

Assessment of the value of group-based counselling for career construction

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ABSTRACT

This article reports on the change in the career adaptability of participants exposed to an intervention programme characterized by career and self-construction principles compared to the change in participants who participated in standard, traditional career counselling lessons. Convenience and purposive sampling were used to select two groups (experimental and comparison of Grade 11 learners). Intervention occurred in both experimental groups. A mixed methods, quasi-experimental, pre-test/post-test comparison group design was used to gather data. Pre- and post-test scores obtained on the *Career Adapt-Abilities Scale (CAAS)* were analysed. The quantitative results suggested that the intervention programme did not improve participants' career adaptability compared to standard, traditional career counselling lessons as measured by the CAAS. Future research should include the use of measures of self-reflection and meaning-making to test the direct effects of experimental interventions.

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Introduction

Contemporary society is characterized by rapid advancements in information technologies and globalization that heralded the start of the twenty-first century. A need for the development of innovative skills and changes in attitude towards work requirements has arisen in response to this rapid advance. Savickas et al. (2009) rightly argue that it is becoming increasingly challenging to predict what the future holds for individuals in a globalized world. Technological advances and globalization characteristics of the twenty-first century necessitate that individuals ask more complex career related questions in response to an ever changing world. Maree and Pollard (2009) state that contemporary society is characterized by the rapid advancements in information technologies and globalization, which heralded the start of the twenty-first century. A need for the development of innovative skills and changes in attitude towards work requirements has arisen in response to these rapid advancements (Maree, 2009). Savickas et al. (2009) argue that it is becoming increasingly challenging to predict what the future holds for individuals in a globalized world. Job prospects are diminishing and individuals are faced with more frequent and complex career transitions than two decades ago. Ultimately, lifelong employment or promotion with one organization cannot be guaranteed and employees do not necessarily remain loyal to a specific organization in their career lifespan (Maree, 2013).

Adolescents are amongst those who ask questions pertaining to what they are going to do with their lives in this ever changing world as they negotiate the many transitions they face (Savickas et al.,

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2009). It is crucial to support them as they negotiate the changes and challenges that confront them. Savickas (2008) argues that the methods used by career counsellors need to be re-evaluated to help them address the diverse needs of clients in the world of work more adequately. In addition, Maree (2010a, 2013, 2015) argues that the ultimate aim of career counselling is to help clients design lives that are conducive to helping them manage repeated transitions when they are faced with challenges. Assessment instruments and associated intervention strategies potentially offer counsellors the means through which they can enable clients to manage career related transitions more effectively. However, Western career facilitation practices in particular, characterized by individualism, rationality and empiricism, may be irrelevant to many cultures in a globalized world (Marsella, 1998). Chung (2007) calls for the globalization of these practices in addition to their westernization.

The changing role of career counsellors

Maree (2010b) maintains that the novel, integrated paradigmatic approach in career counselling (an approach that developed in response to the aforementioned changes in the world of work) necessitates a shift in the role of career counsellors. This has become increasingly more apparent in the past few years. Counsellors' 'expert' role in the career facilitation process, prior to the development of a global economy, often disempowered clients (Maree, 2009). Clients were often likely to be excluded from the decision-making process and in doing so gave the counsellors full control over choices that are made. Instead, clients are to be seen as active agents in this process (Savickas, 2008).

Counsellors can no longer assume that they can make accurate predictions in an unpredictable world. Savickas et al. (2009) state that career counselling needs to move beyond simple advice giving. A dynamic, non-linear process ensues when clients are helped to formulate their identities through articulating their life stories. Central life roles are identified in this process as clients respond to the feedback given in dialogue with their counsellor. Individual expectations are also expressed and ways of reaching these are discussed. Ultimately, counsellors can help clients define their priorities, identify support structures, cultivate resources and engaging them actively (Amundson, 2010) in activities that help them discover what is meaningful in their lives (Savickas et al., 2009). Career counsellors therefore need to be involved in active listening (Brott, 2001) as they assist clients in making sense of their careers and, ultimately, their lives (Savickas, 2010).

Savickas et al. (2009) describe the changing role of career counsellors as change agents, as opposed to diagnosticians who predict fixed outcomes. Techniques that enable, rather than fit should be sought. It is important for counsellors themselves to have clear identities and to display adaptive skills (Savickas et al., 2009). This applies to all categories of counsellors. Lapan, Tucker, Se-Kang, and Kosciulek (2003) emphasize that one of the central roles for school counsellors is to acknowledge that career development programmes should be sensitive to the diverse backgrounds of all learners.

