

**CULTURAL, GENDER AND SOCIO-ECONOMIC DIFFERENCES
IN TIME PERSPECTIVE AMONG ADOLESCENTS**

By

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Reshma Athawale

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Summary

The focus of this research was to determine the possible differences in time perspective among groups of adolescents from different cultures, socio-economic status and gender groups, within the South African setting. Time perspective is an important cognitive function that exerts a dynamic influence on important judgements, decisions and actions. Despite its importance, this is a concept that has not been explored in depth. Consequently, little South African literature is available on this topic.

Four schools were involved in this study. The schools were chosen on basis of the predominant cultural group of the learners, the gender of the learners that attend the school, and prevalent socio-economic status. All the four schools are situated in Bloemfontein, Free State. The research was carried out on all the Grade 9 learners in the four schools. The sample consisted of 390 learners. The Zimbardo Time Perspective Inventory and a biographical questionnaire were administered to the research sample.

Analyses of the results indicated that the temporal orientation that the learners reported on being most inclined towards was the Future time perspective. Results of the statistical analyses suggested that in this particular research group socio-economic status, culture and gender do not have a significant impact on the learner's time perspective.

A Future time perspective is one that is characterised by several positive traits such as high motivation, a high sense of responsibility, ability to organise and plan actions to name a few. The results that have been observed are encouraging as the Future orientation was found to be predominant in learners across the boundaries of culture, gender and socio-economic status.

Opsomming

Die doel van die navorsing was om die moontlike verskille ten opsigte van tydsperspektief tussen groepe adolessente van verskillende kulture, sosio-ekonomiese status en geslag te ondersoek in die Suid-Afrikaanse konteks. Tydsperspektief is 'n belangrike kognitiewe funksie en het 'n dinamiese impak op belangrike beslissings, besluite en aksies. Ten spyte van die belangrikheid daarvan is hierdie konsep nog nie in diepte ondersoek nie. Gevolglik is daar min Suid-Afrikaanse literatuur oor hierdie onderwerp beskikbaar.

Vier skole van Bloemfontein, Vrystaat, was betrokke by hierdie studie. Die skole was gekies op grond van die oorheersende kultuurgroep waaraan die leerders behoort, die geslag van die leerders wat die skool bywoon, en die oorwig van die vlak van sosio-ekonomiese status. Al die Graad 9 leerders van die vier skole het aan die navorsing deelgeneem. Die steekproef het uit 390 leerders bestaan. Die *Zimbardo Time Perspective Inventory* en 'n biografiese vraelys is op die steekproef afgeneem.

Analises van die resultate het aangedui dat toekomstydsperspektief die temporale oriëntasie was waarheen die leerders meestal geneig het. Resultate van die statistiese analise het daarop gedui dat, in hierdie spesifieke steekproef, sosio-ekonomiese status, kultuur en geslag nie 'n beduidende invloed op leerders se tydsperspektief het nie.

'n Toekomstydsperspektief word gekenmerk deur talle positiewe eienskappe soos, onder andere, hoë vlakke van motivering, verantwoordelike sin, en die vermoë om te organiseer en aksies te beplan. Die resultate wat waargeneem is, is bemoedigend aangesien toekomstydsperspektief oorheersend voorgekom het in leerders ten spyte van die grense van kultuur, geslag en sosio-ekonomiese status.

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Introduction

"For us convinced physicists, the distinction between past, present, and future is an illusion, although a persistent one."

- Albert Einstein

Albert Einstein's theory of relativity (1931) established the subjective nature of the physical interpretation of time. Since the time, there has been much controversy among philosophers, psychologists, and physical scientists about the significance of this relative phenomenon. However, research in this field has supported existential philosophers who believed time conception to be an innate ability (Kant, 1965) that influences the way people perceive the world that they live in. Eastern philosophies, such as Zen, believe that time runs in a circular pattern, and thus the past is just as important as the future and present. These views have been agreed upon by Western researchers such as Lewin (1951), who defined time perspective as "the totality of the individual's views of his psychological future and psychological past existing at a given time" (p.75).

Lewin was one of the first researchers to stress the importance of time perspective in the study of human behaviour. He believed "...the life space of an individual, far from being limited to what he considers the present situation, includes the future, the present, and also the past. Actions, emotions, and certainly the morale of an individual at any instant depends upon his total time perspective." (Lewin, 1948). More recent researchers, such as Nuttin (1964) have supported the Lewinian belief, that future and past events have a fundamental impact on present behaviour to the extent that they are present in the person's everyday cognitive reasoning.

Time perspective is now recognised as "a nonconscious process whereby the continual flow of personal and social experiences are assigned to temporal categories, or time frames, that help to give order, coherence and meaning to those events" (Zimbardo & Boyd, 1999). A person's orientation towards time, which is the preferential direction of

an individual's thoughts and actions towards the past, present or future (Volder de, 1979), has a dynamic influence on his/her judgements, decision and actions.

