk to drug use than their male counterparts and thus based on the results, we elected to examine the possible direction of the effect by testing the mean difference using the t-test.

From Table 3, the result shows a significant gender difference on risk perception of drug use (t (378) = –2.138, $p < .033$). Females scored higher on risk perception ($\bar{x}$ = 60.75, SD = 9.23) of drug use than their male counterparts ($\bar{x}$ = 58.83, SD = 8.21).

Table 2. ANOVA Result Showing Influence of Social Influence, Life Orientation, Age and Gender on Risk Perception among Undergraduates

Variables	SS	Df	MS	F	Sig.
Intercept	936835.847	1	936835.847	13618.631	.000
Social Influence (A)	223.053	1	223.053	3.242	.073
Life Orientation (B)	247.980	1	247.980	3.605	.059
Age (C)	14.347	1	14.347	.209	.648
Gender (D)	298.883	1	298.883	4.345	.038
A * B	10.546	1	10.546	.153	.696
A * C	54.767	1	54.767	.796	.373
A * D	48.629	1	48.629	.707	.401
B * C	57.308	1	57.308	.833	.362
B * D	79.501	1	79.501	1.156	.283
C * D	114.943	1	114.943	1.671	.197
A * B * C	44.116	1	44.116	.641	.424
A * B * D	13.141	1	13.141	.191	.662
A * C * D	33.103	1	33.103	.481	.488
B * C * D	3.588	1	3.588	.052	.820
A * B * C * D	16.236	1	16.236	.236	.627
Error	22219.412	323	68.791		
Total	1237069.000	339			

R^2 = .064
Dependent Variable: Risk Perception

Table 3. t-Test Showing Gender Difference on Risk Perception

	Gender	*n*	Mean	SD	DF	T	*p*
Risk Perception	**Male**	192	58.83	8.21	378	–2.138	.033
	Female	188	60.75	9.23			

DISCUSSION

The study investigated the role of social influence processes: informational social influence and normative social influence, as well as life orientation in risk perception of drug use. The results revealed that social influence processes, whether informational or normative, did not affect reported risk perception of drug use. Life orientation showed significant influence on risk perception of drug use among the adolescents. This result did not align with the findings of Knoll et al., (2015) which found that social influence increases risk perception among adolescents such that risk perception increases with decreasing age. These results could mean very much to researchers on drug use when we consider other levels of interrelationships among variables.

For instance, since informational social influence is dependent on group influence for choosing what is right, then participants who were not known to be drug users but asked to give their opinions on risk perception of drug use may either have given their obvious views on their drug involvement or merely displayed expected forms of social desirability. In terms of normative social influence, its non-correlation with risk perception of drug use could be related to the fact that there may be subjective norms guiding undergraduates towards drug use such that their responses may have been given to align with the social expectation that students should stay off drugs. One salient finding of the study is that, students' life orientation predicted risk perception of drug use. This could mean that participants in the study may not have routine contact with drugs physically or may be observing strict monitoring of their overt behaviour in relation to drugs. By implication therefore, there may be personal and/or institutional observation of overlapping life orientation goals – the socially accepted view that drug use is wrong and the other view that "we can always guard against drug use if we chose to".

The reported role of life orientation in risk perception of drug use was not unexpected. Life orientation addresses peoples' social skills, knowledge and values about how the self-interacts within a specific environment. Depending on the direction of such socialization, the person is able to make choices about every life decision. In this study, people whose life experiences engendered optimism were able to understand the risky implications of drug use compared to those who were pessimistic about life. Though social influence did not predict perception of risky drug behaviour, it is important to understand that social influence processes, appear subsumed into people's life orientation as a constant index of subjective norms.

What is however not in doubt is that gender's negative correlation has identified females as those who report more risk in drug use than males. This may be due to their low involvement with drugs on the one hand and the dictum that females are perceived to use less drugs than males on

the other, thus, consolidating their higher estimation of risk more than males. Similarly, this can, as well, be the confirmation that participants may also have engaged in social desirability rather than report the actual situation. The negative correlation of gender with informational social influence and its positive correlation with normative social influence may be a pointer to a labyrinth of hidden implications. It may mean that more women than men rely on oral evidence that drug use is risky while more men than women rely on subjective norms guiding a community's drug-taking behaviour. In addition, empirical evidence has shown that group influence whether at the family, community or peer level, has the tendency to influence drug use. This finding does not align with Kazdouh et al.'s (2018) work concerning gender. That result revealed that women perceived more risk concerning drug use compared to men. The result further explains the negligent posture of our socialization agencies which include families, communities, religious bodies, educational institutions and positive peer influence on oversight functions against drug use.

