

The Influence of Time Perspective on Time Management and Risk Perception among University Students

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Abstract: This research seeks to contribute to the knowledge base used when designing interactive education program and health promotion that support risk free teaching-learning milieu in Higher Education Institutions. A total of 286 participants completed Time Perspective Inventory Scales, Sexual and Drug Oriented Risk Perception Scales and Time Management Questionnaires. The result shows that respondents favored for present hedonistic and future time perspective with lower emphasis of past negative and fatalistic time orientation. There was strong positive correlation among past negative time perspective and sexual risk perception; future time perspective with drug risk perception, time management and procrastination. Future time; present hedonistic and present fatalistic time orientation predicted both drug and sexual risk perception. We concluded that the present, future time perspectives and demographic variables interact with one another to influence risk perception and time management practices, with recommendations of designing cognitive and behavioral interventions aimed at stimulating time management practices and risk perception behaviors among student population.

Keywords: Time Perspective, Procrastination, Risk Perception, Time Management

Introduction

There are two paradoxes of time according to Zimbardo and Boyd: “The first time paradox arises from our assertion that time perspective is one of the most powerful influences on our decisions, yet we are typically unaware of its roles. The second paradox is that some of these specific time-perspectives categories have many good features, but when one category is too heavily favored, its negatives will undercut its virtues” (2008, p. xiv).

Time orientation (hereafter alternatively used as time perspective) is one of the most important personality constructs and individual differences that affect the lives of individuals largely. It is also deemed that the time orientation the person has can affect the time management (Macan et al., 1990; and Wolf and Savickas, 1985) and risk perceptions of individuals (Gibbons & Gerrard, 1995). Hence, in their time paradox, Zimbardo and Boyd (2008) asserted that there is a need for moderately high of past-positive, present hedonistic and future orientation with lower emphasis of past-negative, present-fatalistic. However, being obsessed about the future or any of the time orientation individuals have can cause unbalanced profile in one’s life.

Time is socially constructed (Jonas & Huguet, 2008) that activation of daily activities was moderated by social comparison orientation and identification with relevant groups which they call it a “social clock”. In line of this social construction of time, Seniger (2009) proposed that there is gender difference in building future time orientation. The social role

theories of gender posit that "...in constructing their future orientation adolescent girls will invest more in the construction of relational domains like marriage and family, and adolescent boys in the construction of instrumental domains such as work and career"(p. 97).

Youngsters` view about their present and future time is not only determined by proximal and distal factors, but it is also is affected by micro and macro-level of analysis in their upward and downward comparisons with others (Kloep, Hendry, Gardner & Seage, 2010). In a similar token, meaningful time use also has effects on the psychological well-being of persons. The research finding of Scanlan, Bundy and Matthews (2010) partially supported that meaningful time use predicted the psychological health of unemployed adolescents of 18-25 years old.

Time Management in College Students

College students are set to join at early periods for college and university that leave them with no other option than being disconnected from their families. Leaving high school early leaves young students in states of withdrawal from the norm of the newly community they are mixed in (Lee & Breen, 2007). Such a withdrawal and destabilization can affect how they manage their time in, mostly, new environments. For example, students who perceived to have control of their time had significantly reported greater performance, greater work and life satisfaction, lesser stress, lesser role overload and ambiguity (Macan, Shahani, Dipboye & Phillips, 1990). Similarly, past, present, and future thinking predicts such behavior as academic achievement (for students), occupational choice and satisfaction, job performance, and team effectiveness (Furtunato & Furey, 2010). On the other hand, a more adaptive time perspective is related to attributing success to own efforts and abilities, not luck and also acknowledging the role of lack of efforts when one encounters with failures (Wolf and Savickas, 1985).

Britton and Tesser (1991) stated that the cumulative grade point average of college students was significantly influenced by their time management. Adolescents have higher fears and hopes related to jobs and occupations whereas females have more hopes and fears than male adolescents (Trommsdorff, Lamm & Schmidt, 1979). In tandem with such studies, future time perspective is a motivational source for people to make them engage in instrumental outcomes (Phan, 2009) thereby managing their time at ease.

Time Perspective, Risk Perceptions and Risk Taking Behaviors

Time perspective is believed to affect students` behaviors with regard to their risk perception and engagement in such risky behaviors as alcohol, drugs, `chat`, cigar, etc. Perception prototypes of health risks for example, smoking, drug abuse, and use of contraception were moderated by engagement in social comparison. In other words, perceptions changed in light of change in behavior where perceptions predicted changes in such behaviors (Gibbons &

Gerrard, 1995). Other research studies confirmed that people with high present time perspective are highly prone to the self-reported use and abuse of alcohol, drugs and tobacco.

