COMPARING PERSISTENCE AMONGST STUDENTS WITH LOW AND HIGH SENSE OF MEANING AT AN INSTITUTION OF HIGHER LEARNING IN SOUTH AFRICA

Solomon Makola

Central University of Technology

Abstract. The study evaluated the relationship between sense of meaning and throughput rate with a sample of alumnae of a university. Participants were a stratified sample of two groups, 20 students who scored high on the Purpose in life (PIL) test, and 20, who scored low on the PIL test, selected from a random sample of 101 alumnae from the Faculty of Management Sciences, of a university of technology, in South Africa(age range = 27 to 30 years, females = 73%, majority ethnicity = 70% Sotho speaking). The research is a follow up of a study conducted with the same participants in their first-year of study to investigate the relationship between students' sense of meaning and the extent to which it influences adjustment, at university (N=101). Data were gathered using the Purpose in Life Test (PIL), Biographical Questionnaire, and Student Records.An independent-samples t-test was conducted to compare persistence level for High Meaning Group and Low Meaning Group. There was a significant difference in the scores for High Meaning Group (M=3.150, SD=1.785) and Low Meaning Group (M=0.500, SD=1.573) conditions; t (38) = 4.267, p = 0.000. These results suggest that a high sense of meaning does have an effect on persistence levels of university students. Specifically, the results suggest that when students have a high sense of meaning in their first-year of study, they are able to persevere and complete their studies.

INTRODUCTION

When students enrol for a qualification at university they intend to achieve that goal. In South Africa access, succeeds and competition rates are still racially skewed, with white completion rates being on average 50% higher that African rates (CHE, 2013). As a result attempts were made by universities to develop intervention programs and services to try to retain students to graduation. However, there seems to be no documented proof of the effectiveness of such interventions (CHE, 2012). Countrywide, the persistence level or rates at which students manage to reregister at an institution of higher learning in subsequent years is low.According to reports only one in five South African students who registered for a three year degree in 2000 managed to graduate in 2003 and 50% of those who registered in dropped out (Seepe, 2005). Recent statistics revealed that only 16% of students who registered for degrees in 2005 graduated in record time. The figure is far below the national norm of 25% for full-time students studying towards a three year qualification (CHE, 2012).

There are many factors which influences persistence at university. Even though the doors to higher education are open to all in South Africa, students from low-socioeconomic backgrounds seem to be the ones who are most affected by the high attrition rate (CHE, 2012). Recently the Council for Higher Education released a damning report into university performance. According to the report less than 5% of black African and coloured students succeed at university, and more than half of all first-year entrants never graduate at all (CHE,

2013). Furthermore, the report indicates that 48% of contact students graduate within five years. Studies throughout the word have also revealed that as a group, low-income, low-socioeconomic status, first-generation and working-class students have lower persistence rates and educational attainment than their peers from higher socioeconomic backgrounds (Pascarella&Terenzini, 2005; Tinto, 2006; Walpole, 2007).

Looking at this situation is it imperative that scholars should come up with ways and means through which we can increase the rates of persistence and degree attainment for students, especially those from lower social class backgrounds (Walpole, 2007). As a result, studies which develop and test theories of student retention that seek to explain why some students leave and others persist are of central importance to the field of higher education. Viktor Frankl's theory of meaning in life has also attempted to provide explanations in this regard.

SENSE OF MEANING

Viktor Frankl's theory of "Meaning in Life" indicates that there are three ways in which people can achieve a sense of meaning in their lives; firstly, through what they give to the world, in terms of their creations, secondly, through what they receive or take from the world, in terms of their experiences, and thirdly, through the attitudes they attach to suffering (Frankl, 1988). In this way, Viktor Frankl's theory led the way in helping us identify our individual paths for being inventors of our sense of meaning, by placing emphasis on our highest capabilities. The three avenues, through which

meaning can be found, are important because they serve as resources that might contribute to the students' successful adjustment and performance (Giovinco, 2001 Merullo, 2002; Rengito, 2003; Shantall, 1997).

The importance of finding meaning in life is widely accepted and well documented. One of the reasons why there has been much interest in the field is that finding meaning is associated with survival or effective coping (Courtenay & Truluck, 1997). Research findings suggest that individuals with a high sense of meaning in life are more likely than those with low meaning in life to withstand being exposed to stressors (Edwards & Holden, 2001; Hullett, 1994).

A second reason which make finding meaning important, is that it provides answers to the question "Why?" Such questions are very critical for survival. To highlight the importance of this question, Frankl (2006) used a quote by Nietzsche: "He who has a why to live for can bear almost any how" (p.106). As a result the construct of meaning in life affords students the opportunity to ask questions such as "What is the meaning of my life" (Moran, 2001). In providing answers to this question students come to realise that they are equipped with the most important resource for dealing with the stressors they are exposed to; which is a sense of meaning.