Carstensen and her colleagues (Carstensen, Isaacowitz, & Charles, 1999) have proposed that a person's perception of time plays an integral role in the selection and pursuit of social goals, with important implications for emotion, cognition and motivation. The past, present, and future temporal frames are used in encoding, storing and recalling experienced events, as well as in forming expectations, goals, and possible scenarios. It has been suggested that an optimal time perspective is balanced and allows flexible transitions among temporal orientations that are most situationally appropriate (Zimbardo, Boyd & Keogh, 1999). When a specific orientation is used too often, and others too rarely, a person may become "biased" in their perspective of time. For example, people who are predominantly present orientated may be able to enjoy the moment, but they may have a problem with delay gratification and planning of realistic goals (Zimbardo, 2002). People with high future orientation are good at meeting long term obligations, but on the other hand may be inclined to sacrifice present joys and gratification. Those with high past orientation are able to appreciate and honour obligations and responsibilities, but may be rigid when faced with change.

Zimbardo and Boyd (1999) have proposed five time perspective constructs. These are Past - Negative; Present- Hedonistic; Future; Past-Positive; and Present- Fatalistic.

Past-Negative: This attitude reflects a generally negative, pessimistic and aversive view towards the past. This negative attitude towards the past may be due to actual events that were experienced as traumatic or unpleasant, or may be due to negative reconstruction of past events. Often this attitude may be a mix of both. A person who has a predominantly Past-Negative attitude may often find himself/herself ruminating over unpleasant past experiences, and thus reliving the disappointment or trauma.

Present-Hedonistic: This attitude is characterised by one that is "living for the moment". Thus, risk taking and hedonistic behaviours are associated with people who subscribe to

this way of thought. It suggests an orientation towards present pleasure to such an extent that little concern is shown for future consequences.

Future: People who subscribe to this attitude are concerned with future goals and rewards. Thus, this attitude is associated with a focus on the future, where the present situation is contemplated in terms of future consequences.

Past-Positive: People with an attitude that is Past-Positive have a tendency to reflect on past experiences. However, in contrast to the Past-Negative attitude, this tendency generates feelings of warmth, and sentimentality.

Present-Fatalistic: This attitude reflects a predominantly helpless and hopeless stance towards life and the future in general. People who think in this manner, often feel out of control in the situations that they find themselves in.

Since the introduction of Lewin's (1951) ideas on the psychology of time, time perspective has been related to a host of psychological and sociological constructs. However, until recently due to conceptual simplification of the construct, most of the research has tended to focus on only a single dimension, without the complicating influence of other temporal dimensions (Zimbardo & Boyd, 1999). Recent research done on the different temporal dimensions demonstrates the important influence that each one of the temporal dimensions have on the emotion, cognition, and behaviour of a person.

Research projects conducted by Lyubomirsky and Nolen-Hoeksema (1995) as well as Nolen-Hoeksema and Morrow (1993) have demonstrated that the negative rumination associated with an attitude that is predominantly Past-Negative, is associated with depression. The studies have also pointed out that individuals who scored a high Past-Negative score, had symptoms associated not only with depression, but also anxiety, unhappiness, and low self esteem. An additional finding was the strong relationship between Past-Negative scores and aggression.

Zimbardo and Boyd (1999) carried out an intensive case study research to explore the influences that the different dimensions of time perspective have on a person's emotions, thoughts and behaviour. They reported that a Past-Negative attitude is characterised by a host of problems such as: problems with interpersonal relationships, lack of physical exercise, and an affinity towards gambling. A correlation was also found between high Past-Negative feelings, and a general dissatisfaction of present life circumstances.

Zimbardo, Boyd and Keogh (1999) have identified that a Present time perspective correlates positively to risky driving, frequent smoking, consumption of alcohol and drug use. In the research that Zimbardo and Boyd (1999) carried out, these results were replicated. People with a predominant Present-Hedonistic attitude consumed more alcohol than those who had a low score on this scale. They were also found to be less religious and were unclear about their future goals than their counterparts who did not have a Present-Hedonistic attitude. Goldberg and Malasch, 1996, in Zimbardo and Boyd (1999) have demonstrated that this attitude correlates positively and significantly with Energy, but negatively with Conscientiousness and Emotional Stability.

Zimbardo and Boyd (1999) have found in their research, that people who focus nostalgically on good times from the past, thus having a Past-Positive orientation, were generally found to be introverted with satisfying social and family relationships. They were also likely to be spiritual, and consumed less alcohol than people who had a high Present-Hedonistic score. A high score on this factor also correlated significantly and negatively with aggression, depression and anxiety.

A Present-Fatalistic attitude has been shown to be significantly correlated with aggression, anxiety and depression. This attitude of resignation, correlated negatively with future consequences of behaviour (Zimbardo & Boyd 1999). The research has also observed that the depth of fatalism demonstrated by this group of people was depicted in a desire to live short lives. They were also likely to have many sexual partners, practice unsafe sex, and were at high risk of contracting the HIV/AIDS virus. Rothspan and Read (1996) conducted a research on college students to investigate HIV risk and time

perspective. They found that those high in present orientation (both Hedonistic and Fatalistic) were more sexually active and promiscuous than those high in future orientation.