On the other hand, future time perspective is negatively related with the use and abuse of drugs, tobacco, and alcohol (Keough, Zimbardo & Boyd, 1999). Sloan, Smith and Taylor, Jr. (2003) asserted that Viscusi found that "...who attached a greater risk to smoking were less likely to engage in such behavior" (2003: 106). Viscusi's research on smoking and the perception smokers have showed the relationship of risk perception and the smoking behavior of individuals. Risk taking behaviors (for example, addiction to alcohol, cigars, sexual risks, etc) are taken as habits that develop involuntarily and conditioned. Both acute and chronic and persistent stresses lead individuals from goal-orientated action to habitual action and involuntary (stimulus-response) addition (Schwabe, Dickinson & Wolf, 2011). Future time perspective predicts a higher level of cannabis use among French students moderated by the Drug-Oriented Perception (Apostolidis, Fieulaine & Soule, 2006). Milfont, Andrade, Belo and Pessoa (2008) found out, in Brazilian undergraduate samples, from the five-factor structure of ZTPI that Present Hedonistic is positively correlated with the alcohol consumption. On the other hand, they revealed that future is positively related with health concerns and negatively correlated with alcohol consumption.

There are plenty of reasons for why dating students do not use or fail to use preventive methods during sexual encounters. To this effect, Seal and Palmer-Seal (1996) found out that college dating students' reasons for not using condoms or for practicing unsafe sex are not perceived risks, spontaneity, negative attitude to condom use, and lack of efficacy of deciding to use condoms and to discuss about safe sex behaviors among the partnering students. However, when looking at sexual risks in light of sex difference, females are prone to engage in unsafe sex not because of lack of risk perception but it has been explained that females and women are involved in risky sexual behaviors because of sexual imposition from partners, trust in the relationships and sensation seeking during sex (Jones, 2004).

Phan (2009) also asserted, in a conference paper presentation in Canberra, Australia, that time perspective (future and present) directly and positively affect academic performances of adolescents. Individual differences are salient in the judgment or decision making processes. Leikas, Lindeman, Roininen, and Lahteenmaki (2009) showed that persons with the trait of achievement motivation perceive higher risks in conditions where they focus on promotion of health but not for those who focused on the prevention of risks. This higher risk perception is influenced by the state in which the individuals were assigned (promotion versus prevention) and their trait. Studies in UK and US show that the more intelligent children are, the higher the likelihood is their consumptions of alcohol, tobacco and illegal drugs (Kanazawa & Hellberg, 2010).

Though the concept and the application of the time perspective and its effects on differing social psychological dimensions is new, it seems worth studying its effect on the time management and risk behavior perceptions college students have. Looking into our own context, many students in Northern Ethiopian Universities are observed to have propensity to

smoking, drug using, alcoholism, chat and other substances with lesser or no risk perception of the drugs and substances. To the best of the researchers' knowledge, there are few or no local studies conducted on the issues of the effects of time management and risk perception in light of time perspective; and this calls for investigation of the nature of the problem in the student communities.

On the basis of the above theoretical and conceptual framework, this research, therefore, sought to investigate students' value of time orientations, risk perceptions and the corresponding time management practices; and what implications the findings have in increasing their efficacy and achievements in academic scenarios.

Objectives

This study consists of the following objectives: (1) to what time orientation are students inclined/attribute for; (2) to assess the risk perception students have about drugs and sex; (3) to see the relationships of time perspective on their time management, procrastination and perceptions of risk behaviors; (4) to examine the effect of sex, club participation and entertainment on time perspectives, time management and drug and sexual risk perceptions.

Methods

Population and Participants

The target population of the study was students of a university of Northern part of Ethiopia. Identification of participants, and naming the university and the program where data on sexual behaviour is collected from might be sensitive that makes us unable to state in detail. The participants had differing ages, socio-economic backgrounds, source of income, served in the University cafeteria or non-café.

Stratified random sampling technique was used to select the participants from first and second year students in different departments. This sampling method was important in avoiding such biases as sex distribution, year levels and other background data; and the exclusion of participants would not affect the results of the study.

A sample of 320 participants took part in the study which, according to Krejcie and Morgan (1970) who developed a standard way of having a representative sample from a population, is representative. However, only 286 participants were used in the final analysis because incomplete questionnaires were discarded (some failed to give background information).

With regard to sex of the participants, 114 (39.9%) were females and the 172 (60.1%) were male participants. In terms of the means of feeding, 66 (23.1%) were non-cafeteria users. 90 (31.5%) of the participants reported as having a sexual partner. The year level of the participants shows that 62.2% were first year students whereas 37.8% were second year

students. On the other hand, participants who had club participation in the University were 25.5%. The average of the participants was 20.43 years with standard deviation 1.529 ranging from 18-27 years old. The participants were also grouped into three (entertaining every day, every weekend and sometimes) based on the frequency they entertain themselves.

