# PERSPECTIVA DE TIEMPO FUTURO Y SATISFACCIÓN CON LA VIDA EN ADOLESCENTES: UN ESTUDIO TRANSCULTURAL (DEDICADO AL PROF. DR. WILLY LENS)

## FUTURE TIME PERSPECTIVE AND LIFE SATISFACTION IN ADOLESCENTS AND YOUNGSTERS: A CROSS CULTURAL STUDY (DEVOTED TO THE MEMORY OF PROF. DR. WILLY LENS)

RESIMEN

Dora Herrera<sup>1</sup>, Lennia Matos<sup>2\*</sup>, Patricia Martínez<sup>3\*</sup> Willy Lens<sup>+</sup>

RESOLIEN
El presente artículo se sustenta en una investigación trans-cultural que
describe la relación entre las variables Perspectiva de Tiempo Futuro (PTF) y
satisfacción con la vida. Para desarrollar el estudio se evaluó 648 estudiantes
universitarios de tres países del continente americano: Costa Rica (n=202);
Perú (n=217) y Estados Unidos (n=229). El modelo original de investigación
consideró múltiples variables relacionadas con la satisfacción de vida. Para el
presente artículo, se presenta únicamente la asociación entre PTF (contenido
de metas) y satisfacción con la vida. Cabe señalar que la longitud de la
Perspectiva de Tiempo Futuro fue mayor en Perú que en los otros países
analizados. Se considera relevante profundizar en esta línea de investigación
a fin de establecer nuevas inferencias científicas.

Palabras clave: Perspectiva de Tiempo Futuro, Satisfacción con la vida, Adolescencia, los estudiantes universitarios.

#### \_ ABSTRAC \_\_\_\_\_

This is a cross cultural research in which the relationship between Future Time Perspective (FTP) and life satisfaction in adolescents is described. 648 university students from three American countries were assessed: Costa Rica (n=202); Peru (n=217) and the United States (n=229). The original research model considers different variables associated to life satisfaction. For this manuscript we present the association between FTP content categories and life satisfaction. Using the whole model, predictors of life satisfaction were diverse (FTP, perceived stress, coping resources patterns of perfectionism and life satisfaction) in different countries but we can affirm that, wellbeing was positively associated to planning, time management or goal and priorities setting. Length of FTP was larger in Peru than in other countries. Future research in this line of investigation should work deeply for stronger crosscultural conclusions.

Keywords: Future Time Perspective, Life Satisfaction, Adolescence, college students.

Recepción del artículo: 07.04.2015 Aprobado: 23.06.2015

Dora Herrera<sup>1</sup>, P. U. Católica Del Perú, diherrer@pucp.pe; Lennia Matos<sup>2</sup>, P. U. Católica del Perú, Imatosf@pucp.pe; Patricia Martínez<sup>3</sup>, U. P. Católica del Perú, pmartin@pucp.pe; Willy Lens<sup>+</sup> Katholieke Universiteit of Leuven

"In 2000, 189 nations made a promise to free people from extreme poverty and multiple deprivations" (UNDP, 2012). This collective commitment was based on the idea that every individual has the right to dignity, freedom, equality, and a basic standard of living (Kabeer, 2010). This pledge, also, turned into the eight millennium development goals. One of them is related to access to education and better living conditions (UNDP, 2012). The three countries where we collected our data for this paper (Costa Rica, Peru and USA) are part of the group that is actively looking for better living conditions and consequently for higher life satisfaction.

As psychologists we are permanently interested in describing, explaining and predicting human behavior and individual differences. In this context, motivation, as a psychological process, explains why any intentional activity oriented towards a goal, starts, persists or stops. The performed effort and the satisfaction after accomplishing the established goals (or not) are also relevant when motivation is analyzed (Herrera, 2009; Herrera & Matos, 2009).

Besides the aforementioned aspects in relation to a motivated behavior, it is important to consider the relevance of Time Perspective in explaining the reasons why persons act. It has been deeply studied that when a person is concerned with a specific time period, his or her time orientation or perspective is clearly established and the impact of such time perspective on judgments, decisions and behavior is considerably strong (De Bilde, Vansteenkiste & Lens, 2011). Among the different concepts or aspects of psychological time or time perspective, Future Time Perspective (FTP) is an important "zone" defined as "the present anticipation of future goals" (Husman & Lens, 1999). Seginer (2009) formulates it as follows: "Thus, FTP concerns interindividual differences in the anticipated future goals one aims to attain. These differences can refer to the temporal distance towards those goals, as conceived within the athematic approach, and/or to the content of those goals, as conceived within the thematic approach" (in De Bilde, Vansteenkiste & Lens, 2011 p. 333).