In comparison to the other constructs of time perspective, an extensive amount of research has been done on Future time perspective. It has been recognised that Future time perspective may have profound effect on human motivation and behaviour (Seijts, 1998). For example, researchers (Barndt & Johnson, 1955) have found evidence that delinquents have a shorter time perspective than non-delinquents, who seem to be more orientated in the Present. Manganiello (1978) demonstrated that opiate addicts had a shorter Future time perspective than non-addicts; and they correlated positively to a low self-esteem and an external locus of control. Smart (1968) found that alcoholics had less extensive and coherent Future time perspectives than did social drinkers. These results were reflected in Zimbardo & Boyd's (1999) study, where they discovered that a Future time perspective was negatively associated with behaviours that might jeopardise future goals, such as aggression, ego undercontrol, impulsivity, and risk taking. The Future factor correlated significantly with conscientiousness, consideration of future consequences, and preference to consistency. The scores also correlated negatively to sensation seeking, anxiety and depression.

Over the years, research done in this area has pointed towards the strong relationship between Future time perspective and motivation. For example, De Volder and Lens (1982) found evidence that an extended Future time perspective is an influential factor in academic performance improvement. Future time perspective thus has a motivational impact on planning goals, persisting towards achieving them, and performance.

Bearing these properties in mind, time perspective has a special importance for individuals going through developmental and transitional periods in which they are expected to prepare themselves for the tasks that lie ahead (Seginer, 2003). Therefore the study of time perspective is especially relevant to adolescent development; as they have

important life tasks ahead of them, which need optimal motivation and responsible decision making.

During adolescence, boys and girls are faced with several life developmental challenges and normative demands typical for their age (Lens, Herrera & Lacante, 2003). This is a period that children have to make decisions about their future education, occupation and family life. Paxiao (1997, 2002, Paixao & Silva, 2001, in Lens, Herrera & Lacante 2003) have shown that the individual's time perspective and attitude towards the future play an important role in the construction of educational and or vocational projects in late adolescence and early adulthood. Research done by Peetsma (2000) clearly shows that there are positive correlations between the scales for future time perspective related to school and professional career and school investment.

The research that has been conducted on time perspective over the past years, has also established that over-reliance on a particular temporal frame is determined by many learned factors, with cultural, education, gender, religious, social class, and family modelling among the most prominent (Zimbardo & Boyd, 1999). Within the constraints of this proposed research, three of these factors will be investigated, namely: culture, gender and social class.

It has been proposed that people from different cultures differ in their preference of the past, present or future (Seginer, 2003). Some societies, such as in the Western world, encourage the pursuit of autonomy and the development of future tasks; whereas other societies encourage a more past orientated approach. Various researchers have gathered results that support this premise in the past. Levine and Barlett (1984) have found predominant cross-cultural differences in future time perspective among both adults and students in Australia, Brazil, India and the United States. Similar results were obtained by the research carried out by Heckel and Rajagopal (1975). They compared future time perspective among Indian and American college students, and discovered striking differences in their extension of the future perspective, which is the length of the future time span that is conceptualised. The results indicate that American students have a

longer future time perspective than their Indian counterparts. These findings were related to the fact that due to the easy availability and access to modern technology and health care. Americans thus have a longer life expectancy than the average Indian.

Closer home, Alastair Bentley (1983) investigated future time perspective in a sample of Swazi and Scottish students. Content analysis of the results indicated that people from different cultures laid emphasis on different matters of concern. For example, Personal Happiness was a greater topic of concern for the Scottish than for the Swazi. It is suggested that the relative importance of this variable in the Scottish sample reflects the encouragement that the Western cultures harbour towards individuality rather than concern for family responsibilities. Preoccupation with the welfare of other family members can be considered more characteristic of societies in which the traditional extended families are still intact.

Significant ethnic differences were also found in the research that Zimbardo and Boyd (1999) carried out. On the Past-Negative scale African Americans scored the highest, followed by Asians and then those of "Other" ethnic backgrounds. On the Past-Positive scale Caucasians scored the highest, followed by Hispanics, African Americans, and Asians.

However, not all the studies that have been carried out on the cross-cultural setting have provided consistent results on the relationship between culture and time perspective. For example, evidence presented by Mehta, Rohila, Sundberg and Tyler (1972) found no significant cultural differences in the median time attributed to future events in American and Indian samples. Therefore, further research in this area needs to be done to equivocally substantiate the correlation that has been found in some of the research done.

This trend in differences in time perspective among groups from different cultural backgrounds can also be traced to a difference in level of socio-economic status. In research carried out by Lomranz, Shmotkin, and Katznelson (1983), Future time perspective revealed a significant relationship to the variable Social Class. These results

supported the previous findings of LeShan (1952) among other researchers, which demonstrated a tendency of middle-class subjects, in contrast to lower-class subjects towards a longer and coherent Future time perspective.

The effect of Social Class on time perspective is hypothesised to be linked to stressful life events (Fingerman, 1995). People in lower socio-economic groups often have to face challenges such as poverty, crime and unemployment, among other adversities in their day-to-day lives. In the research that Beiser (1987) conducted on refugee populations, it was observed that during periods of acute stress, refugees focus more on the present than on the future. Markus and Nurius (1986) carried out an examination of different temporal aspects of self-concept. The results revealed that a general locus of control was related to time perspective. If people experienced life events in which they felt helpless and frustrated, or were currently going through a situation that reflected this sentiment, they were more likely to feel out of control over future events. Therefore they tend to focus on the past or the present. These results support the theory that time perspective is an outcome of the socialisation process (Lamm, Schmidt, & Trommsdorft, 1976). Individuals learn that society as a whole, as well as the social class and groups that they belong, provide an organised array of future events and goals, some of which are more time specific than others (Seijts, 1998).