Cost reductions in the implementation of the career support programme were an important consideration to ensure that the intervention strategy offered to learners was also accessible to individuals from disadvantaged communities. The need to design and implement such programmes is apparent in the contexts in which we, the authors, work. Swanson and Fouad (1999) state that learners need time for exploration so that sufficient self-knowledge and knowledge about the world of work can be achieved. Moreover, the costs incurred by doing this one-to-one can potentially be avoided if learners are given opportunities for self-exploration in class. Hence the idea for the implementation of a novel school-based career support programme was born.

Theoretical overview and conceptual framework

The incorporation of several theories in our conceptual framework is supported by Savickas and Lent (1994), who argue that more than one theory is inevitably needed when answering research-based questions. Using the *narrative paradigm* incorporated into life-design intervention frameworks, the two theories of *self-construction* (Guichard, 2005) and *career construction* (Savickas, 2015) are translated into

practice (Savickas et al., 2009). These two theories, grounded in the theory of *social constructivism* and based on an interactionist perspective, propose that people construct reality, roles, capabilities and competencies in social contexts through shared and agreed-upon meanings, and advocate that identities develop as individuals actively participate in social realms. Career intervention programmes serve to encourage participants to narrate and become the authors of their life stories. Narrative approaches that conceptualize careers as stories assert that chapters in life stories are interrelated. Each chapter in an individual's life story builds on previous chapters and is related to future chapters as all life experiences are intertwined (Maree, 2013). That is, current experiences inevitably have an impact on future ones.

Psychodynamic approaches, too, are relevant in the narrative paradigm as the use of early life stories is encouraged in the narration process. Campbell and Ungar (2004) suggest that life design intervention has the potential to enhance the design of individuals' lives in response to the many challenges they face. This form of counselling translates Guichard's (2005) self- and career construction theory into practice by seeing individuals as actively constructing themselves through narration or story telling in social interaction. Life design intervention frameworks ultimately encourage individuals to identify and reflect on what is meaningful in their lives as they attempt to manage significant and complex career transitions successfully.

Constructivism is the main theory that informs our conceptual framework due to the premise that what people know and who they are (identities) develop through experiences and social discourse between people (Savickas et al., 2009). The notion that people and their environments shape each other provide the link between people and their environments. Social constructivism conceptualizes identity as a self-construction process that develops over time into a life story (McAdams, Josselson, & Lieblich, 2001; Savickas, 2011a).

This study is restricted to the domain of adolescence. Erikson's (1968) *theory of psychosocial development*, which names *identity formation* as a primary developmental task in adolescence, therefore seems relevant. This concept is inherent in Super's (1957) developmental approach to vocational choice when he discusses the exploratory stage of life that takes place between the ages of 14 and 24 years. Developmental theories are of interest to us as they facilitate our understanding of adolescence and the corresponding challenges faced as career transitions are negotiated. The quest to gather information about themselves continues in this developmental stage as adolescents strive to establish their sense of self by attempting to answer the question, 'Who am I?' Erikson places a strong emphasis on the social aspect of identity formation by acknowledging that people are embedded in broader contexts in which various life roles are assumed. Cohen-Scali (2014) states that individuals rely on perceptions they have regarding how they think other people see them in the identity construction process. It is useful to incorporate lifespan, life-space career development theories as a reminder that the work role should not be the exclusive focus of our study (Hartung, 2011). Savickas (2008) argues that it is useful to know what personality traits, needs, values and interests are part of one's self-concept. Parsons' trait-factor theory in uncovering these components can therefore not be ignored (Rafael, 2007). It is important, though, to note that development takes place through an individual's lifespan and not at a specific point in time. Savickas (2015) and Pizzorno, Benozza, Fina, Sabato, and Scopesi (2014) name the career context as a potential domain in which identities can develop. The development of self in this context (career construction) takes place through new experiences and social exchanges in the world of work. In essence, the career story 'helps a person define who she or he is and how she or he should act within a career context' (Meijers & Lengelle, 2012).

Since the study assesses the intervention effectiveness in promoting career adaptability, the dimensions of adaptability as well as their importance for career management are described in more detail below.