Data Collection Instruments

Zimbardo Time Perspective Inventory (ZTPI): This inventory measures helps to identify where the participants stand in the categories of the five-factor variables namely past (positive and negative), present (hedonistic and fatalistic) and future time orientation. The items were measured on a five point scale ranging from 1 (Not true of me) to 5 (Very true characteristics of me).

Past Negative: This is a subscale of the ZTPI that is used to assess to what extent participants are tilted to the past and how their past experiences influence their current behaviors. Items include “painful past experiences keep being replayed in my mind” that consisted of nine items. There was a moderate reliability with Cronbach Alpha, $\alpha = 0.59$.

Past Positive: This subscale helps to assess how individuals use their past for the good of today. It had eight items including “it gives me pleasure to think about my past” with a reliability of Cronbach Alpha, $\alpha = 0.56$.

Present Fatalistic: It includes eight items such as “fate determines much in my life” with a reliability of Cronbach Alpha, $\alpha = 0.507$.

Present Hedonistic: This subscale comprises 15 items about the present conditions of participants with items such as “I believe that getting together with one’s friends to party is one of life’s important pleasures” with a reliability of Cronbach Alpha, $\alpha = 0.61$.

Future Time: This shows how much participants are planned about their future selves. It includes items such as “I believe that a person’s day should be planned ahead of each morning”. The reliability of the items was Cronbach Alpha, $\alpha = 0.541$ which is close to the reliability of the short form in Italian version (D’Alessio et al., 2003).

Generally, the overall reliability of the ZTPI was $\alpha = 0.77$. This reliability test is similar with the studies of Worrel and Mello (2007) who reported the reliability of ZTPI to range from 0.50 to 0.80. The ZTPI was measured on a five point scale ranging from 1 (Not true of me) through 3 (neutral) to 5 (Very true characteristics of me).

Drug Oriented and Sexual Risk Perception: This scale measures the tendency of using and perception the participants have about commonly used drugs such as ‘Chat’, alcohol and Cigars; and sexual intercourse. This was adapted from the Drug Oriented Perception (DOP) from Apostolidis, Fieulaine and Soule (2006). This scale has nine items such as “Chat,

Cigars, and alcohols lead to psychological dependence”, “Chat, Cigars, and alcohols lead to consumption of other drugs”, etc. it has shown a good reliability with a Cronbach Alpha, $\alpha=0.85$. This scale was accompanied by self-developed sexual risk perception scale consisting of eight items as “One should have sex with girl or boy friend without condom”, “I feel as if I am invulnerable for sexually transmitted diseases”, etc with scale ranging from 1 (strongly disagree) to 5 (strongly agree) showing a good reliability of Cronbach Alpha, $\alpha=0.76$.

Time Management Scale: This scale measures the ways the participants spend their time, how much they are engaged in non-goal oriented tasks, and how much time they consume by engaging in academic and related activities. This scale is a modified version of the Time management questionnaire (Macan, et al. 1990; Britton & Tesser, 1991) and we had fifteen items that assess the effective utilization of time by students with items such as “ I accept unimportant interruptions when working on an urgent task” rated with 4-point Likert scale ‘never (1) to ‘always (4)’. This scale showed a reliability of Cronbach Alpha, $\alpha=0.79$.

Procrastination Scale: This scale was developed by Lay (1986) for the student population to assess how much tasks are put off or left for later completions. It included 16 items such as “I often find myself performing tasks that I had intended to do days before”, “In preparing for some deadline, I often waste time by doing other things”. This was measured on a five point Likert Scale ranging from 1 (extremely uncharacteristic of me) to 5 (extremely characteristics of me). This also showed a good reliability of Cronbach Alpha, $\alpha=0.79$.

Procedures

The subsequent subscales were administered to fifty students (17 percent of the sample population which is outside the sample frame, and who were selected randomly) to estimate the reliability of measurements. The reliability of each scale is given above. The validity (reflecting the existing university contexts, suitability and relevance) of items was assessed by three senior lecturers from the Department of Psychology. After the items were improved through such a manner, the items were administered to students during working hours, in the presence of the researcher. In addition, prior to the collection of data, participant students were informed that completing the questionnaire will be part of the assessment and the classes they were taking. They also were briefed about the objective of the study in a few words in order to complete the questionnaire seriously.

Data Analysis

In the process of data analyses, both descriptive and inferential statistics were employed. Mainly, Pearson product moment correlations were used to the relationship among time perspective categories, risk perception, time management and procrastination. Regressions were also used to predict the academic performance, sexual and risk perceptions, and time management among students and how much the different time orientation subscales predict risk perception and time management. Independent t-tests were used to compare the time

orientation, time management, risk perceptions and procrastination based on sex, means of feeding, and club participation of participants. Both one way and two way analyses of variance were also used.

Results

The Relative Weight of Time Perspective Subscales among Respondents

To assess the relative importance or weight of each attributed time perspective subscales, the researchers computed scale scores for each time perspective category (by summing up the item scores for each scale and dividing by the total number of items in time perspective/orientation categories), and compared the mean scores for each time perspective subscales using paired t-tests. Mean scores, standard deviations and paired t-tests for the five time perspective categories are reported in Table 1 below.