Generally, in the real world, and consistent with past research, social influence, whether informational and/or normative, is capable of leading people to follow group norms and values. In the present study, the results tend to point to the fact that undergraduates who made up the study population may not have been able to see clearly the risks associated with drug use and this may be due to extant rules against drug use in hostels, classrooms and other parts of the campus. It can suggestively be reasoned that since social influence also encompasses religious practices embedded in social norms, there is a strong interaction of informational and normative variants of social norms in the risk perception of drug use by the group studied.

In another dimension, life orientation did not show a clear difference between optimistic and pessimistic participants in risk perception of drug use. Participants who were optimistic about life were marginally able to report more risks to drug use than those who viewed life pessimistically. It means that both pessimistic and optimistic people may have placed equally the same value for life, which in turn increases their hope for better things in the future, hence their restraint in taking adverse decisions that can jeopardize this hope. On the other hand, both pessimistic and optimistic people may have attached less premium on life and may have become vulnerable to threatening and adverse drug decisions.

Finally, age was implicated in the study in order to contextualize Erikson's "subcultural" stages of human development in risk perception of drug use. Therefore, juxtaposing Erikson's lifespan hypotheses to the study group was difficult due to the age of participants. With an average age of 22 years, it was clear that participants were mostly adolescents and young adults submerged in the crises of identity and identity confusion as well as the need for intimacy which may, in adverse conditions, also result in isolation. Nevertheless, Knoll, et al. (2015) found that risk perception increases with decreasing age, a finding that did not align with the result of the present study. It may also have been possible that young adults who were positively distracted by intimate interests during their young adulthood years would express very high levels of risk perception of drug use since

they were already engaged in positively desirous behavior. It is those who may not have had deep intimate interests that may report very low levels of risk perception of drugs. However, the likely decision to isolate themselves from others may increase their propensity towards drug use.

Limitations of the Study

The results of the present study may be limited by the nature of the population studied as other population types may reveal different results. It means that every group's dynamics would greatly influence the response of the population to risk perception of drug use. This study was based on a population of undergraduate students with peculiar characteristics such as age, life orientation, filial opportunities and socialization goals. As university students with specific (academic) goals and rules of engagement through the matriculation oath, students could have been very cautious in their involvement with reports associated with drugs or may, at the same time, have been very economical on how they divulged information on their involvement with drugs. With this propensity towards social desirability, the study's results should be cautiously applied to the general population. For instance, the report that social influence, whether informational or normative, did not influence students' risk perception of drug use, even with an average (perceptibly youthful) age of 22 years, makes the group an exogenous one, since results of previous studies report risk perception as being inversely proportional to age. Moreover, it cannot be definitely ascertained how students' academic overload affected the quality of their responses, since data were collected in the countdown to their semester examinations.

Implication and Suggestions for Future Research

The present findings have revealed the direction of adolescents' perception of risks in the context of drug use. It points to the reality that life orientation remains an important compass which people could use as a guide in taking many decisions, irrespective of their source and quality of social influence, be it normative or informational. The study's findings may therefore be an emporium of research knowledge for those who may choose to work in the area of people's perception of risks, not only in relation to drug use, but also of many other life threatening decisions available as options for people to take in the face of life's several vulnerabilities. Based on these observations, there is also the need to study populations other than students in order to clearly understand the direction of influence of life orientation and social influence as well as other interacting demographics on risk perception of drug use. When this is done, there will be a clear direction of counseling across different populations on the dangers associated with drug use. Moreover, these efforts will also point to other directions where research and interventions may be targeted to ensure peoples' resilience against the numerous influence and effects of drug use. With these, a significant impetus would have been added to the global synergy towards the eradication of harmful drugs through people's precautionary behaviours.

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