Aware of the relevance of the concept of FTP and the strong association between an extended FTP and positive behavioral outcomes, different researches have been conducted research in Europe and the American continent. Empirical data has permitted to associate positively this FTP length with school engagement, efficient time managing and less procrastination, persistency; also, a great sense of satisfaction from studying (Zaleski, 1987; Peetsma, 1994; Harber, Zimbardo, & Boyd, 2003; Jackson, Fritch, Nagasaka, & Pope, 2003; Horstmanshof & Zimitat, 2007 in De Bilde, Vansteenkiste & Lens, 2011).

Besides the length, it is also relevant to take into consideration the deepness of FTP which has also being reported as beneficial for individuals who have longer FTP. Two aspects are implied in it: a) the cognitive capacity to look far ahead into the future and b) the dynamic capacity to ascribe high value to long-term goals. All these considerations rely on the quantitative view of motivation (De Bilde, Vansteenkiste & Lens, 2011).

In addition to the relevant findings for explaining motivated behavior quantitatively, researchers have been very attentive to the importance of the quality of motivation. Nowadays it is strongly recognized that this quality is related to the content of goals. The Self Determination Theory (SDT) has been very productive in presenting empirical arguments to support this consideration. According to this theory, intrinsic goals, such as growth, relationships, and community contributions, are distinguished from extrinsic goals, such as wealth, fame, and they image (Vansteenskiste, Lens & Deci, 2006) and are positively and negatively associated to well-being or satisfaction with life respectively (Kasser & Ryan, 1996). Individuals are different in terms of their life goals and this diversity is also related to their wellbeing and adjustment. This has been also confirmed through experimental field studies (Vansteenkiste, Simons, Lens, Sheldon, & Deci, 2004; Vansteenkiste, Simons, Soenens, & Lens, 2004 in Vansteenskiste, Lens & Deci, 2006). Well-being and specifically life satisfaction is just one of the positive outcomes of Future Time Perspective and due to the fact that empirical data supports their relation, at the present study this variable was considered (Desmyter & De Raedt, 2012; Lens, Paixao, Herrera & Grobler, 2012).

Besides quantity and quality of motivation it is noteworthy that motivation is a process that orients people to goal settings but not necessarily to goal attainment. In this line, Heckhausen (1991) and his former collaborators (Gollwitzer, 1999; Gollwitzer & Bargh, 1996; Kuhl & Beckman, 1994) distinguished motivational and volitional processes. For them, motivational processes lead to goal setting. Goal attainment requires however additional motivational and volitional processes. Quite often, one does not only formulate a goal but also action plans or behavioral means-end structures regarding how to achieve the goal (Nuttin, 1984). These action intentions must be implemented in order achieve the goal. Volitional processes and action-control mechanisms protect the intentions and facilitate their enactment. Very often there is a big gap between action intentions and actions. We implement intention; an we may postpone (procrastination), give priority to another intention or replace it by a new goal and action plan (Herrera, 2002) Volitional processes are also active when we would prefer to stop what we are doing (but should finish first) and do something else that is more attractive at

that moment (e.g., to continue preparing tomorrow's exam rather than watch a movie on TV). We also need will or volitional control to stop an interesting activity and start doing something that we have to do and that is less pleasant at the moment (e.g., to stop playing soccer in order to study for tomorrow's exam) (Dewitte & Lens, 2000; Lens & Vansteeskiste, 2006).

### Antecedents and purpose of the present study

Under this aforementioned framework, different samples of youngsters from three countries of the American continent (Peru, CR and USA) have been assessed in terms of their FTP extension and content. Other variables were also evaluated (Perceived stress, Perfectionism, Coping Resources, Learning Strategies, Behavior Regulation, etc.), but at this manuscript we will present information focused on the relation between future time perspective and life satisfaction in selected samples of adolescents from these three countries (648 participants). Specifically, one particular research question was stressed: Which is the relationship between Future Time Perspective and Satisfaction with Life?