Table 1: Mean, Standard Deviations, and Paired t-tests for Time Perspective Subscales, N = 286

<i>Time perspective subscales</i>	<i>Mean</i>	<i>SD</i>	<i>Mean difference</i>	<i>SD</i>	<i>Std. Error Mean</i>	<i>df</i>	<i>T</i>
Past negative	3.1480	.58021	-.32697	.75901	.04488	285	-7.285
Future	3.4750	.48164					
Past negative	3.1480	.58021	-.20251	.71284	.04215	285	-4.804
Past positive	3.3505	.58756					
Past negative	3.1480	.58021	-.48671	.51890	.03068	285	-15.862
Present hedonistic	3.6347	.37060					
Past negative	3.1480	.58021	.36865	.58911	.03483	285	10.583
Present fatalistic	2.7794	.59314					
Future	3.4750	.48164	.12446	.59329	.03508	285	3.548
Past positive	3.3505	.58756					
Future	3.4750	.48164	.69562	.78300	.04630	285	15.024
Present fatalistic	2.7794	.59314					
Future	3.4750	.48164	-.15975	.55248	.03267	285	-4.890
Present hedonistic	3.6347	.37060					
Present fatalistic	2.7794	.59314	-.85536	.57638	.03408	285	-25.097
Present hedonistic	3.6347	.37060					
Present fatalistic	2.7794	.59314	-.57115	.77255	.04568	285	-12.503
Past positive	3.3505	.58756					
Present hedonistic	3.6347	.37060	.28421	.58374	.03452	285	8.234
Past positive	3.3505	.58756					

$P^* < 0.05$

The higher the mean score the higher the agreement that the time perspective is relatively perceived by sample respondents. There is statistically significant difference between students attribution of time perspectives (See Table 1 above). The result shows that respondents relatively inclined to present hedonistic time orientation (M = 3.63, SD = 0.37) followed by future (M = 3.48, SD = 0.48), past positive (M = 3.35, SD = 0.59), past negative (M = 3.15, SD = 0.58) and present fatalistic time perspective (M = 2.78, SD = .59) in that order. The result implies that respondents favored the present conditions rather than focusing on their academic engagements. Possible explanations will be given in the discussion section.

The Relationship among Time Perspectives, Risk Perceptions and Time Management

Table 2: Pearson Product Moment Correlation among Measures of Time Perspective, Risk Perception and Time Management, N=286

Scales	1	2	3	4	5	6	7	8	9
1. Past negative	1								
2. Future	.050	1							
3. Past positive	.148*	.263**	1						
4. Present fatalistic	.383**	.005	.224**	1					
5. Present hedonistic	.520**	.078	.267**	.452**	1				
6. Drug risk perception	-.054	.188**	.068	-.209**	-.110	1			
7. Sexual risk perception	.197	-.065	.051	.247**	-.238**	-.201**	1		
8. Time management	-.052	.468**	.191**	-.097	-.079	.137*	-.106	1	
9. Procrastination	-.214	.213**	.069	-.199**	-.224**	.108	-.264**	.403**	1

$P^* < 0.05$; $P^{**} < 0.01$

In order to see the relationship among time perspective categories, risk perception and time management, the researchers carried out the zero order correlations (please see Table 2 for the details of the correlation result). The analysis revealed that there is a significant positive correlation between past negative and sexual risk perception with $r=.197$, $p<0.05$. Future time perspective also has strong significant correlation with drug risk perception ($r=.188$, $p<0.05$), time management ($r=.468$, $p<0.05$) and procrastination ($r=.213$, $p<0.05$). On the other hand, participants with time orientation of present hedonistic decreased risk perception of drugs ($r=-.238$, $p<0.05$).

Predictor Variables of Risk Perception, Time Management and Procrastination

The other main objective of the present research was to see whether time perspectives contribute in the explanations of risk perception, time management and procrastination. For this reason, different regression types were applied. Using the standardized regression, future time, present hedonistic and present fatalistic time perspectives were assessed to predict sexual perception. They explained 8.7%, $F(3, 282) = 8.992$, $p<0.001$, of variance in sexual risk perceptions. Of these, present fatalistic predicted that students perceive lesser sexual risk (beta= .172, $p<0.01$) more than present hedonistic (beta=.167, $p<0.05$). On the other hand, the same predictors explained 8%, $F(3, 282) = 8.203$, $p<0.001$, of changes in drug risk perceptions. Present fatalistic time perspective (beta= -.193, $p<0.01$) that future time perspective predicted drug risk perception (beta= .191, $p<0.01$) indicating that future time perspective predicting high drug risk perception. Again using the standard regression, it is revealed that 24.8%, $F(2, 282) = 18.457$, $p<0.001$, of variance in time management of students is explained by the time perspective they have. Future time perspective predicted more of time management (beta= .446, $p<0.001$) than past positive (beta= .120, $p<0.05$).