SENSE OF MEANING AND ADJUSTMENT IN HIGHER EDUCATION

Sense of meaning plays a significant role in higher education. Research studies indicates that exposure to stressors such as poor socio-economic backgrounds (Ross, Cleland & Macleod, 2006), single-parenthood Hak-Ju (2004), authoritarian parenting styles (Gonzalez, Greenwood & WenHsu, 2001), being a first-generation student (Chen, 2005), poor background school environment (Akoojee, 2004; Sennett et al., 2003), lack of institutional facilities (Desjardins, Kim & Rzonca, 2002/2003) and sexual harassment (Shumba & Masiki-Matima, 2002), has a negative impact on students' academic performance. Meaning helps students to tolerate being exposed to these stressors better, thus preventing or decreasing potential stresses related to circumstances (Makola, 2007). In this way the stressful conditions may still be present, however the student's capacity to deal with the stressors improves when a sense of meaning is related to it (Savolaine & Granello, 2002; Makola, 2007).

Authors of the wellness model have often cited meaning and purpose as an important characteristic of the well individual (Hetter, 1980; Ryff & Singer, 1998a, 1998b). The one way that meaning might have positive effects on individual's wellness is related to intra-psychic functioning or psychological well-being. For example, meaning can help in inspiring a sense of personal values and students may be guided by such values in order to overcome their stressors. In other words the stressors are no longer perceived as something frustrating but as a challenge (Purvis, 1979). In a study by Chambel and Curral (2005) general well-being was found to have a direct impact on student performance. As a result, because psychological well-being is strongly related to sense of meaning (Meraviglia, 2005; Pinquart, 2002). In a study by Makola (2007), first-year students with high sense of meaning coped

much better academically because they used more effective coping strategies.

On the opposite scale meaninglessness may result in a number of problems, for example, depression and aggression to the self or others, problems of concentration in the lecture-hall, difficulties in relating to others, lack of initiative, insecurity and many forms of irresponsibility (Makola, 2007). Research conducted at Idaho State University found that 51 of the 60 students, who had seriously attempted suicide, mentioned that, they did so because "life meant nothing" to them (Roberts, 1980). In support of this finding, a study by, Edwards and Holden (2001) postulate that the stress and confusion that emanates from a lack of understanding of one's life purpose can be dangerous, because it may contribute to suicide amongst students. A study by Silverman (2004) found that suicide is the second leading cause of death amongst university students.

Meaning may also have an effect on an individual's behaviour by influencing both the initiation of new habits and adherence to existing habits (Hermon & Hazler, 1999; Prochaska, 1995). In an education setting this is essential because for students to be successful they need to adopt behaviours that will support their learning. From this we can infer that because meaning has an influence on the initiation of new habits and adherence to existing habits, students with high meaning are more likely to adopt effective study behaviours. Research studies found that study behaviours such as, course specific learning styles (Boyle, Duffy & Dunleavy, 2003; Drysdale, Ross & Schulz, 2001; Jones, Reichard & Mokhtari, 2003), effective study strategies/ methods

(Bosch, Boshoff & Louw, 2003; Yip & Chung, 2005), class attendance (Moore, 2005), and time management (Bitzer, 2003; Jackson et al., 2003; Marlowe et al., 2002) contributes to persistence and academic success.

Sense of Meaning and Persistence

The results of study conducted by Makola and Van Der Berg (2010) revealed that meaning potentials of participants who scored high on the Purpose in Life Test (PIL) are different from those who scores low on the PIL. Makola and Van Der Berg (2010) study suggested that first-year students with a high sense of meaning are much better adjusted than those with a low sense of meaning. What is distinctive about participants who scored high on the PIL is that they see meaning in their studies, are more interested in the service they will provide, and they maintain positive attitudes. Thus, the latter study suggested that students with a high sense of meaning are more likely to persist with their studies. Other research findings have highlighted a strong correlation between sense of meaning, which encompasses all three ways of finding meaning, and wellbeing (Meraviglia, 2005; Pinquart, 2002).

In addition Makola's study indicated that, on the contrary participants who scored low on the PIL are unable to see meaning in their studies, more interested in money and status, and they tend to harbour negative attitudes (Makola & Van Der Berg, 2010). As a result the study suggested that due to their diminished interest, in their current study courses, participants with low meaning are more

at the risk of dropping out of university or experiencing job burnout in their future careers.

Goals of the study

The aim of the present study is to investigate whether persistence is significantly greater in students with a high sense of meaning compared to those with a low sense of meaning. The primary research question was: Is the persistence level significantly greater in students with a high sense of meaning compared to those with a low sense of meaning?

METHOD

Research Design

The research is quantitative in nature. An independent samples t-test was used because we are comparing two groups. For this reason an independent samples t-test was used to investigate whether persistence amongst students with a high sense of meaning is significantly greater than those with a low sense of meaning. As a result, persistence is the criterion variable, and meaning in life is predictor variable.

Problem statement and hypotheses of the study

This research investigates the role of a sense of meaning in facilitating persistence amongst students at university. The predictor variable is sense of meaning, and the dependent variable is the persistence level, as measured by the extent to which students persevere with their studies or drop out of university.

The researcher postulates that high levels of meaning, especially in the first-year of study,

enable students to persist at university, and complete their studies.

The following research hypothesis was formulated for the study:

1 H_O The students' level of meaning in the first-year of study is not related to persistence.

1 H_1 Students with a high the sense of meaning in the first-year of study are able to persist with their studies, and complete their qualifications.

Participants

A stratified sample of two groups, 20 students who scored high on the Purpose in life (PIL) test, and 20, who scored low on the PIL test, was selected from a random sample of 101 alumnae from the Faculty of Management Sciences, of a university of technology, in South Africa. As a result, the research is a follow up of a study conducted with the same participants in their first-year of study, in 2005, to investigate the relationship between students' sense of meaning and the extent to which it influences first-year academic performance and adjustment (N=101).