Gender has also been recognised as a variable that constitutes to differences in time perspective. In the research that Zimbardo, Boyd and Keogh conducted (1999) they found that men reported consistently higher present scores than women. Female participants in the research also reported on having higher future scores in all of the samples than their male counterparts. These results are in accordance with the findings of Heckel and Rajagopal (1975). In their study on Future time perspective among men and women from India and USA, they discovered that there were differences in time perspectives not only among the different nationalities, but also among the different genders. Bentley (1983), in his research on future time perspective among Swazi and Scottish students, compared the differences not only in culture but also gender. He discovered that sex differences were more important determinants of personal future time

extension. Within each cultural group men were found to have significantly more extensive future time perspectives than women. Content analysis has shown that women tend to be far more concerned with issues such as Marriage and Children than men are. This has resulted in the speculation that the relatively greater emphasis placed upon marriage and family on women is an important factor in their choice of preferred time perspective modality. It has been suggested that the uncertainty of obtaining a spouse results in a lack of control over the future, which leads to a truncated future time perspective (Bentley, 1983).

These results have not been replicated universally. Fingerman (1995) in her study on Future time perspective in adults discovered that there were no gender differences in the time period participants reported thinking of most frequently. Thus although gender has been recognised as an important variable that influences a person's perspective of time, this construct has not been proven to be equivocally true.

The study of time perspective is one that is relatively young. A limited amount of research has been carried out in this area, and the results have indicated the strong influence this construct is likely to have on fundamental psychological constructs. Thus, this research is being carried out in an attempt to enhance the existing knowledge in this field. Most of the research that is cited above has been derived from studies conducted internationally, as the amount of research done on this topic in South Africa is very limited. Thus, this study will attempt to analyse the prevailing pattern that one would find in adolescents within the South African setting.

South Africa presents a very interesting environment to conduct this research. The country's history bears witness to centuries of turmoil, unrest and oppression. The 1950 Population Registration Act ensured that all citizens were classifiable according to racial criteria. This was followed by other acts that disenfranchised all persons not classified as White. The 1960's were marked as South Africa's most politically repressive periods (Finchilescu & Dawes, 1999), and the two decades that followed were transition periods

where political activism was a prominent feature of the lives of many young Black South Africans.

In early 1990, South Africa was a highly polarised and violent society. After democracy was restored in 1994, a certain level of anxiety and racial antagonism was still prevalent (Finchilescu & Dawes, 1999).

Since the time, although the class structure of South African society has not altered radically, many factors that influenced political socialisation under the old regime have seen a significant change. For example, there has been a radical decrease in the level of political activity and violence in the country. Inter-group contact is more possible, as schools and neighbourhoods are more integrated. However, as privileges are now being dispensed to the previously disadvantaged group; Mattes (1998, in Finchilescu and Dawes 1999) reported that opinion polls indicate that fear and anger is prevalent among the White, Coloured and Indian groups, as a result of their perceived loss of privileges

Finchilescu and Dawes (1999) conducted a research on the South African adolescent's future ideologies. The results of this research were compared to the ones carried out by Danziger (1963). The impact that the change in socio political environment, had on future ideologies across cultures was studied in this research project. The results indicated that the population group to which the adolescent's belonged was found to have a major influence on the type of future perspective that they were likely to have. In the study carried out in 1996, White, coloured, and Indian adolescents reported on envisaging the future as 'catastrophic' (disastrous future, characterised by economic decline, violence, chaos), a significant change from earlier studies, where the different culture groups presented with an array of different possible future scenarios. A change was also noted in the Black population, who earlier had predominantly 'revolutionary' themes (future themes indicating the belief that the government would be overthrown and radical change would ensue), in 1996 were noted to have 'Liberal' (future scenarios that indicated the need for a peaceful transformation).

The last few decades have been ones marked with radical social upheaval and a structural breakdown of the socio-political system. Although these changes have a marked effect on all members of society, it has been hypothesised (Cairns, 1996) that children and adolescents are particularly vulnerable and are most likely to be the first to suffer both emotionally and physically. Until recently, the majority of the South African population was underprivileged. Their rights to education, free speech, democracy, among others, were in serious restraint. However, the changes in the political system have now attempted to reinstate the people with the rights that they deserve. Nevertheless, a huge gap still exists in the socio-economic, educational and employment levels of the white and non-white population. Thus, a study in time perspective among the different culture groups, can be used to explore the effects that the long standing oppression followed by a dramatic change in the socio-political environment, have had on the adolescents that represent the future of South Africa.

This research also attempts to take into consideration the different dimensions of time perspective. In the past research has been focused upon a single dimension of temporal orientation. It was assumed that scoring high on one scale was equivalent on scoring low on another. For example, scoring high on Future time perspective was thought to be the same as scoring low on Present time perspective (Zimbardo & Boyd, 1999). However, data has shown that this is not the case. Thus, in the present research the five subscales of time perspective are thought to be independent of each other. Focusing on these different dimensions may allow for more precise understanding of complex emotional, cognitive and behavioural phenomena.