On the other hand, using the hierarchical model of regression, having not violating assumptions of multicollinearity, homoscedasticity, normality and linearity, in step one, frequency of entertainment, sex of participants, age and sexual partner explained 5.6% of changes in sexual risk perception. In step two, adding the five perspective subscales predicted 14.8% of variance in sexual risk perception, $F(9,276) = 5.340$, $p<0.001$. The subscales of

time perspective explained an additional 9.2% change, F change (5, 276) = 5.951, $p < 0.001$. In the final model, however, sex and present fatalistic were statistically significant with present fatalistic recording higher beta value (beta= 3.130, $p < 0.01$) and sex (beta= 2.689, $p < 0.05$).

Direct logistic regression was performed to assess the predictive ability of sex, age, CGPA, academic year level and frequency of entertainment on time management. The full model containing all predictors was statistically significant, χ^2 (7, N=286) = 19.079, $p < 0.05$, showing that the model differentiated between those who do and who do not manage their time. The model also explained between 6.5% (Cox & Snell R square) and 10.5% (Nagelkerke R squared) of variance in lack of time management and correctly classified 83.2% of cases. The strongest predictor of lack of time management was the frequency of entertainment (every day entertainment recording odds ratio of 3.6 and those every weekend, odds of 4.6). This indicates that those who 'entertain' themselves everyday/every weekend are four times/five times more likely to mismanage their time.

Sex, Club Participation and Ways of Feeding Differences in Time Perspective, Time Management, and Drug and Sexual risk Perceptions

An independent t-test was conducted to compare the time perspectives and time management where it showed no statistically significant differences between males and females. Specifically, there was no significant difference in the scores of future time perspective between females (Mean=43.39, SD=5.45) and males (Mean=44.13, SD= 6.16); t (284) = -1.03, $p > 0.05$ (two-tailed). The magnitude of the difference in the means (MD = -.73, 95% CI; -2.133 to 0.665) was very small (eta squared=0.004). There was also no statistically significant difference in the other time perspective subscales, so was there no significant difference in procrastination between females (Mean =56.07, SD=9.48) and males (Mean=56.67, SD=9.55); t (284) = -.526, $p > 0.05$ (two-tailed) where the magnitude of the mean difference (MD=-0.604, 95% CI; -2.867 to 1.658) was very small (eta squared=0.0009).

However, there was a significant difference on scores of drug risk perceptions between females (Mean=38.73, SD=7.03) and males (Mean=36.33, SD=8.28); t (284) = 2.542, $p < 0.05$ (two-tailed) and sexual risk perceptions between females (Mean=13.2, SD=5.32) and males (Mean=15.17, SD=5.93) t (284) = -2.867, $p < 0.01$ (two tailed). The mean difference for risk perceptions (MD=2.40, 95% CI; .541 to 4.253) was moderate (eta squared=.03); however, sexual risk perception (MD=-1.973, 95% CI; -3.327 to -.619) was small (eta squared=0.02).

Another independent samples t-test was conducted to compare the scores of drug risk perception, sexual risk perception and procrastination of participants based on their means of feeding (Cafeteria and Non-cafeteria participants- those who are given the cost sharing cash and are fed out of the university cafeteria). It was shown that there was a statistically significant difference of drug risk perception between cafeteria users (Mean=40.15, SD=8.255) and non-cafeteria participants (Mean=36.43, SD=5.65), t (156) = -4.181, $p < 0.001$ (two-tailed). Similarly cafeteria users (Mean=14.91, SD=5.81) and non-cafeteria users

(Mean=12.65, SD=5.30), $t(284) = 2.823$, $p < 0.01$ (two-tailed) significantly differ in their sexual risk perceptions. There also was a significant difference in procrastination between cafeteria user participants (Mean=57.06, SD=9.59) and non-cafeteria users (Mean=54.35, SD=8.97), $t(284) = 2.043$, $p < 0.05$ (two-tailed). For drug risk perceptions, the magnitude of the mean difference (MD=-3.724, 95%, CI: -5.484 to -1.965) was moderate (eta squared=0.06), for sexual risks perception (MD=2.258, 95%, CI: .083 to 3.832) was low (eta squared=0.03) but the mean difference for the difference of procrastination (MD=2.711, 95%, CI: 0.099 to 5.322) was very small (eta squared=0.01).

Though there was no significant difference of drug, sexual risk perception, procrastination and present fatalistic time perspective, there was a statistically significant difference of present hedonistic time perspective between those who are in romantic relationship, i.e., those who have sexual partners (Mean=47.61, SD=6.779) and those who are not in relationship or who do not have long term sexual partner (Mean=44.52, SD=7.996), $t(284) = 3.184$, $p = 0.002$ (two-tailed) with a slightly small magnitude of difference (MD=3.096, 95%, CI: 1.82 to 5.010, eta squared=0.04).