Defining characteristics of the research participants:

- Age (in 2013): group mean (27.38 years) standard deviation (1.29). Youngest participant (25 years) and oldest (30 years).
- Gender distribution: 27 (26.73%) males and 74 (73.26%) females.
- Home language: 71 (70.29%) South Sotho, 18 (17.82%) Xhosa, 5 (4.95%)

Tswana, 5 (4.95%) Afrikaans, 1 (0.99%) Tsonga and 1 (0.99%) Zulu.

Data collection

Purpose in Life Test (PIL) of Crumbaugh and Maholick (1969). This was administered to measure the meaning potentials of students. The PIL was designed to operationalize Frankl's ideas and to measure an individual's experience of meaning and purpose in life. It is a 20-item scale, and each item is rated on a 7-point scale and total scores therefore range from 20 (low purpose) to 140 (high purpose). According to the criterion provided by Crumbaugh and Maholic (1969), PIL scores of 92 or less are indicative of low meaning, and scores of 112 and more indicate definite purpose in life, with moderate meaning in between. A Cronbach's alpha coefficient of 0,84 was observed for the study sample.

Student Records.

Data form student records was used to determine persistence. For this reason the researcher obtained academic transcripts of the participants to determine those who completed their qualifications, against those who dropped out.

Procedure

There were three stages in the current research study.

Stage1. The first stage was gathering data in the first semester of 2005 with 101 first-year students. The PIL, LISRES, Biographical Questionnaire, 2 focus group sessions and individual interviews were used to gather data in the first semester of the first-year of study.

Stage 2. The second stage was gathering data from the student administrator's office on academic performance at the end of the second semester of the first-year of study. A qualitative and quantitative analysis of the data was conducted, and presented.

Stage 3. A stratified sample of two groups, 20 students who scored high on the Purpose in life (PIL) test, and 20, who scored low on the PIL test, was selected from the random sample of 101 students who took part in the first stage of the study, in 2005.Also, in the third stage data was gathering of from the academic administrator's office on persistence (criterion) in 2013.

Ethical considerations

Permission to conduct this study was obtained from the Management of Central University of Technology, Free State. All students who participated in this study completed a consent form. Participants were assured that all information would be treated as confidential and anonymous.

The questionnaire was administered by the researcher, and completed individually by the participants. The latter were completed in the first-year of study, in 2005. Data was analysed with a computer software programme.

DATA ANALYSIS

Data was analysed quantitatively. For this reason an independent t-test was used to determine if the two sets of data are significantly

different from each other. The results that follow were obtained with the help of the GraphPadInstat version 3.10 for Windows, GraphPad Software computer program (GraphPad, 2009).

Formula

$$t = \frac{M_x - M_y}{\sqrt{\dfrac{S_x^2}{n_x} + \dfrac{S_y^2}{n_y}}}$$

M = mean
n = number of scores per group

$$S^2 = \frac{\sum (x - M)^2}{n - 1}$$

x = individual scores
M = mean
n= number of scores in group

We are interested in a difference between 2 populations (High Meaning Group, and Low Meaning Group,) and we use 2 samples (High Meaning Group, and High Meaning Group) to estimate this difference.

RESULTS

The group statistics (averages and standard deviations)are presented in Table 1. The results of the independent samples t-test are presented in Table 2.

Table 1: *Group Statistics (N=40)*

	Levels of Meaning	N	Mean	Standard Deviation	Standard Error Mean
Persistence Level	High Meaning Group	20	3.150	1.785	0.399
	Low Meaning Group	20	0.500	1.573	0.351

In the Table for Group Statistics, the mean for condition 1 (High Meaning Group) is 3.150. The mean for condition 2 (Low Meaning Group) is 0.500. The standard deviation for condition 1 is 1.785and for condition 2, 1.573. The number of participants in each condition (N) is 20. The magnitude of the difference between conditions is indicated, and we can see that High Meaning Group has a higher mean. For example, we realize that the mean for condition1 is almost three times that of condition 2. We also realize that the persistence level of participants in the High Meaning Group condition is nearly three times when compared to those of Low Meaning Group.

Table 2: *Independent Samples Test*

	Levene's Test for Equality of Variances		t-test for Equality of Means							
									95% Confidence Interval of the Difference	
	F	Sig.	t	df	Sig. (2 tailed)	Mean Difference	Std. Error Difference		Lower	Upper
Equal variances Assumed	1.228	0.0001	4.981	38	0.0001	-2.650	0.621		-3.727	-1.573
No Equal variances Assumed			4.981	37	0.0001	-2.650	0.621		-3.728	-1.572

An independent-samples t-test was conducted to compare persistence level for High Meaning Group and Low Meaning Group. There was a significant difference in the scores for High Meaning Group (M=3.150, SD=1.785) and Low Meaning Group (M=0.500, SD=1.573) conditions; t (38) = 4.267, p = 0.000. These results suggest that a high sense of meaning really does have an effect on persistence levels of university students. Specifically, our results suggest that when students have a high sense of meaning in the first-year of study, they are able to persevere, and obtain their qualifications.