In addition to investigating the effect that variables such as culture and socio-economic status have on an adolescent's time perspective, the influence of gender will also be studied. As mentioned earlier, research in this field has not yielded in unanimous results. Thus, this investigation attempts to further enhance the knowledge that is held in this area.

Methodology

Four schools were involved in this study. The schools were chosen on basis of the predominant cultural group of the learners, the gender of the learners that attend the school, and prevalent socio-economic status. The research was carried out on all the Grade 9 learners in the four schools. The sample consisted of 390 learners.

The biographical characteristics of the participants appear in Table 1.

Table 1: Frequency distribution of the biographical variables for the research participants

Biographical variable	N	%
Gender		
Female	163	42.8
Male	218	55.9
Age (in years)		
12 – 13	5	1.3
14 – 15	322	86.6
16 – 17	40	10.6
18 – 19	5	1.3
Culture group*		
Asian	11	2.8
Black	144	36.9
Coloured	16	4.1
White	207	53.1
Socio economic status		
Better than most	203	52.1
Worse than most	187	47.9

* As the number of Asian and Coloured learners present in the study constituted to only 6.9% of the total sample, these participants were included in the group with Black learners for purposes of the research. Thus for methodological purposes, two cultural groups were compared, namely Black and White.

The frequency distributions of the biographical variables indicate that there are roughly equal numbers of males and females in the research group. The mean age of the research sample was 14.9 years. Roughly equal numbers of Black and White participants were present. The sample of Black learners constituted to 43.8%, while the sample of White learners constituted to 53.1%, of the total research group. The Asian and Coloured culture

group constituted to only 6.9% of the whole sample group. The option of omitting these groups from the research was considered. However as the size of the groups was small, omission or inclusion of the participants in these groups was not likely to have a significant bearing on the outcome of the statistical analysis. Thus, the decision of including Coloured and Asian participants within the Black culture group was made.

Measuring Instruments

The Zimbardo Time Perspective Inventory (ZTPI) (Zimbardo & Boyd, 1999) was used to assess the learners' time perspective profile and specific biases. The questionnaire comprises of five different factors of time perspective, namely: Present – Hedonistic; Future; Past – Positive; and Present – Fatalistic. The ZTPI consists of 56 statements and asks the respondents to indicate how characteristic a statement is of them on a 5-point Likert scale [1 = Very uncharacteristic; 5 = Very characteristic]. The ZTPI was designed in the United States of America, and Zimbardo and Boyd have demonstrated the necessary psychometric requirements for reliability and validity. However, no South African research establishing its validity and reliability to the population group of the country could be traced. The alpha co-efficient of the ZTPI for the research sample was calculated to be 0.8512.

A self-compiled biographical questionnaire was administered. This questionnaire was used to obtain information regarding gender, race, age, and socio economic status (Please refer to Appendix 1 for a copy of the questionnaire administered)

A list of amenities present in the household was used to gain information about the participant's socio-economic status. This list was compiled with the help of Prof. Andre Peltzer from the department of Social Sciences at the University of Free State. The items that were present have been used in a number of research questionnaires done in this field. The items were altered slightly, in order to make them more relevant to the present research sample. There were 22 items present in the list, a mean score was calculated, and the participants were divided into two groups: above average and below average.

Theoretically, it would have been preferable to divide the groups in three. However, due to the low numbers of participants in some of the groups, the decision of having two categories for socio-economic status was made.

Statistical Procedure

The aim of the research was to investigate the relationship between one dependent variable (time perspective) and three independent variables (gender, culture, and socio-economic status). According to Tabachnick and Fidell (1989) a multivariate analysis of variance (MANOVA) was the appropriate statistical technique to use in this particular situation.

Using the MANOVA analysis, the significance of each result (F-Value) was investigated. If a significant result were to be attained, it would have been followed by a one-way analysis of variance (ANOVA). Finally the effect sizes of the significant ANOVA results would have been calculated to give the practical significance of the results.

The following formula would be used to calculate the effect size:

$$f = \sqrt{k - 1 / N - k} \cdot \sqrt{F}$$

All the statistical analyses were executed with the SPSS computer software program (SPSS Incorporated, 1983) and the 1% level of significance was used.

Results

The researcher hypothesised that the 5 variables of the dependent variable were independent of each other. In order to validate this assumption the interrelations between the scores obtained on the five temporal scales were calculated. The results are as follows:

Table 2: Correlation coefficients between the five levels of the dependent variable.

	Past Negative	Present Hedonistic	Future	Past Positive	Present Fatalistic
Past Negative	1.000	0.2561	0.1597	0.2098	0.3182
Present Hedonistic	0.2561	1.000	0.0832	0.1891	0.2558
Future	0.1597	0.0832	1.000	0.3996	0.0304
Past Positive	0.2098	0.1891	0.3996	1.000	0.1213
Present Fatalistic	0.3182	0.2558	0.304	0.1213	1.000

The results indicate low correlation between the different levels of temporal orientation. Thus we may conclude that the levels of dependent variables are indeed independent of each other.