We considered important to observe similarities and differences among countries that belong to the same continent; specifically America. One of the countries (USA) belongs to the North, the other to Central America and one is from the South (Peru). Even if the countries' economic development is different, the interest of the universities implied in conducting the study has permitted to observe to what extent FTP and satisfaction with life were related in university students. For selecting the three American countries, other information was also taken into account. According some studies (Hofstede, 2001; Páez, Fernández, Basabe & Grad, 2002) differences in values among countries exist. This has been found through a cross cultural study in which, after applying a factor analysis, four dimensions have been Power distance; Individualism-Collectivism; Masculinity-Femininity and Uncertainty avoidance. Taking this information into consideration Costa Rica has been categorized as collectivistic and has shown, as country, less differences in terms of gender roles. Peru, also has been qualified as collectivistic and USA, on the other hand, has been considered individualistic. Even if these dimensions were not measured in the study reported in this manuscript, it is interesting to consider these information in order to understand some new findings.

This psychological research line that is part of the context in which this study is inserted, started in Lima, Peru at the end of the 90's. Taking into account that in this country the students who finish secondary school are a highly selected group (Herrera, 2002), we

deemed it relevant to investigate which future paths those adolescents consider after their high school period. We started to investigate the relation between FTP and other variables like social insertion, in a two years follow up study that was carried out in order to know, empirically, how future intentions or goals in relation to different life domains were transformed in specific or related actions (Herrera, 2002). Future expectations of 174 adolescents who just finished the last year of secondary school were assessed during two and a half years and a clear gap was observed for the educational domain. Only 6 % of those who planned to go to the university did it in fact. We assumed that this plan's breach indicates a lack of realism among our research participants; perhaps they were notably influenced by their families, schools and society in general. In the whole research model, parents' and teachers' expectations were assessed; as well as school culture. Results have shown that adolescents' context, measured through these variables, oriented these students mostly to follow the university studies path (Herrera, 2002).

To gain insight in this complex social and psychological reality more psychological research was needed for describing the FTP goals and of adolescents from different institutions in which those youngsters, who decide to follow post-secondary education, are mainly registered (universities, technical schools, and academies which only prepare students for the entrance examination for higher education). When this second study was carried out, students' goals were sampled using the Motivational Induction Method (MIM See page 8); (Nuttin & Lens, 1985). When the different groups (schools, universities, technical institutions and academies) were compared, the most frequently expressed goals were about self-realization in general (between 23 and 30%). Most of the other goals were related to the educational domain, specifically to university education (between 7.25 and 19.56%). This result was also expected because these groups had to face the developmental task of a transition from their schooling to different life domains among which going mainly to higher education or perhaps starting in the world of work and forming a family is regularly projected (Herrera, 2009). Most of the studied participants reported a high frequency of answers related to short or medium extension of Time Perspective (between 77 and 99 percent); not too many responses were related to a long FTP. These findings in terms of FTP length in adolescents were relevant for this research line. In recent investigations new outcome variables were inserted in order to analyze how FTP length was associated with them. Some of these variables were academic achievement, school dropping, risk tendencies and satisfaction with life. This last variable will be considered in the study that is reported in this manuscript. According this new framework, other Latin-American realities were explored

measuring FTP, and the same results in terms of content and length tendencies were found. This was evident in a study carried out in Costa Rica where 401 secondary school students were assessed through a research project supported by the University of Costa Rica. The whole group of participants were studied with the MIM and their answers coded individually. FTP was associated with Risk Tendencies and their profiles compared with a similar Peruvian sample of secondary school students (N=429). General FTP results, unexpectedly, reported that girls have higher number of answers related to post-secondary education than boys  $\chi$  2 (3, N = 829) = 32.87, p = .0000. Also, in terms of the relation between FTP and risk tendencies, it was found that FTP had a negative relation with the risk tendency to be ill. As longer the FTP was, less risk tendencies of acquiring diseases was reported (Herrera, 2009). Analyzing the motivational content and the time perspective of the MIM responses represented an enormous effort for the 2,210 participants assessed in different studies, however, the reported findings permitted to focus and orient further research projects in different countries.

#### Method

In order to understand how FTP was related to life satisfaction and to answer to the stated research question, a new research was developed with a sample of 648 University students from three American countries: Costa Rica (N=202); Peru (N=217) and the United States (N=229).

As mentioned before, this research is only part of a larger research project in which other variables were included as well The initial research model related FTP (assessed with FTP ®), Perceived Stress, Perfectionism, Coping Resources and Satisfaction with Life. This is mentioned here in order to present the context in which the present research was developed. The three sub-samples were selected from the first two year students at universities from the three countries (Costa Rica and USA collected information from public institutions; Peru from a private one).