Figure 1 *All participants from the study*

All Participants (N=101)
Completed & Drop out

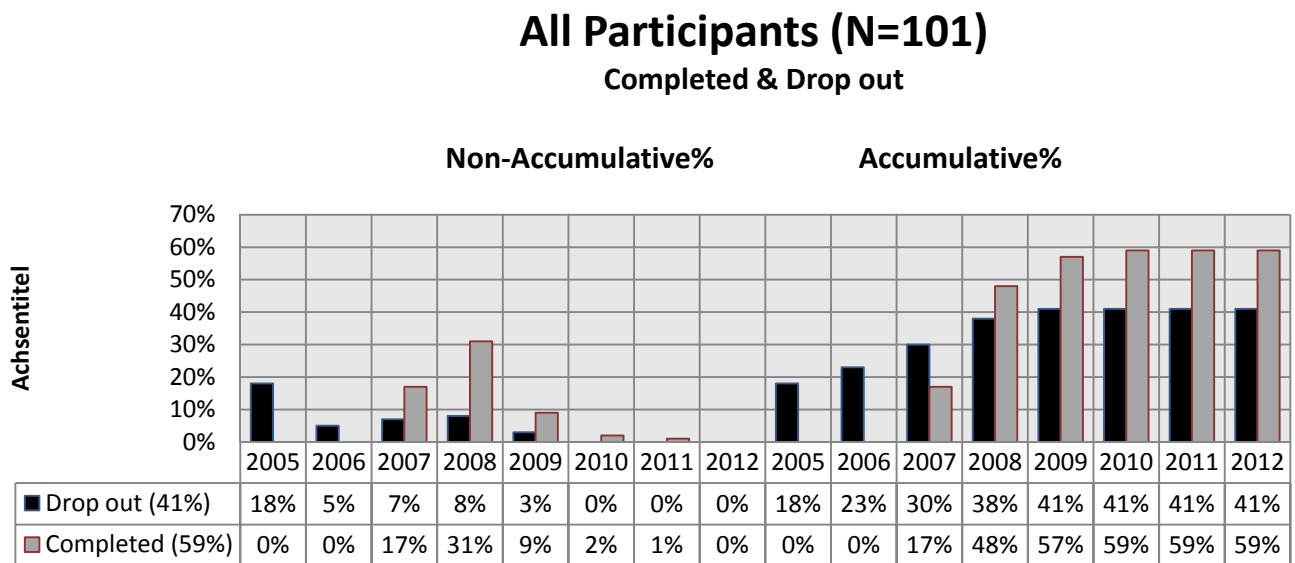|	2005	2006	2007	2008	2009	2010	2011	2012	2005	2006	2007	2008	2009	2010	2011	2012
Drop out (41%)	18%	5%	7%	8%	3%	0%	0%	0%	18%	23%	30%	38%	41%	41%	41%	41%
Completed (59%)	0%	0%	17%	31%	9%	2%	1%	0%	0%	0%	17%	48%	57%	59%	59%	59%

Figure 1 is the percentages of the throughput and dropout rates of participants from the random sample (N=101). From this figure we realize that 59% of students of all students who participated in the study completed their studies, and 41% dropped out.

Figure 2 *Participants from the Low and High Meaning Groups*

High & Low Meaning Groups (N=40)

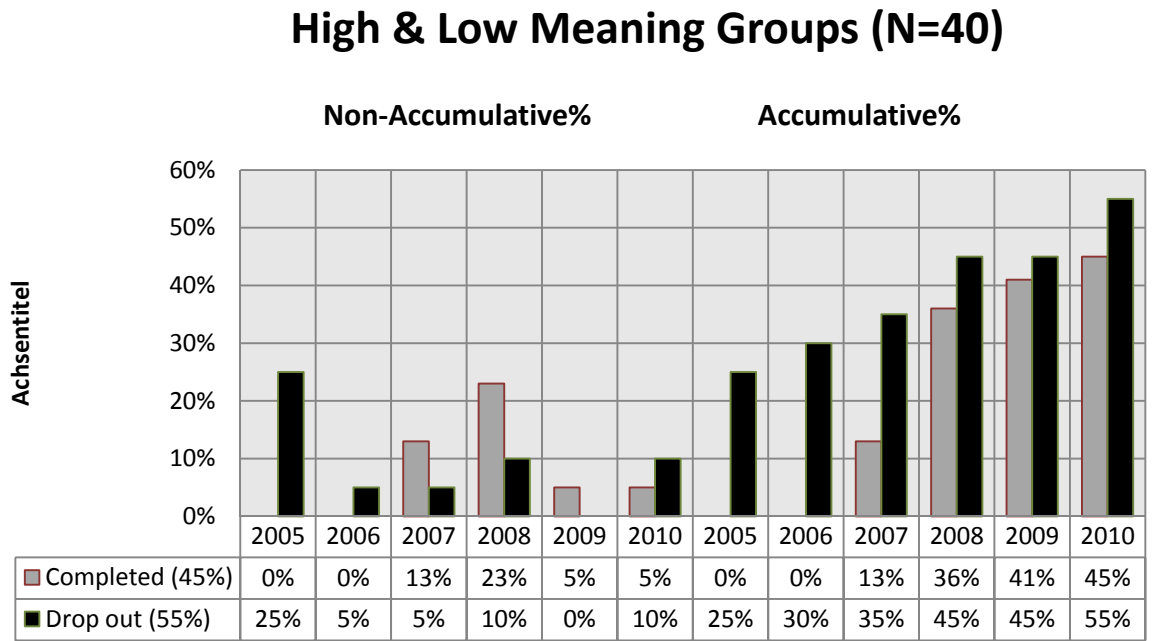|	Non-Accumulative%						Accumulative%					
	2005	2006	2007	2008	2009	2010	2005	2006	2007	2008	2009	2010
Completed (45%)	0%	0%	13%	23%	5%	5%	0%	0%	13%	36%	41%	45%
Drop out (55%)	25%	5%	5%	10%	0%	10%	25%	30%	35%	45%	45%	55%