The involvement of participants in different clubs (club participation) influenced their sexual risk perceptions. An independent sample t-test showed that there was a significant difference in the sexual risk perceptions of those who participate in one or more clubs (Mean=15.82, SD=6.301) and those who have no club participation (Mean=13.90, SD=5.50), $t(284) = 2.483$ (two-tailed), $p = 0.014$ though a small magnitude effect (eta squared=0.02). The same test showed no statistically significant difference between first and second year students.

In light of the frequency of entertainment, the scores of those who 'entertain' themselves everyday significantly differed from those who get entertained every week or sometimes in sexual risk perception, $F(1, 283) = 7.393$, $p < 0.01$ and procrastination, $F(1, 283) = 5.847$, $p < 0.05$. On the other hand, an independent between group analysis of variance was conducted to explore the frequency of entertainment (every day, every week and sometimes) and club participation on sexual risks perceptions. The interaction effect was not significant, $F(2, 280) = .821$, $p > 0.05$. There was a main effect of frequency of entertainment, $F(2, 280) = 3.865$, $p = 0.02$ though the effect size was small (eta squared=0.03). Post hoc comparison of Tukey HSD showed that the mean scores of those who entertain themselves every day (Mean=16.77, SD=5.776) significantly differed from those who get entertained every week (Mean=13.52, SD=4.815) and sometimes (Mean=4.17, SD=5.875). In the same token, two way ANOVA of sex and frequency of entertainment did not show significant interaction effect $F(2, 280) = 2.451$, $p > 0.05$, but showed main effect of sex, $F(1, 280) = 9.685$, $p < 0.01$ on the sexual risk perceptions. The main effect of frequency of entertainment $F(2, 280) = 0.939$, $p > 0.05$ did not reach statistical significance.

Discussion

The first objective of the present research was to examine the extent to which and degree of respondents' inclination towards the time perspective categories. The result shows that the respondents (as they are adolescent student population) relatively favored for present hedonistic and future time perspective with lower emphasis of past negative and fatalistic time orientation. Perhaps respondents have been guided in their thinking by social learning experiences, which stressed the need for present gratification, and value of time in life courses with which they are acting in more pleasure seeking activity than academic engagements. They might develop the opportunities to construct social clock that direct their thinking in seeking gratifications in the present conditions rather than just being exposed to plan ahead for the future. Of course, their relative inclination to future time orientation helps them to promote their academic activities by guiding them which activities will be done ahead of time. However, the authors of this research, suggest, with some reservations, that being obsessed with the present hedonistic and future time orientation with lower emphasis with on the other time perspective categories will induce unbalanced life profiles in the student communities (Zimbardo & Boyd, 2008).

In this research, the researchers also examined the influence of time perspective on time management, risk perception and risk taking behavior on a sample of University students in Ethiopia. The research results indicated a significant positive correlation between past negative and sexual risk perception; future time perspective also had a strong significant positive correlation with higher drug risk perception, better time management and lesser probability of procrastination. The present hedonistic and future dimension evidenced in the present study on a sample of University Students seem to be parallel to those reported by Milfont, Andrade, Belo and Pessoa (2008). Furthermore, consistent with the current result, findings by Keough, Zimbardo and Boyd (1999) showed that people with dominant future time perspective are likely to perceive high risk and subsequently distance themselves from the potential threats.

Given the diverse participants and the strength of the relationships uncovered, it is apparent that sexual and drug risk perception increases among those who are higher in future time perspectives and lower on those who are present hedonistic and present fatalistic time perspectives (Keough, Zimbardo & Boyd, 1999; Zimbardo & Boyd, 2008). Future time perspective was also powerful in students' time management. Time perspective can be thought of as a unique cognitive style of processing information and acting based on learned, preferred focus on one or another dimension of the temporal environment, past, present or future. When that preference becomes persistent, the person typically uses only a narrow or biased temporal frame for dealing with the social world he/she lives in-it then functions as a personal trait. A study by Rothspan and Read (1996) on the effects of present and future time perspective on heterosexual adolescents on HIV/AIDS sexual risk taking behavior showed that adolescents with present orientation, as opposed to those with future orientation, did not use alternatives to reduce risk such as abstinence, inquiring about the history of partners or delaying sex. Present orientation was positively correlated with risky sexual behaviors.

Thus, time perspective is an important orientation for an individual's achievement motivation and anticipated action or consequences. The result reported in the present research invites the outcome of systematic identification of the importance of the present along with the future orientations. Moreover, the current research from our sample is revealing conditions under which a past negative orientation also contributes an important way to understand (to a larger extent) the complex human sexual behavior in their due course of life history.