As indicated above the five temporal scales correlate weakly with each other. The highest correlation that was noted was 0.3996, which was between the Future and Past Positive perspectives. This indicates that as hypothesised the five temporal orientations are indeed independent of each other.

The descriptive statistics (means and standard deviations) with reference to the five levels of dependent variable of the total research group are as follows:

Table 3: Descriptive statistics for the 5 levels of the dependent variable

Variables	N	ξ	S	Rank order of ξ
Past Negative	378	3.196	0.731	4
Present Hedonistic	378	3.421	0.631	3
Future	378	3.511	0.688	1
Past Positive	378	3.452	0.683	2
Present Fatalistic	378	2.847	0.693	5

According to these results it is clear that the temporal orientation that the learners reported on being most inclined towards was the future time perspective. This was followed by a past-positive perspective, and a present hedonistic perspective. The learners scored the lowest on past negative and present fatalistic perspectives

In order to determine whether there were differences in time perspective, between adolescents in terms of gender, culture and socio-economic status the means and standard deviations for the five temporal scores as a function of culture, gender and socio-economic level were compared. In addition, a multivariate analysis of variance (MANOVA) was performed.

Please refer to Page 18 for the table indicating the means and standard deviations for the five temporal scores as a function of culture, gender and socio-economic status.

Table 4: Means and Standard Deviations for the five temporal scores as a function of culture, gender, and socio-economic level.

Temporal orientation		Socio-Economic Status (SES)								SES		Gender		Culture	
		High				Low									
		Boys		Girls		Boys		Girls							
		White	Black	White	Black	White	Black	White	Black						
Future	SD	0.6885	0.5270	0.7044	0.6901	0.8062	0.5922	0.5679	0.7209	0.6983	0.6845	0.6608	0.7136	0.6959	0.6814
	Mean	3.5694	3.5556	3.6557	2.8571	3.3750	3.4921	3.3182	3.5000	3.5629	3.4686	3.5092	3.5046	3.5497	3.4783
Present -Fatal.	SD	0.7304	0.6099	0.6508	0.8997	0.7746	0.6440	0.6396	0.7171	0.6905	0.6997	0.6952	0.6947	0.6910	0.6958
	Mean	2.8750	3.1111	2.9016	2.8571	2.7500	2.8571	2.8636	2.7891	2.9117	2.8717	2.8712	2.8305	2.8713	2.8261
Present -Hed*	SD	0.6463	0.7071	0.5923	0.9512	0.5	0.5598	0.7126	0.6399	0.6415	0.6264	0.6117	0.6427	0.6266	0.6352
	Mean	3.3194	3.6667	3.4426	2.2857	3.6250	3.5714	3.3182	3.3750	3.3841	3.4603	3.4724	3.3853	3.3918	3.4444
Past Positive	SD	0.6712	0.5270	0.6415	0.3780	0.7188	0.6915	0.6661	0.7092	0.6540	0.7034	0.6781	0.6858	0.6685	0.6951
	Mean	3.5139	3.4444	3.2951	2.8571	3.6250	3.5397	3.4091	3.4688	2.8571	3.3974	3.5399	3.3945	3.4327	3.4686
Past Negative	SD	0.6677	0.8819	0.5673	0.6901	0.7042	0.7590	0.7516	0.8087	0.6364	0.7716	0.7144	0.7374	0.6441	0.7905
	Mean	3.3194	3.444	3.2459	3.1429	3.3125	3.1429	3.2273	3.0938	3.2848	3.1339	3.2515	3.1514	3.2807	3.1256

* Present-Hedonistic

The learners obtained the lowest scores for Present Fatalistic across the different subgroups.

Table 5: Manova F-values for the main effects

Independent Variable	F-Value+	Error DF	P
Socio economic status	1.65	366.00	0.145
Race	0.63	366.00	0.675
Gender	1.71	366.00	0.675

+ Hotelling- Lawley test score is used.

According to these results socio-economic status, culture and gender do not have a significant impact on the learner's time perspective.

Discussion

One of the primary findings of this research is that the temporal orientation that the learners were most inclined towards was Future time perspective. These results were replicated regardless of socio-economic status, gender or culture. The variables: gender, culture and socio-economic status do not exert an effect on the learner's preferred mode of time perspective. These results contradict the findings of researchers such as Levine and Barlett (1984). However, results similar to the ones recorded in this research were observed by investigations carried out by researchers such as Peetsma (2000) and Spangler and Petrovich (1978), who did not find evidence which indicated that gender, culture and socio-economic status had a discernible influence on the sample's future time perspective.

Several explanations for the contradicting results have been offered. These include differences in measuring instruments, investigation of different aspects of time perspective. However, keeping within the parameters of this research, the results obtained in this specific sample will be discussed.

Firstly, no cross cultural differences were found in time perspective. This contrasts sharply to the results that have been attained by researchers such as Heckel and Rajagopal (1975). It is interesting to note that most of the cross cultural results that have been documented above have been carried out by comparing subjects from different countries. As this research aims to investigate the trend in time perspective across cultures, in the same nation, the socio-political environment is kept constant. Thus, it may be hypothesised the unique socialisation process that is prevalent in each country may have a strong influence on the cross cultural differences in time perspective that have been recorded by researchers such as Heckel and Rajagopal (1975).