Figure 2 is the percentages of participants from the stratified sample (N=40). From this figure we realise that 45% of entire sample completed their studies, while 55% dropped out. A sizeable number of these students (18%) dropped out in the first-year, and 5% in the second year.

Figure 3 *Participants from the High Meaning Group*

High PIL Scores (N=20)

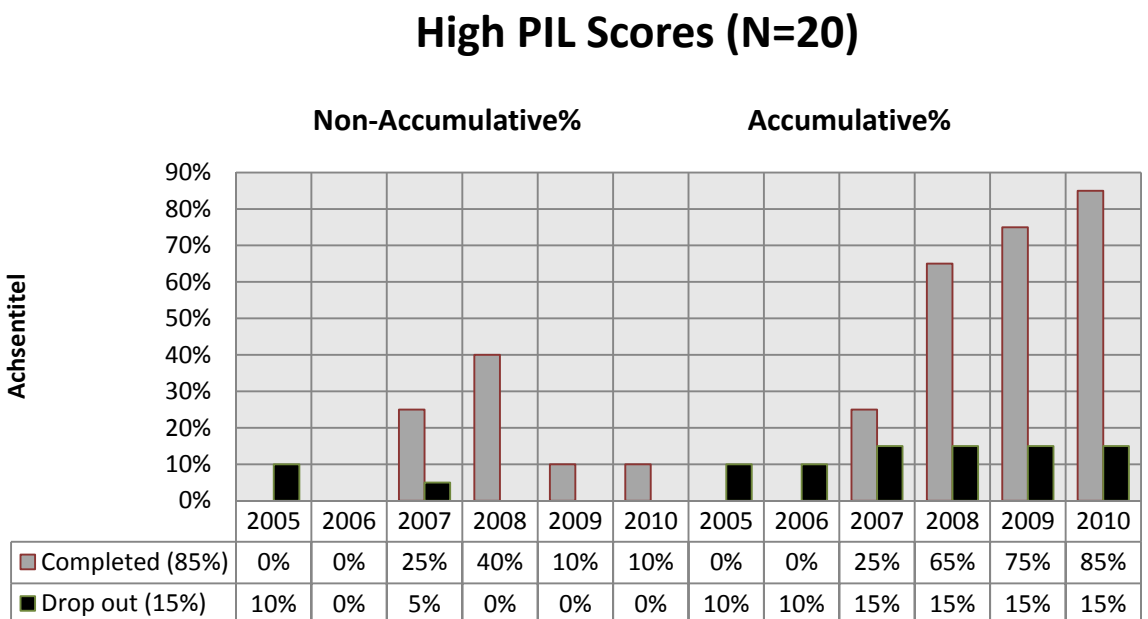|	Non-Accumulative%						Accumulative%					
	2005	2006	2007	2008	2009	2010	2005	2006	2007	2008	2009	2010
Completed (85%)	0%	0%	25%	40%	10%	10%	0%	0%	25%	65%	75%	85%
Drop out (15%)	10%	0%	5%	0%	0%	0%	10%	10%	15%	15%	15%	15%

Figure 3 is the percentages of participants from the High Meaning Group (N=20). From this figure we realise that 85% of students in this group completed their studies, while 15% dropped out; most (10%) of those who dropped out did so in the first-year, and 5% in the third year.