Career adaptability

Career adaptability relates to the coping mechanisms used to manage career challenges and transitions, is incorporated in our conceptual framework as it provides the link between people and their

environments. Today, it is our task to enable people to execute careers that will facilitate the design of successful career lives. Moreover, we should help people pursue education and training that will help them become more employable (in other words, help them embrace the idea of life-long learning instead of life-long employment in a single company). Career counselling theory and practice transitioned from 'helping' people choose careers to empowering them to choose careers and, subsequently, construct careers and themselves relationally.

Adaptability is key if we wish to promote people's employability. For this reason, we, as career counsellors, should do what is needed to encourage and advance our clients' adaptability. Soresi, Nota, Ferrari, and Solberg (2008) aptly maintain that the usefulness and worth of career counselling depends largely on the extent to which it produces key changes in people's career life stories. Pulakos et al. (2002) state that career counsellors should help clients become more adaptable by, for instance, becoming creative problem solvers, dealing with unpredictable and volatile situations in occupational environments, coping with stress and crises in occupational contexts and acquiring new skills on a continual basis.

Savickas (2011a, 2011b) maintains that counselling for career construction (career counselling) should enable people to develop new attitudes (A), beliefs (B), and competencies (C) to broaden and develop their careers. The so-called ABC model correlates highly positively with career adaptability with respect to four 'adapt-abilities', namely: (a) concern about or the ability to relate to and to consider future prospects; (b) control over or the ability to improve one's self-regulation by means of rigorous career decision-making but also taking responsibility for one's future); (c) curiosity, which relates to an enquiring attitude about one's future and to fruitful career exploration; and (d) confidence about the future and one's self-efficacy and the belief that one has the capacity to solve future problems. Acquiring career 'adapt-abilities' empower people to adapt to and in rapidly changing contexts, especially when transitions or career related traumas are encountered (Porfeli, Lee, & Vondracek, 2013; Savickas & Porfeli, 2010) (Figure 1).

Rationale for the study

Maree and Beck (2004) argue that traditional psychometric assessment tests are limiting in that they do not give individuals extensive opportunities to explore and develop. Moreover, the majority of these assessment instruments are only available to select groups of individuals and lack application potential in diverse contexts. Career counselling practises that are mostly reliant on these assessment instruments will therefore have limited outcomes in terms of meeting the career needs of diverse groups of people. This realization prompted us to find alternative ways of working with individuals (adolescents in particular) who strive to manage transitions in their lives. Savickas (1999) states that individuals who recognize and acknowledge the importance of making career choices, and who understand the consequences of these choices, manage work-related challenges more effectively. Successful career management strategies for adolescents should aim specifically at helping them become more playful, adaptive (Savickas, 1999), proactive (Claes & Ruiz-Quintanilla, 1998) and more resilient. Lapan et al. (2003) conclude that all individuals should consistently be exposed to these strategies while Maree (2006) states that inadequate support at school inevitably may contribute to inadequate academic achievement, which limited career opportunities for learners.

The research conducted and reported on in this article arose in response to the challenges outlined above. It constitutes a response to the question whether more meaningful career support programmes can be designed and implemented in schools.

Goals of the study

The primary goal of the research was to explore alternative and possibly more effective ways of helping learners manage career transitions. More particularly, we explored the extent to which career and self-construction help them manage career transitions.