Instruments: Future Time Perspective ®. A new instrument for collecting goals content and extension was created: Future Time Perspective-Revised (FTP ®) (Herrera, Martinez & Lens, 2010). This instrument is derived of the Shorter Form B of Motivational Induction Method (MIM) which is a first-person sentence completion technique (Nuttin & Lens, 1985). The aim of this technique is to facilitate the free expression of different motivational goals, aspirations, plans, and projects. It is important to remark that the participants' freedom for expressing different contents allows researchers to know and compare the relative importance of the different motivational

categories. In this shortened version twenty five sentence beginnings were used as motivational inducers, fifteen positively formulated (e.g., I hope ...), and ten negatively formulated (e.g., I do not want

...). The original English inducers or sentence beginnings were translated into Spanish. To check the translation, the Spanish items were translated back into English and then compared with the original English items. This translation was made by two bilingual psychologist.

Regarding the validity of the instrument, it is important to consider that the MIM is intended to obtain a representative sample of the motivational objects of a group of persons. The MIM assumes that people are able to know and communicate a number of concrete goal objects that they pursue in their daily life, and most of the time these goal objects have some motivating effect on their behaviour (Nuttin & Lens, 1985). Social desirability may inhibit some participants to express some of their more intimate goals, wishes or fears. Previous research with the MIM with many different groups of people all over the world shows however that in favourable conditions, persons can and are willing to express their goals, desires, projects and intentions, without difficulties. It is concluded then that the MIM had face validity (Nuttin & Lens, 1985).

Regarding the reliability of the MIM it can only be considered if the results have a high degree of stability. It is important to precise then that although motivational objects may change as a function of situational circumstances, it is very difficult to change one's general motivational orientations. In this sense, motivation is a stable element at least in its main orientations and structures. There are two reasons for expecting certain stability within MIM data. First, because the large number of inducers, we may expect that the expressed motivational objects reflect not only the people' concerns at the very moment of testing, but also a broader scale of virtually present objects in their current life situation. The latter will manifest more stability. Moreover, and what is most important; the concrete motivational objects are not but rather the main motivational categories and registered, subcategories in which the motivational objects are classified on the basis of their motivational meaning or content. These motivational categories correspond more or less to general motivational orientations and, as such, will be more stable than the concrete objects, which are much more dependent on circumstances (Nuttin and Lens, 1985 p. 59).

To check the coding reliability, the analysis and coding of motivational contents is usually done by two trained judges working independently. The concrete motivational objects are analysed in terms of motivational categories or subcategories in which they are classified according to their meaning. The coding reliability is usually expressed in terms of the percentage (%) correspondence between two independent coding and all difficult codding's are discussed with an expert coder until an agreement is reached.

Keeping the arguments for measuring FTP that the MIM offered, the FTP ® permits to collect, through a free expression of the participants, the ten most important motivational goals, plans and aspirations. Participants were asked to express hierarchically their goals. This new instrument looks for metric equivalence with the MIM. To be able to compare the data collected with the MIM and the FTP ® these two instruments – assumed to assess the same constructs (i.e., content and extension of FTP)- were applied to the same sample in Peru and Costa Rica (100 participants). All responses were coded with the same or very equivalent content categories and temporal codes (See Table 1 and 2). We expected a high correlation between the frequencies of the whole group of content categories. However, only for some of these categories (education; labor; leisure, altruism, and material possessions) the correlation was positive and significant (see Table 3). Nevertheless, these categories are very crucial in terms of life domains and self. According these findings the new instrument is very helpful for measuring FTP.

Perspectiva de tiempo futuro y satisfacción con la vida en adolescentes: un estudio transcultural, (dedicado al Prof. Dr. Willy Lens)/ *Dora Herrera, Lennia Matos, Patricia Martínez- Willy Lens* 

Table 1

MIM-FTP Content Categories Codes (Life Domains, Categories and Subcategories)