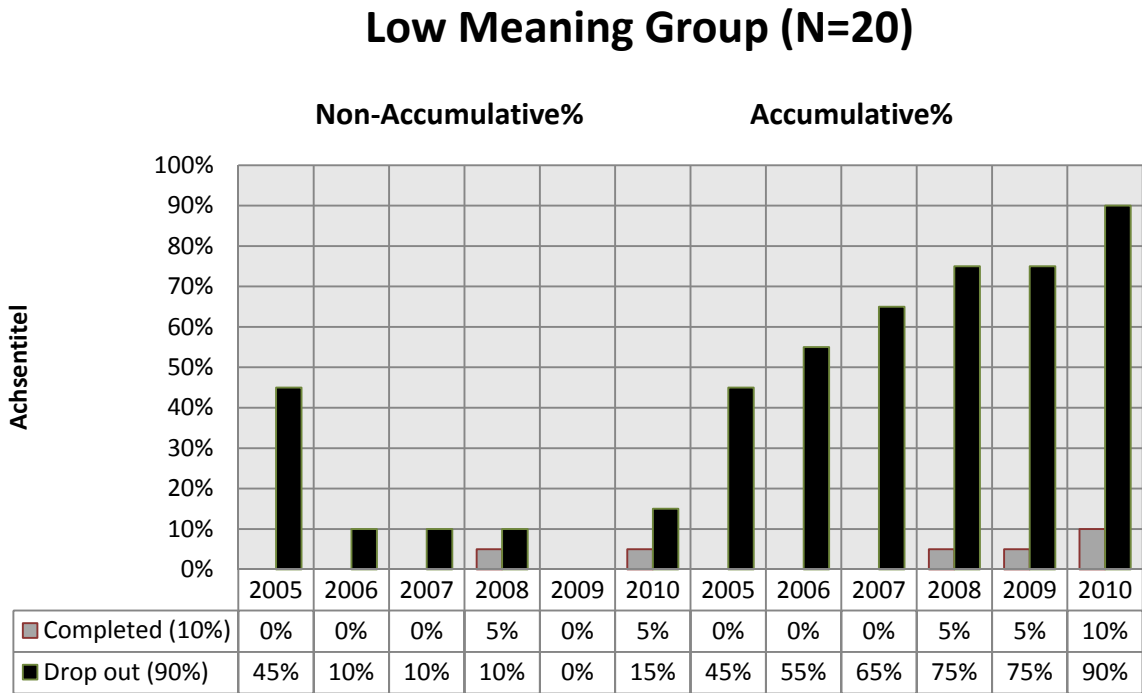Figure 4 *Participants from the Low Meaning Group*

Low Meaning Group (N=20)

Non-Accumulative%   **Accumulative%**

	2005	2006	2007	2008	2009	2010	2005	2006	2007	2008	2009	2010
▭ Completed (10%)	0%	0%	0%	5%	0%	5%	0%	0%	0%	5%	5%	10%
▬ Drop out (90%)	45%	10%	10%	10%	0%	15%	45%	55%	65%	75%	75%	90%

Figure 4 depicts the percentages of participants from the Low Meaning Group (N=20). From this figure we realise that 90% of students in this group dropped out of university, while 10% persisted. Almost half(45%) of those who dropped out did so in the first-year, and an additional 10% in the second, third and fourth year, respectively.

DISCUSSION

This research is a follow up on study conducted with the same participants to investigate how sense of meaning assist first-year students in their adjustment at university. The latter study discovered that first-year students with a high sense of meaning are much better adjusted than those with a low sense of meaning (Makola & Van Den Berg, 2010). Having found this variable to be important in adjustment, the researcher deemed it necessary to investigate whether this variable can have a significant impact on persistence. As a result, the purpose of this study is to investigate whether a high levelof meaning, in the first-year of study, enable students to persist at university, and complete their studies. For this reason an independent samples t-test was used to investigate whether the persistence level of students with a high sense of meaning is significantly greater than those with a low sense of meaning.

From these variables, 1 null and alternative hypothesiswas formulated.

In the next section the results of this quantitative study are discussed and related to the hypothesis.

Hypothesis 1 – Level of meaning and persistence

A significant correlation was found between purpose in life and persistence. As a result, the null hypothesis is rejected and the alternative hypothesis was supported by the results of this study. Therefore the study discovered that when students have a high sense of meaning in their first-year of study, they are able to persevere, and complete their studies. Therefore, the result of the current study confirms Vincent Tinto's findings that, high motivation levels of students especially in the first year of study are considered to be the defining time for the rest of their university career (Tinto, 1993). In additions, the findings confirm those of a study Makola (2007) which revealed that sense of meaning is one of the constructs which helps students to tolerate life stressors more effectively, thus improving adjustment to the life demands, including academic demands. An earlier study by Nackord (1983) also proposed a significant relationship between meaning orientation and scholastic achievement. Lately, results of a study by Greenway (2005) reported that academic engagement is a strong predictor of success amongst university students and that meaning in life was significantly predictive of a student's level of engagement.

The descriptive statistics revealed that 59% of all participants completed their studies, and 41% dropped out. A sizeable number (18%) of participants dropped out in the first-year, and an additional 5% in the second year.

In a comparative American study 28% of students did not persist to their sophomore year (Olivera-Celdran, 2011). In addition, the study reports that 57% of participants completed their studies in five year. This figure is slightly higher than the one recently release by the Council for Higher Education which indicates that 48% of contact students complete their studies in five years (CHE, 2013).

In addition, the descriptive statistics indicated that 85% of high meaning participantscompleted their studies, and only 15% dropped out.A study by Edwards and Holden (2001) on undergraduate students found that students who believed that their life had meaning used more effective coping strategies. They also found that when exposed to stressors such students are less likely to consider suicide as their escape. From these findings we can conclude that a high sense of meaning in the first-year of study enables students to persist with their studies until they obtain a qualification.

The current study further revealed that, 90% of low meaning participantsdropped out of university and 10% persisted. Almost half (45%) of those who dropped out did so in the first-year. According to Makola (2007), meaninglessness may result in a number of problems, for example, depression and aggression to the self or others, problems of concentration in the lecture-hall, difficulties in relating to others, lack of initiative, insecurity and many forms of irresponsibility. Research conducted at Idaho State University found that 51 of the 60 students, who had seriously attempted suicide, mentioned that, they did so because "life meant nothing" to them (Roberts,

1980). From these findings we can conclude that a low sense of meaning has detrimental effects and thwarts progress amongst students at university.