Apart from sexual and drug risk behaviors, the present and future time perspectives can also be related to host of other risk behaviors and health maintenance behaviors, with present time oriented individuals acting in more pleasure seeking activity while those individuals who are future oriented acting more for concern about the consequences of their actions and seeking long-term gratifications. This discussion indicates when individuals are future oriented in their time perspectives, they will have a better frame of time management. This is mainly because future oriented individuals are ready to put a great deal of effort into their work, as they are good at avoiding temptations and distractions and devote most of their energies and actions to the achievement of a goal. Similar arguments and logical analysis also apply for procrastination where individuals with present time orientation adhere to put off or leave tasks for later completion.

In terms of the relationship between demographic variables and temporal dimensions, in this study we obtained different results from those reported by Gonzales and Zimbardo (1985). In the present findings, sex had no effect on time perspective, time management and procrastination. However, there was sex difference on drug and sexual risk perceptions of respondents where females scored higher in drug perception and lower in sexual risk perception than their counterparts. It should be noted, however, that this sex difference could be due to a ceiling effect; female respondents indicated very high behavioral expectations (or perhaps experience) for the condition of drug risk perceptions and lower behavioral expectations for sexual risk perceptions were affected by the time perspective they were induced to socialize. The fact that present hedonistic perspective varies as a function of respondents with sexual partner and non sexual partner might also happen with the expectation that increased awareness will make people more risk averse and will reduce their willingness to engage in unsafe sex. Stated in another way, respondents having sexual partner would score higher on the present hedonistic dimension and lower on the future dimension reflecting an internalized environmental representation/social clock guiding them towards shorter-term life strategies.

The result also showed that respondents who had participated in one and more clubs were found to be higher in their sexual risk perception than those respondents who did not take part in any more clubs. We argued that active (partial) involvement of students in club increases the awareness that unsafe/risk sexual behavior can have negative consequences, and that this increased awareness causes people to become more risk averse and take much more attention in their sexual risk perceptions in their course of life. Looking at sexual risks taking behaviors among college students, Rolison and Scherman (2003) took three perspectives:

dispositional trait, decision making and environmental perspectives. Their findings show that sensation seeking, perceived peer participation and certain benefits from doing what they do are related to involvements in risky behaviors. As adolescence is also a period of invincibility and immutability to risks, the perceived likelihood of the consequences of the risks are related to taking and getting involved in risky behaviors.

The post hoc comparison revealed that those who entertained themselves everyday had lower sexual risk perception than their counterparts. Individuals who have experienced environments (home conditions) in which personal safety, social support, and resource control are uncertain may be more likely to discount future outcomes in favor of present outcomes. Others who experienced more reliably supportive environments (parental care and support) where resource control is more certain could be expected to exhibit the reverse pattern as a reflection of experiences that promote longer-term strategies whereby maximum risk perception behavior will be induced. Stated in another way, entertainment may be attributed to individual's time perspective which may psychologically represent the essence of life history tradeoffs.

Two of Zimbardo and Boyd's (1999) psychological measures of time perspective may be especially relevant to these features of life history. Present orientation, or "Present-Hedonistic" in Zimbardo and Boyd's terms, reflects an orientation towards immediate outcomes and little concern for future consequences (for example risk taking behavior). Future orientation reflects a pattern of behavior dominated by a striving for future goals and rewards. Taken together, the current results point to the existence of important relationships between time perspectives, time management practices and risk perception behaviors with which it guides rigorous future research to discover less clear significant differences among the host of variables in other similar veins.

Theoretical and Practical Implications

From the theoretical perspective, the results from the present study show that present, future time perspectives and demographic variables interact with one another to influence risk perception and time management practices. From an applied perspective, the findings from this study indicate that to be maximally effective, sensitization program, educational forum, and academic intervention programs aimed at stimulating time management practices and risk taking aversive behaviors should be targeted at individual or group based intervention on the basis of their future time perspective, drug and sexual risk awareness, and risk management behavior. For example, life skill trainings mainly focusing on time orientation, time management, risk perception and risk behavior management skills should be given for student community visiting the university. Focusing on a smaller, more homogeneous subset of individuals, however, would allow university level intervention specialists to make stronger assumptions regarding individuals' psychological pre-dispositions of time, which in turn, should allow them to fine tune their advice to university students.

The results of this investigation may also have important applications for educational planning professionals. Among others future time perspective/predispositions, risk preventive behavior, and risk perception awareness measures could probably be used as assessment tools to gauge client time management practices. Educational advisors and psychologists could also use the results of the examination of time perspectives on time management and risk perceptions with the student/client for counseling and educational purposes. For example, a client low in drug and sexual risk perception or knowledge with a short future time perspective might benefit from receiving not only informational packets on time management, but also long-range educational goal-setting exercises.