	Educational: E				
1.	General : Unspecified			Egu	
		Level of performance:	* high	Egph	
			* 'average'	Egpa	
2.	High school (stop):	General		Ehg	
		Finishing high school (suc	ccessfully)	Ehs	
		High school as an instr			
		to post secondary edu		Eh P	
3.	Entrance examination			Ee	
4.	PostSecondary Education :	University		EPU	
		- In general (to continue m	y studies)	EPUg	
		- Successfully ende	d	EPUs	
		- As an instrument for get	ting a job	EPU J	
		Technical		EPT	
			v studies)	EPTg	
		- In general (to continue my studies) - Successfully ended			
		- As an instrument for get		EPT J	
		Unspecified			
Empl	oyment: Em				
1.	Professional job:	- just to have it	EmPh		
	r rereceienan jeur	- to be successful	EmPs		
2.	Technical job:	- just to have it	EmTh		
		- being successfull in it	EmTs		
		Domig Caccoccan III II	LIIII3		
3.	Unskilled labor:				
3.	Unskilled labor:	- employed - Self employed	EmUe EmUse	)	
3.	Unskilled labor:	- employed	EmUe	3	
	Unskilled labor:  A job:	- employed	EmUe	)	
		- employed - Self employed	EmUe EmUse	)	
		- employed - Self employed - general	EmUe EmUse EmJg EMJ E	)	
		- employed - Self employed  - general - student's job	EmUe EmUse EmJg EMJ E		
		- employed - Self employed  - general - student's job	EmUe EmUse EmJg EMJ E ment to study)	essional)	
		- employed - Self employed  - general - student's job	EmUe EmUse EmJg EMJ E ment to study) EmJ EP (Prof	essional) hnical)	
4.		- employed - Self employed  - general - student's job	EmUe EmUse  EmJg EMJ E ment to study)  EmJ EP (Prof EmJ ET (Tec	essional) hnical) specified)	

Family: F

1.	Positive	Fp:	Nuclear Family	Fpn
			From:	
			Affective	Fpn a
			Support (also material)	Fpn s
			Contact	Fpn c
			Consideration	Fpnco
			Towards:	
			Affective	Fpn a
			Support	Fpn
			Contact	Fpn c
			Large Family	Fpl
			From:	
			Affective	Fpl a
			Support (also material)	Fpl s
			Contact	Fpl c
			Consideration	Fpl co
			Towards:	
			Affective	Fpl a
			Support	Fpl s
			Contact	Fpl c
1	Self realization :	S		
1.	Life in genera	ı		Sg
2.	Self:	ll .	Self (end product)	Sp
	JCII.		Self realization	S
			Self (traits): - Professional abilities	Spa
			- Others	So
		Wish	es: W	
	<b>Altruism:</b> A		Friends	Af
			Town	At
			Country	Ac
			World	Aw
	Material possessions	<b>s:</b> Mp		
	<b>Social Mobility:</b> Si	m		
	Others: 0			1

Perspectiva de tiempo futuro y satisfacción con la vida en adolescentes: un estudio transcultural, (dedicado al Prof. Dr. Willy Lens)/ Dora Herrera, Lennia Matos, Patricia Martínez- Willy Lens

Table 2

FTP (R) Coding

Life Domain	Categories	Subcategories
	Education	Secondary School Post Secondary Education
Life Tasks	Employment	Instrumental (as a mean)
	Family	Towards From
	Contacts / Personal links	Friends Partners Others (altruism)
Self	Material Posesions  Personal Self	Abilities and traits Personal Development (Self realization in general) Health Autonomy Religiosity

Table 3

Correlations between the categories of the FTP (R) and the MIM

Vari	iables	Education PTF	Work PTF	Family PTF	Leisure PTF	Contacts PTF	Material Possessions PTF	Personal self PTF
Education	MIM	.29**	.00	.01	03	01	05	11
Employment	MIM	.03	.28**	10	11	10	08	07
Family	MIM	.15	.07	.08	.04	.16	.02	17
Wishes	MIM	04	03	.02	19	16	.24*	03
Altruism	MIM	09	05	11	.33*	.14	23	.26**
Possession	MIM	14	20*	07	04	04	.21*	.07
Mobility	MIM	14	03	.01	01	.19	.02	00
Contacts	MIM	.19	.12	04	.09	.08	24*	.03
Religion	MIM	17	03	03	07	.06	10	.07
Self-realiz.	MIM	.30**	11	.02	.09	.01	.09	.12

<sup>\*</sup>p<.05; \*\*p<.01; \*\*\*p<001

Satisfaction with Life Scale: The Satisfaction with Life Scale-SWLS (Diener, Emmons, Larsen, & Griffin, 1985) is a psychometric tool with five items. This scale assesses the global life satisfaction using a 1 (Totally disagree) to 7 (Totally agree) points Likert type scale. The SWLS has high convergent validity with other psychometric scales that are created for measuring subjective well-being too (Pavot & Diener, 1993). The test-retest reliability for the whole scale was

0.82 and the Cronbach's Alpha was 0.87 (Diener et al., 1985). Vassar (2008) meta analytically studied four hundred and sixteen articles in which SWLS was used. From this group of papers, sixty two calculated their own data an reported 76 reliability coeficients; it is concluded from this study, that the English version of the test and samples concentrated in youngsters demonstrated significant relationships with score reliability. For the present study the Cronbach's Alpha for the whole group was 0.88 (corrected item-total correlations ranged from .62-.82). To analyze the reliability of this scale in the three studied samples, the Conbach's alpha coefficients were obtained and were 0.79 for Costa Rica (corrected item-total correlations ranged from .51-.79); 0.85 for USA (corrected item-total correlations ranged from .56-.78) and 0.84 for Peru (corrected item- total correlations ranged from .50-.77).