Results indicate that differences in gender were not found to play a role in the learner's preferred mode of time perspective. It has been speculated that the different gender-specific socialisation may lead to gender differences in time perspectives (Bentley, 1983). The mean age of the sample of learners included in this study was 14.9. Thus, it may be hypothesised that young adolescents have not yet completely internalised the expectations and norms that are expressed by society, as compared to their older counterparts. This may be a reason that the results found in this investigation differ to the ones obtained when the research sample consists of older adults and adolescents.

Socio-economic status was not found to influence time perspective, in this specific study. Although research such as the one conducted by Lomranz, Shmotkin and Katznelson (1983) have indicated that socio-economic status has an important effect on time perspective; contradicting results (e.g. Peetsma 2000) to this construct have also been found. The difference in results may be attributed to the different constructs of time perspective that are measured. This study was aimed at gaining information about the preferred modality of learners, whereas the majority of research conducted in the past has focused on a specific aspect of one of the modalities of time perspective (e.g. Lomranz, Shmotkin and Katznelson (1983) investigated the level of coherence of future time perspective in children.). Therefore, although learners from the different socio-

economic strata reported on being orientated towards the future time perspective, they may differ in terms of extension, coherence, density, directionality and affectivity.

Conclusion:

Future time perspective was found to be the most common temporal orientation among the learners included in the sample. Future time perspective is associated with several positive traits such as decreased psychopathology, more adaptive coping strategies, increased organisational capacity etc. Thus, this is an encouraging reflection of the adolescents in the South African society. As future time perspective has a strong connection with locus of control: it may be inferred that in the present socio-political environment of the country, citizens are empowered with an equal sense of control over their environment.

The researcher had envisaged that the most common temporal orientation among the learners would be Present-Hedonistic. Researchers such as (Mischel, Shoda & Peake, 1988) have observed through delay gratification studies that adolescents are most likely to be orientated towards the Present-Hedonistic time perspective. These results were not replicated within this study. A possible reason for this may have been that the participants were asked for their subjective views on their own time perspective. As a result the responses may have been inaccurate as a result of inadequate self knowledge or the tendency to “fake-good”.

The results of this study indicate that the variables gender, socio-economic status and culture do not have a bearing on time perspective. Although several researchers have found results similar to the ones acquired in this study; the findings are in sharp contrast with others who have found that these variables do indeed play an important role in time perspective. One possible explanation for this finding is that the sample size that was used in the study was not large enough to be a true representation of the learners in the country. Thus the saga of acquiring contradictory results within the field of time perspective continues.

Several reasons have been offered for the differences in results that the various studies have yielded. One of them is the fact that there does not appear to be a clear and precise definition of the construct. Thus, the measuring instrument and interpretation of the results is dependent on the individual researcher's understanding of the concept. Furthermore, the measuring instruments that have been used in the past have varied greatly and have had little to no systematic exploration of the psychometric properties (Seijts, 1998).

These factors were taken into consideration when conducting the research. However as with any research of this nature, some methodological factors may have influenced the results. Firstly, in order to minimise the contamination in results caused by an array of psychometric tools, a single test, namely the Zimbardo Time Perspective Inventory, was used. Although proven to be reliable and valid in the tests conducted in Stanford, U.S.A; this test has not been standardised on the South African population. This could affect the result's validity and reliability. Another problem encountered was the inability to judge the accuracy of the responses given, due to a lack of a lie-scale in the test. Learners were encouraged to give answers that were honest and congruent with behaviour in everyday life. However, it is possible that the learners "faked - good" and indicated answers that they felt were preferable. Suggestions for future research include using methodology that would reflect on the orientations of time perspective from a behavioural point of view. Thus instead of asking the participants to answer hypothetical questions, observations of behaviours indicative of time perspective should be studied. This would dramatically reduce the possibility of participants "faking good" and give a more accurate indication of their temporal orientations.

Furthermore, due to the restrictions placed by the nature of the study, a larger number of people could not be included in the investigation. Therefore, the sample size may not have been large enough to be representative of the learners in the country. This led to methodological restraints, such as having only two groups of socio-economic status, and having only two cultural groups, which may have had an impact on the results of the study.

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Appendix A

				For official use only
Section A: Demographics Please encircle the relevant response.				
				1-3
1	Gender Female	1	4	
	Male	2		
2	Race Asian	1	5	
	Black	2		
	Coloured	3		
	White	4		
3	Please indicate your age Years			6-7

Section B: Please indicate which of the following items you have present at home				For official use only
		YES	NO	
1.	Does your family OWN their place of residence	1	2	8
2	Does your family have more than one house/residential property?	1	2	9
3	Motor vehicle	1	2	10
4	More than two cellular phones	1	2	11
5	Satellite Television – DSTV/Mnet	1	2	12
6	Personal Computer / Laptop Computer	1	2	13
7	Internet access at home	1	2	14
8	Dishwasher	1	2	15

9	Washing Machine	1	2	16
10	Tumble dryer	1	2	17
11	Microwave	1	2	18
12	Television	1	2	19
13	Refrigerator	1	2	20
14	Stove/ Hotplate	1	2	21
15	Geyser	1	2	22
16	Electrical heater	1	2	23
17	Telkom telephone (landline)	1	2	24
18	Iron	1	2	25
19	Electrical kettle	1	2	26
20	Radio	1	2	27
21	Toilet inside the house	1	2	28
22	Running water inside the house	1	2	29

Section C: In response to each of the following statements, indicate to what extent the given statement is true of you.