CONCLUSION

This study proposes a different way of new looking at student persistence. It suggests that when we instill a high sense of meaning amongst students in the first-year of study, it does not only result to academic achievement in that year, but,it is also likely to benefit them in subsequent years. The study discovered that students with a high sense of meaning are able to persist with their studies and obtain a qualification.In this way, the paperadds knowledge to the theory on factors which promotes persistence amongst students in institutions of higher learning.

For these reason, the paper provides additional empirical evidence that a high sense of meaning does not only promote academic achievement in the first-year of study (Makola, 2007), but it also enables students to persist until the complete their studies. As a result, a high sense of meaning acts as a buffer against challenges faced by students, especially those from poor socioeconomic backgrounds. However, more empirical research needs to be done to further develop this model.

In order to develop the model further, more studies should be conducted whereby the levels of meaning of all first-year students will be assessed with the Purpose in Life (PIL) test at the beginning of the year. Secondly, brief meaning-centered interventions will be conducted for students who achieved low PIL scores. Thirdly, the PIL will be re-administered at the end of the first-year.Finally, the PIL scores will be compared to the academic performance of students, at the end of the first-year, and subsequent years. In this way we would further advance this theory and the related literature on student persistence and low-socioeconomic students in higher education.

The results of this study should be interpreted against the following limitations; the sample size was small and it was taken from one faculty, in one institution. Irrespective of the above-mentioned limitations, it is envisaged that the outcomes of the research could have relevance to other universities. For example, the findings of this study may contribute to the development of intervention programs aimed at improving the meaning potentials (the creative, experiential and especially the attitudinal values) of young people. Viktor Frankl's theory of "Meaning in Life" is very significant in helping students realise their meaning potentials. From the results of this study we come to realise that because students with a high sense of meaning are better adjusted, at university (Makola & Van Der Berg, 2010), the current study discovered that they are also able to persist with their studies. As a result, more time and energy should be spent on developing programmes which will assist youth to realise their meaning potentials.

REFERENCES

Akoojee, S. (2004). Access and quality in South African Higher Education: The challenge for transformation. Retrieved September 4, 2004, from http://www.ecu.au/conferences/herdsa/main/papers/nonref/pdf/SalimAkojee

Bitzer, E. M. (2003). Assessing students' changing perceptions of higher education. South African Journal of Higher Education, 17(3), 164-176.

Bosch, J. K., Boshoff, C. & Louw, L. (2003). Empirical perspectives on the motivational learning strategies of undergraduate students in business management: an exploratory study. Management Dynamics, 12(4), 39-50.

Boyle, E. A., Duffy, T. & Dunleavy, K. (2003). Learning styles and academic outcome: The validity and utility of Vermunt's Inventory of learning styles in a British higher education setting. British Journal of Educational Psychology, 73, 267-290.

Chambel, M. J. &Curral, L. (2005). Stress in academic life: Work characteristics as predictors of student well-being and performance. Applied Psychology: An International Review, 54(1), 135-147.

Chen, X. (2005). First-generation students in postsecondary education: A look at their college transcripts (NCES 2005-171). U.S. Department of Education, National Centre for Education Statistics. DC: U.S. Government Printing Office.

Council for Higher Education.(2012). Vital stats public higher education 2010. Pretoria.

Council for Higher Education. (2013).A proposal for undergraduate curriculum reform in South Africa: The case for a flexible curriculum structure. Pretoria.

Courtenay, B. C. &Truluck, J. (1997). The meaning of life and older learners: Addressing the fundamental issue through critical thinking and teaching. Educational Gerontology, 23(2), 175-195.

Crumbaugh, J. C. &Maholick, L.T. (1969). Manual of Instructions for The Purpose in Life Test. Munster, Indiana: Psychometric Affiliates.

Desjardins, S. L., Kim, D. &Rzonca, C. S. (2002/2003).A nested analysis of factors affecting bachelor's degree completion. Journal of College Student Retention, 4(4), 407-435.

Drysdale, M. T. B., Ross, J. L. & Schulz, R. A. (2001). Cognitive learning styles and academic performance in 19 first-year university courses: Successful students versus students at risk. Journal of Education for Students Placed at Risk, 6(3), 271-289.

Edwards, M. & Holden, K. (2001). Coping, meaning in life, and suicidal manifestations: Examining gender difference. Journal of Clinical Psychology, 577, 1517-1534.

Frankl, V. E. (1988). The will to meaning: Foundations and applications of logotherapy. New York: Penguin Books.(Giovinco, 2001

Frankl, V. E. (2006a). Man's Search for Meaning. Beacon Press. ISBN 978-0-8070-1427-1. http://books.google.com/books?id=F-Q_xGjWBi8C. Retrieved 6 June 2012.(Moran, 2001).(Ross, Cleland & Macleod, 2006),

GraphPad. (2009). "Unpaired t-test was performed using GraphPadInstat version 3.10 for Windows, GraphPad Software, La Jolla California USA, www.graphpad.com".

Greenway, K. A. (2005). Purpose in life: A pathway to academic engagement and success. Unpublished thesis (for the degree Doctor of Education), Azusa Pacific University, California.