The Principal Components Analysis for the whole group was applied. The KMO was 0.87 and the Bartlett test was significant ( $X^2$ = 1761.36, df = 10, p < .001). The outcome showed the presence of one factor with an Eigenvalue higher than one which explained the 70% of the variance. The five items obtained high loading (.74 to .90).

## Results

As was mentioned at the method section, the analyzed relationship between FTP and Life Satisfaction that is presented at this manuscript is part of a more extensive research model (See p. 7).

In terms of FTP length measured in the three countries an ANOVA was applied for observing differences among countries and gender. No main effect of gender, no interaction effect of gender by country were found but a significant main effect of country was evident F(2, 642) = 5.634 p = .004,  $\eta_p^2 = .017$ . Peru scores significantly higher in FTP length (M= 32.39 SD =11.20) than the USA (M 28.26 SD=11.21)

and Costa Rica (M=29.49~SD~11.49) groups which, according the results, do not differ from each other.

The content categories evaluated through the FTP  $\circledR$ , as was presented at the coding table in the method section (See p. 13) were distributed in two main areas that are the following: Life tasks (education, work and family) and Self (leisure, contacts, material

possessions, and personal self). It is remarkable that the hierarchy of the content categories of FTP in the three countries is almost the same. In the three countries, the three most important categories are: first, education; second, labor and third family (See Table 4). The least important goals in the three countries have to do with leisure.

Table 4

Mean importance of the FTP content categories in Costa Rica, USA and Peru

	Cos	sta Rica		USA		Peru	To	tal
	Mean	Order	Mean	Order	Mean	Order	Mean	Order
Education	7.67	1	7.46		7.13	1	7.42	1
Work	6.78	2	6.49		6.79	2	6.69	2
Family	5.59	3	5.90		5.74	3	5.75	3
Leisure	4.36	7	4.24		4.84	7	4.46	7
Contacts	4.73	6	5.12		5.22	5	5.05	5
Mat. Possessions	5.43	4	4.57		5.01	6	4.94	6
Self	5.20	5	4.91		5.53	4	5.19	4

Table 5 gives the frequencies of the different content categories in the three countries. When Chi square is applied for analyzing these data, significant differences appear for education, work, contacts, material possessions, and self. For Education the frequency is higher in Costa Rica (24.08%) and Peru (23.04%) than in the USA (18.64%). For Work the frequency is also highest in Costa Rica (14.14%) and lowest in the USA (9.60%; in Peru it is 11.98%). However for Contacts, Materials Possessions and Self the highest frequencies are in the USA (11.48%; 11.89% and 28.15%).

Frequencies of Content categoríes of FTP in Costa Rica, USA and Peru

Table 5

	Cost	Costa Rica USA		Pe	eru	Total		
	N	%	N	%	N	%	Chi Square	p
Education	414	24.08	406	18.64	427	23.04	19.72	.00
Work	243	14.14	209	9.60	222	11.98	19.32	.00
Family	241	14.02	291	13.36	270	14.57	1.23	
								n.s.
Leisure	126	7.33	150	6.89	125	6.75	0.51	
Contacts	147	8.55	250	11.48	185	9.98	9.93	n.s
	4	1001	2.50	44.00		o 4 <b>=</b>	10.50	.01
Material Possessions	176	10.24	259	11.89	157	8.47	12.72	.00
Self	372	21.64	613	28.15	467	25.20	12.93	.00
								.00
Total	1719	100	2178	100	1853	100		

Table 6

Table 6 shows the frequencies of the different time categories (length of FTP) as a function of goal importance and in general.

Year	Goal 1	Goal 2	Goal 3	Goal 4	Goal 5	Goal 6	Goal 7	Goal 8	Goal 9	Goal 10	Total	%
Dont Know /N Ans	14	17	26	35	46	79	111	143	179	186	836	13
Now	208	132	145	140	143	136	120	126	120	139	1409	22
< 1	16	26	15	23	19	24	28	20	30	23	224	3
1-2	106	114	98	105	84	77	72	63	46	42	807	12
2-5	159	203	195	164	168	138	125	103	78	74	1407	22
6-10	88	116	127	138	118	129	120	111	106	82	1135	18
> 10	57	40	42	43	70	64	72	82	89	102	661	10
											6479	100

Percentages of FTP Temporal Categories as a function of goal importance\*N (648)

If the association between content categories and Life Satisfaction is analyzed, we see that country and the content category Education are significant predictors of life satisfaction. But the variable Country is much more important than the category Education (See Table 7). The variable country explained 42.7% of the variance. Adding the variable education in the equation only explained an extra 1.4% of the variance.