		Very uncharacteristic of me	Slightly uncharacteristic of me	Neutral	Somewhat characteristic of me	Very characteristic of me	For official use only
1	I believe that getting together with one's friends to party is one of life's important pleasures.	1	2	3	4	5	30
2	Familiar childhood sights, sounds, smells often bring back a flood of wonderful memories.	1	2	3	4	5	31
3	Fate determines much of my life.	1	2	3	4	5	32
4	I often think of what I should have done differently in my life.	1	2	3	4	5	33
5	People or things around me mostly influence my decisions.	1	2	3	4	5	34
6	I believe that a person's day should be planned ahead each morning.	1	2	3	4	5	35
7	It gives me pleasure to think about my past	1	2	3	4	5	36
8	I do things impulsively	1	2	3	4	5	37

9	If things don't get done on time, I don't worry about it.	1	2	3	4	5	38
10	When I want to achieve something, I set goals and consider specific means for reaching those goals.	1	2	3	4	5	39
11	On balance, there is more good to recall than bad in my past.	1	2	3	4	5	40
12	When listening to my favourite music, I often lose all track of time.	1	2	3	4	5	41
13	Meeting tomorrow's deadlines and doing other necessary work comes before tonight's play.	1	2	3	4	5	42
14	Since whatever will be will be, it doesn't really matter what I want to do.	1	2	3	4	5	43
15	I enjoy stories about the way things used to be in the "good old times".	1	2	3	4	5	44
16	Painful past experiences keep being played on in my mind.	1	2	3	4	5	45
17	I try to live my life as fully as possible, one day at a time.	1	2	3	4	5	46
18	It upsets me to be late for appointments	1	2	3	4	5	47
19	Ideally, I would live each day as if it were my last	1	2	3	4	5	48
20	Happy memories of good times spring readily to mind	1	2	3	4	5	49
21	I meet my obligations to friends and authorities on time.	1	2	3	4	5	50
22	I've taken my share of abuse and rejection in the past.	1	2	3	4	5	51
23	I make decisions on the spur of the moment.	1	2	3	4	5	52
24	I take each day as it is rather than try to plan it out.	1	2	3	4	5	53
25	The past has too many unpleasant memories that I prefer not to think about						54
26	It is important to put excitement in my life.	1	2	3	4	5	55
27	I've made mistakes in the past that I wish I could undo.	1	2	3	4	5	56
28	I feel that it's more important to enjoy what you're doing than get work done on time.	1	2	3	4	5	57
29	I get nostalgic about my childhood.	1	2	3	4	5	58

30	Before making a decision, I weigh the costs against the benefits.	1	2	3	4	5	59
31	Taking risks keeps my life from becoming boring.	1	2	3	4	5	60
32	It is important for me to enjoy life's journey than to focus only on the destination.	1	2	3	4	5	61
33	Things rarely work out as I expected	1	2	3	4	5	62
34	It's hard for me to forget unpleasant images of my youth.	1	2	3	4	5	63
35	It takes joy out of the process and flow of my activities, if I have to think about goals, outcomes, and products.	1	2	3	4	5	64
36	Even when I am enjoying the present, I am drawn back to comparisons with similar past experiences.	1	2	3	4	5	65
37	You can't really plan for the future because things change so much	1	2	3	4	5	66
38	My life path is controlled forces I cannot influence.	1	2	3	4	5	67
39	It doesn't make sense to worry about the future since there is nothing I can do about it anyways.	1	2	3	4	5	68
40	I complete projects on time by making steady progress.	1	2	3	4	5	69
41	I find myself tuning out when my family members talk about the way things used to be	1	2	3	4	5	70
42	I take risks to put excitement in my life	1	2	3	4	5	71
43	I make lists of things to do	1	2	3	4	5	72
44	I often follow my heart more than my head	1	2	3	4	5	73
45	I am able to resist temptation when I know there is work to be done.	1	2	3	4	5	74
46	I find myself getting swept up in the excitement of the moment.	1	2	3	4	5	75
47	Life today is too complicated; I would rather live in the simpler life of the past.	1	2	3	4	5	76
48	I prefer friends who are spontaneous rather than predictable.	1	2	3	4	5	77
49	I like family rituals and traditions that are regularly repeated	1	2	3	4	5	78
50	I think about the bad things that have happened to me in the past.	1	2	3	4	5	79

51	I keep working at difficult, uninteresting tasks if they will help me get ahead	1	2	3	4	5	80
52	Spending what I earn on pleasures today is better than saving for tomorrow's security.	1	2	3	4	5	81
53	Often luck pays off better than hard work	1	2	3	4	5	82
54	I think about the good things that I have missed out on in my life.	1	2	3	4	5	83
55	I like my close relationships to be passionate	1	2	3	4	5	84
56	There will always be time to catch up on my work.	1	2	3	4	5	85