Hak-Ju, K. (2004). Family resources and children's academic performance. Children and Youth Services Review, 26(6), 529-536. (Gonzalez, Greenwood &WenHsu, 2001)

Hermon, D. A. &Hazler, R. J. (1999).Adherence to wellness model and perceptions of psychological well-being.Journal of counselling and Development, 77, 339-343.

Hetter, B. (1980). Wellness promotion on a university campus.Family and Community Health, 3, 77-95.

Hullett, M. A. (1994). A validation study of the existential anxiety scale. Paper presented at the Annual Meeting of the Middle Tennessee Psychological Association (Nashville, TN, April 30, 1994).

Jackson, T., Weiss, K. E., Lundquist, J. J. & Hooper, D. (2003).The impact of hope, procrastination, and social activity on academic performance of Midwestern college students. Education, 124(2), 310-320.

Jones, C., Reichard, C. &Mokhtari, K. (2003).Are students' learning styles discipline specific? Community College Journal of Research and Practice, 27, 363-375.

Makola, S. (2007).Meaning in life and life stressors as predictors of first-year academic performance. Unpublished doctoral thesis, University of the Free State. Bloemfontein.

Makola, S., & Van Der Berg, H. (2010).A study on logotheory and adjustment in first-year university students. The International Forum for Logotherapy, 33(2), 87-94.

Marlowe, J., Koonce, J., Lee, J. &Cai, Y. (2002). An examination of the impact of student's work time on academic performance. Consumer Interests Annual, 48, 1-9.

Meraviglia, M. (2005).Effects of spirituality in breast cancer survivors.Oncology Nursing Forum, 33(1), p.E1-E7.

Merullo, R. (2002). The challenge of first-generation college students. Chronicle of higher education, 48(4), 10-11.

Moore, R. (2005). Attendance: Are penalties more effective than rewards? Journal of Developmental Education, 29(2), 26-32.

Nackord, E. J. (1983). A college test of logotherapeutic concepts. The International Forum for Logotherapy, 6(2), 117-122.

Olivera-Celdran, G. (2011). Purpose in life and career indecision of academic success in college. Unpublished doctoral dissertation.University of North Carolina at Charlotte.

Pascarella, E. T., &Terenzini, P. T. (2005). How college affects students, Vol. 2. A third decade of research. San Francisco: Jossey-Bass.

Pinquart, M. (2002). Creating and maintaining purpose in life in old age: A meta-analysis. Ageing International, 27(2), 90-114.

Prochaska, J. O. (1995). Common problems: Common solutions. Clinical Psychology: Science and Practice, 2, 101-105.

Purvis, G. C. (1979). A philosophy of youth.In J. B. Fabry., R. P. Bulka.& W. S. Sahakian (Eds.) Logotherapy in action. New York: Jason Aronson.

Rengito, P. (2003). College student at higher risk of depression, stress. BG News, October 14 2003. Retrieved May 10, 2004, from http://media.www.bgnews.com/media/storage/paper883/news/2003/10/14/LocalNews/Colleg e.Students.At.Higher.Risk.Of.Depression.Stress1290180.shtml?sourcedomain=www.bgnews. com&MIIHost=media.collegepublisher.com

Roberts, H. C. (1980). Logotherapy's contribution to youth.The international Forum for Logotherapy, 3, 19-21.

Ryff, C. D., & Singer, B. (1998).The role of purpose in life and personal growth in positive human health.In P. T. Wong., & P. S. Fry (Eds.), *The human quest for meaning*(pp.213-235).   Mahwah,   NJ: Erlbaum.

Savolaine, J. &Granello, P. F. (2002).The function of meaning and purpose for individual wellness. Journal of Humanistic Counselling, Education and Development, 41, 178-189.

Seepe, J. (2005). Universities must enforce re-admission rules - Pandor. City Press, 15 May 2005. Johannesburg. (CHE, 2012).

Sennett, J., Finchilescu, G., Gibson, K. & Strauss, R. (2003).Adjustment of black students at a historically white South African university. Educational Psychology, 23(1), 108-116.

Shantall, T. (1997). What is meant by 'meaning'? In F. Crous, A. A. H. Coetzer, & G, van den Heever. On the way to meaning: Essays in remembrance of Viktor Frankl. Johannesburg.

Shumba, A. &Masiki-Matima, A. E. (2002).Sexual harassment of college students by lecturers in Zimbabwe. Sex Education, 2(1), 45-59.

Silverman, N. (2004). College student suicidal prevention: Background and blueprint for action. Spectrum, 13-19.

Tinto, V. (1993). Leaving college: Rethinking the causes and cures for student attrition (2nd ed.). Chicago: University of Chicago Press.

Tinto, V. (2006). Research and practice of student retention, What's next? Journal of College Student Retention, 8(1), 1-19.

Walpole, M., (2007).Economically and educationally challenged students in higher education: Access to outcomes. ASHE-Higher Education Report Series, 33(3), 1-113.

Yip, M. C. W. & Chung, O. L. L. (2005).Relationship of study strategies and academic performance in different learning phases of higher education. Educational Research an Evaluation, 11(1), 61-70.

SOBRE O AUTOR

Solomon Makola. Proceeded to Vista University, Welkom Campus, in 1991. In 1994 he graduated with a Bachelor of Arts in Education (BA.Ed) with majors in Psychology and Education. After completing a BA Honours in Psychology in 1996. Actually is Welkom Campus Manager.