Taking into consideration that Country was a predictor of Satisfaction with Life, an ANOVA was applied in order to test the differences between the three countries. Table 8 shows the mean scores. The main effect was indeed significant (F (2, 373) = 151.00, p < .000); Post hoc analyses (Tukey) show that the differences between the three countries are significant at the .05 level. Costa Rica (M=5.58) has the highest and Peru the lowest mean score (M=2.85) for life satisfaction.

<sup>\*</sup>Goal 1= most important; Goal 10 = least important

Table 7

Hierarchical Regression Analysis. Demographic Variables; FTP and Satisfaction with Life.

		Step 1	Step 2
		В	В
Demographic Variables	Country	65***	64***
	Gender	06	07
FTP Content Categories	Education		.12*
R <sup>2</sup>		42.7%	44.2%
Aditional R			1.4%

Table 8

ANOVA effect of Country on Satisfaction with Life

Country	Mean	SD
Costa Rica	5.58	1.10
USA	3.34	1.60
Peru	2.85	1.33

#### **Discussion**

At the end of this study we can affirm that in terms of goal content, Education is a very relevant category for university students in the three countries and it positively predicts life satisfaction.

It is remarkable here that, in coincidence with the United Nation General Assembly resolution through which the pursuit of happiness was recognized as a universal aspiration; Costa Rica is an example of holistic development, and compared to other countries with similar income levels, it ranks higher in human development and is a beacon of peace and democracy (Ban Ki-moon, 2012). During the year 2013, in Latin America, this country was considered the happiest if compared with the others of the region (Helliwell, Layard & Sachs, 2013). Even if happiness is measured, in these studies, considering its emotional and evaluative components, it is interesting to observe the coincidence with the reported life satisfaction that the assessed adolescents reported in the investigation that is reported in this manuscript. According the results, the students from Costa Rica, compared with the ones from Peru and USA, have shown the highest scores of life satisfaction.

These findings are particularly important for the Future Orientation research line because they are evidence about how across life span, the subjective representation of the future can affect behavior and impact on some developmental outcomes (Seginer, 2009). These adolescents' aspirations can be unrealistic but are reported explicitly; and knowing for some previous empirical studies that many of the students do not finish their university education we need to intervene through the counseling branch at the universities and reinforce the importance of goal content.

In terms of measuring, we must continue working on the FTP instruments in order to facilitate data collection in terms of length and content of this very important variable in individuals (Herrera, 2002; Herrera, 2009). The positive correlations between the MIM and the FTP ® were not as expected. They exist but are not found in the whole group of categories. Further research is needed not only with students who are in the first years but also with the ones who are at the end of their career and face another developmental task, the world of employment and family support. It is also relevant to include quantitative instruments for measuring the FTP variable in order to facilitate the data analysis when other quantitative variables are implied.

## Referencias Bibliográficas

- Ban Ki-moon (2012). Remarks at High Level Meeting on happiness and well-being: defining a new economic paradigm. Retrieved from
  - http://www.un.org/apps/news/infocus/sgspeeches/statments\_full.asp?statID=1493#.VRtPBfmUeAV.
- De Bilde, J., Vansteenkiste, M., & Lens, W. (2011). Understanding the association between future time perspective and self- regulated learning through the lens of self-determination theory. *Learning and Instruction*, *21*, 332-344.
- Desmyter, F., & De Raedt, R. (2012). The relationship between time perspective and subjective well-being of older adults. *Psychologica Belgica*, *52*(1), 19-38.