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Other Information

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References

- Apostolidids, T., Fieulaine, N. and Soule, F. (2006). Future time perspective as predictor of Cannabis use: Exploring the role of substance perception among French adolescents. *Addictive Behaviors, 31*, 2339-2349
- Britton, B.K. and Tesser, A. (1991). Effects of time-management practices on College grades. *Journal of Educational Psychology, 83*(3), 405-410
- D'Alessio, M., Guarino, A., De Pascalis, V. and Zimbardo, P. G. (2003). Testing Zimbardo's Stanford Time Perspective Inventory (STPI)-short form: An Italian study. *Time & Society, 12* (2/3), 333-347
- Fortunato, V.J. and Furey, J.T. (2010). The Theory of Mind Time: The relationships between thinking perspective and time perspective. *Personality and Individual Differences, 48*, 436-441
- Gibbons, F.X. and Gerrard, M. (1995). Predicting Young Adults' Health Risk Behavior. *Journal of Personality and Social Psychology, 69* (3), 505-517

- Jonas, K. J. and Huguet, P. (2008). What day is today? A social-psychological investigation of into the process of time orientation. *Personality and Social Psychology Bulletin*, 34(4), 353-365
- Jones, R. (2004). Relationships of sexual imposition, dyadic trust and sensation seeking with sexual risk behavior in young urban women. *Research in Nursing and Health*, 27, 185-197
- Kanazawa, S. and Hellberg, J. E. E. U. (2010). Intelligence and substance use. *Review of General Psychology*, 14(4), 382-396
- Keough, K.A., Zimbardo, P.G. and Boyd, J.N. (1999). Who's Smoking, Drinking, and Using Drugs? Time Perspective as a Predictor of Substance Use. *Basic and Applied Social Psychology*, 21 (2), 149-164
- Kloep, M., Hendry, M. P., Gardner, C. and Seage, C. H. (2010). Young people's views of their present and future selves in two deprived communities. *Journal of Community & Applied Social Psychology*, 20, 523-524
- Krejcie, R.V. and Morgan, D.W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610
- Lee, T. and Breen, L. (2007). Young people's perceptions and experiences of leaving high school early: An exploration. *Journal of Community & Applied Social Psychology*, 17, 329-346
- Leikas, S., Lindeman, M., Roininen, K. & Lahteenmaki, L. (2009). Avoidance motivation, risk perception and emotional processing. *European Journal of Personality*, 23, 125-147
- Macan, T.H., Shahani, C., Dipboye, R.L. and Phillips, A.P. (1990). College students' time management: Correlations with academic performance and stress. *Journal of Educational Psychology*, 82 (4), 760-768
- Milfont, T.L., Andrade, P.R., Belo, R. P. AND Pessoa, V.S. (2008). Testing Zimbardo Time Perspective Inventory in a Brazilian Sample. *Interamerican Journal of Psychology*, 42, 49-58
- Phan, H.P. (2009). Examination of time perspective, hope, self-efficacy, and ethnic identity: A Structural equation model. Conference paper for the AARE, 2009, Canberra Australia
- Phan, H.P. (2009). Future time perspective in socio-cultural contexts: A Discussion paper. *Electronic Journal of Research in Educational Psychology*, 7(2), 761-778
- Rolison, M. R. & Scherman, A. (2003). College student risk-taking from three perspectives. *Adolescence*, 38, 689-704
- Rothspan, S. & Read, S. J. (1996). Present versus future time perspective and HIV risk among heterosexual college students. *Health Psychology*, 15, 131-134.
- Scanlan, J. N., Bundy, A. C. Matthews, L. R. (2010). Investigating relationships of meaningful time use and health in 18- to 25-years-old unemployed people in New South Wales, Australia. *Journal of Community & Applied Social Psychology*, 20, 232-247
- Schwabe, L., Dickinson, A. and Wolf, O. T. (2011). Stress, habits and drug addiction: A psychoneuroendocrinological perspective. *Experimental and Clinical Psychopharmacology*, 19(1), 53-63

- Seal, D.W. & Palmer-Seal, D.A. (1996). Barriers to condom use and safe sex talk among college dating couples. *Journal of Community and Applied Social Psychology*, 6, 15-33
- Singer, R. (2009). *Future time orientation: Developmental and ecological perspectives*. New York: Springer
- Sloan, F. A., Smith, V. K. and Taylor, Jr., D. H. (2003). *The smoking puzzle: Information, risk perception and choice*. Cambridge: Harvard University Press
- Trommsdorff, G., Lamm, H. and Schmidt, R.W. (1979). A Longitudinal study of Adolescents' future orientation (time perspective). *Journal of Youth and Adolescence*, 8, 137-147
- Wolf, F.M., and Savickas, M.L. (1985). Time Perspective and Causal Attributions for Achievement. *Journal of Educational Psychology*, 77 (4), 471-480
- Zimbardo, P. and Boyd, J. (2008). *The time paradox: The new psychology of time that can change your life*. New York, NY: Free Press.