- Diener, E., Emmons, R., Larsen, R., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49, 71-75.
- Heckhausen, H. (1991). *Motivation and action*. Berlín: Springer-Verlag.
- Helliwell, J., Layard, R., & Sachs, J. (2013). World happiness report 2013. New York: UN SDSN.
- Herrera, D. (2002). Social insertion of high school graduates in Lima: A socio-psychological Study. Leuven: Katholieke Universiteit Leuven.
- Herrera, D. (Ed.) (2009). Teorías contemporáneas de la motivación: una perspectiva aplicada. Perú: Fondo PUCP.
- Herrera, D. & Matos, L. (2009). Desarrollo del concepto de motivación y su representación en distintas proximaciones teóricas. En D. Herrera (Ed.) *Teorías Contemporáneas de la Motivación*. Lima: Fondo Editorial de la Pontificia Universidad Católica del Perú.
- Herrera, D., Martinez, P. & Lens, W. (2010). Perspectiva de tiempo futuro ®. Informe final del proyecto de investigación: Proyecto: Perspectiva de tiempo futro, estrés percibido, recursos de afrontamiento, patrones de perfeccionismo y satisfacción de vida en estudiantes universitarios de Perú, Costa Rica y Estados Unidos: Un estudio transcultural. (Documento Inédito). Perù: PUCP.
- Hofstede, G. (2001). *Culture's consequences: Comparing values behaviours, institutions and organisations across nations*. Thousand Oaks, CA: Sage.
- Horstmanshof, L., & Zimitat, C. (2007). Future time orientation predicts academic engagement among first-year university students. *British Journal of Educational Psychology*, 77, 703-718.
- Husman, J., & Lens, W. (1999). The role of the future in student motivation. *Educational Psychologist*, *34*, 113-125.
- Jackson, T., Fritch, A., Nagasaka, T., & Pope, L. (2003). Procrastination and perceptions of past, present, and future. *Individual Differences Research*, 1, 17-18.
- Kabeer, N.(2010). Can the MDGs provide a pathway to social justice? Brighton: Institute of Development Studies.
- Kasser, T., & Ryan, R.M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin*, 22, 280–287
- Kuhl, J., & Beckmann, J. (1994). *Volition and Personality: Action Versus State Orientation.* Seattle: Hogrefe & Huber Publishers.
- Lens, W., & Vansteenkiste, M. (2006). Motivation: About the "why" and "what for" of human behavior. In K. Pawlik & G. d' Ydewalle (Eds.). *Psychological concepts: An international*

- historical perspective (pp. 249-270). Hove, UK: Psychology Press
- Lens, W., Paixao, M., Herrera, D., & Grobler, A. (2012). Future Time Perspective: A Motivational Construct. *Japanese Psychological Research Review*. 54(3), 321-333.
- Nuttin, J. (1984). *Motivation, Planning and Action: a relational theory of behavior Dynamic* Louvain: Lawrence Erlbaum Associates.
- Nuttin J., & Lens, W. (1985) Future Time Perspective and Motivation: theory and research method. Leuven & Hillsdale, NJ: Leuven University Press & Erlbaum.
- Páez, D., Fernández, I., Basabe, N. & Grad, H. (2002). Valores culturales y motivación: creencias de auto-concepto de singelis, actitudes de competición de Triandis, control emocional e individualismo-colectivismo vertical- horizontal. Revista Española de Motivación y Emoción. 3, 169-195. Recuperado de http://reme.uji.es
- Pavot, W., & Diener, E. (1993). Review of the satisfaction with life scale. *Psychological Assessment*, *5*, 164-172
- Peetsma, T. (1994). Toekomstperspectief als voorspeller van inzet voor school. (Future time perspective as a predictor of school engagement). *Tijdschrift Voor Onderwijsonderzoek, 19,* 331-342.
- Seginer, R. (2009) Future Orientation. Developmental and Ecological Perspectives. USA: Springer.
- United Nations Development Program (2012). United Nations *Milenium Declaration*. Retrieved from http://www.un.org/millennium/declaration/ares552e.htm
- Vansteenkiste, M., Simons, J., Soenens, B., & Lens, W. (2004). How to become a persevering exerciser? Providing a clear, future intrinsic goal in an autonomy-supportive way. *Journal of Sport and Exercise Psychology*, 26, 232-249.
- Vansteenkiste, M., Simons, J., Lens, W., Sheldon, K. M., & Deci, E. L. (2004). Motivating learning, performance, and persistence: The synergistic role of intrinsic goals and autonomy-support. *Journal of Personality and Social Psychology*, 87, 246–260.
- Vansteenkiste, M., Lens, W., & Deci (2006). Intrinsic versus Extrinsic Goal Contents in Self Determination Theory: another look of the quality of academic motivation. *Educational Psychologist*. 41(1), 19-31.
- Vassar, M. (2008). A note on the score reliability for the satisfaction with life scale: an RG study. *Social Indicators Research*, 86(1), 47-57
- Zaleski, Z. (1987). Behavioural effects of self-set goals for different time ranges. *International Journal of Psychology*, 22, 17-38.