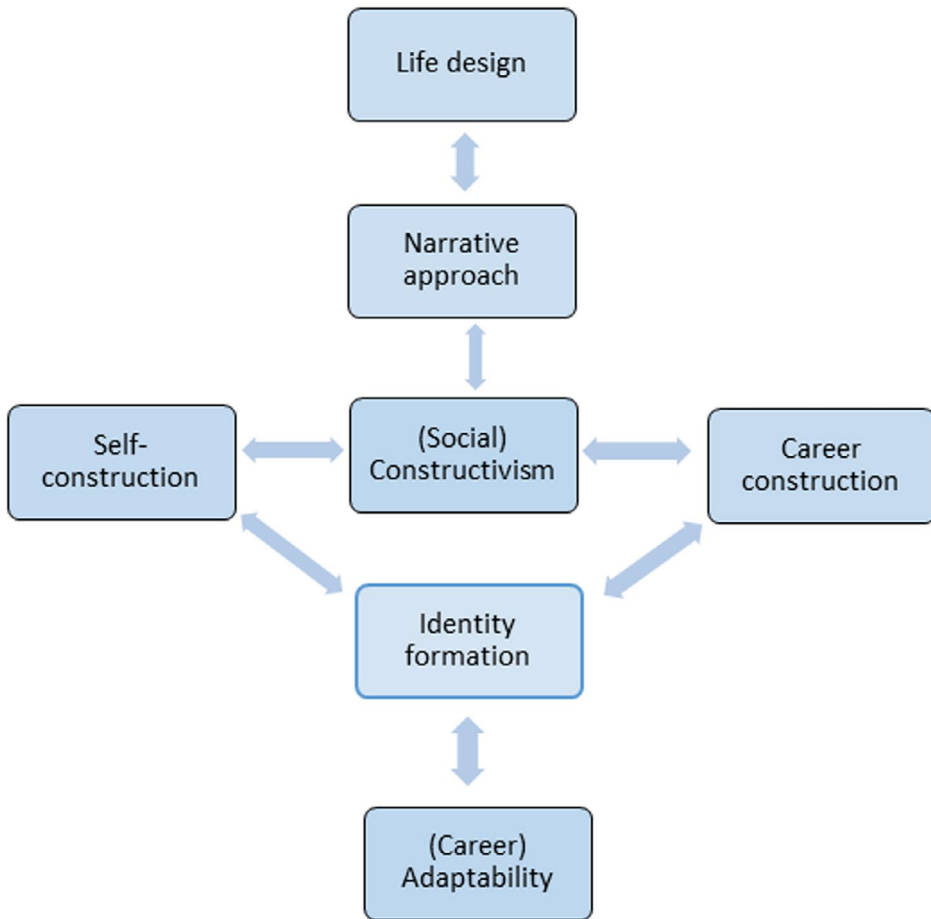


Figure 1. Conceptual framework: implementing an intervention programme characterized by career and self-construction principles to impact career adaptability.

Research hypotheses: analysis of differences between pre-intervention scores

Five statistical hypotheses, one for each of the four *Career Adapt-Abilities Scale* (CAAS) (Savickas & Porfeli, 2010) subscales, as well as for the overall CAAS score, were formulated to assess whether the pre-intervention CAAS scores of the two schools were significantly different from each other (between school comparisons). This was done to verify that the scores of the learners in the two schools did not differ from each other prior to the onset of the intervention, in other words, to confirm that there was no initial bias between the two groups of learners. To evaluate whether inadvertent differences existed between the learners assigned to the intervention and the control group, the same five hypotheses were tested for each of the two schools (within school comparisons). The hypotheses were tested using non-parametric Mann–Whitney U-tests, which are analogous to the two-sample independent *T*-test, since the samples are small and the distributional assumptions of the two-sample independent *T*-test could not be met.

Analysis of differences between post- and pre-intervention scores

The same five statistical hypotheses (one for each of the four CAAS subscales, as well as for the overall CAAS score), were subsequently formulated to compare the effect of the intervention. Pre-intervention scores were subtracted from the post-intervention scores since it was hypothesized that the intervention

would raise awareness. The four groups that were compared simultaneously are the control groups and the experimental groups in each of the two schools. These hypotheses were tested using non-parametric Kruskal–Wallis tests, which are analogous to an ANOVA.

Method

Participants

Convenience and purposive sampling were utilized to select two groups of Grade 11 learners (males and females) from Penryn College and Mthombo High School, respectively, to explore the career transition experiences of learners in contrasting educational settings. Disadvantaged learners from lower socio-economic backgrounds (Mthombo) followed a state-based education system while more privileged learners from higher socio-economic backgrounds (Penryn) in an independent school setting followed a different system. That is, the latter school is examined by the Independent Examinations Board, an independent assessment agency offering examinations to mostly private schools whereas the former school is examined by a state run examination body offered mostly to public schools. The participants in the experimental group (Penryn) ($n = 21$; 10 males and 11 females) were between the ages of 16 and 18 ($M = 16.00$, $SD = 0.95$), and the participants in the comparison group ($n = 23$; three males and 20 females) were between the ages of 16 and 17 ($M = 16.00$, $SD = 0.66$). The participants in the experimental group (Mthombo) ($n = 21$; 11 males and 10 females) were between the ages of 16 and 23 ($M = 18.00$, $SD = 1.73$), and the participants in the comparison group ($n = 22$; 7 males and 15 females) were between the ages of 15 and 23 ($M = 17.00$, $SD = 1.81$).

Design

A mixed method (integrated), collective, instrumental case-study design was used. Grounded in social constructivism as the main theoretical framework, this design was utilized to collect, analyse and report on quantitative and qualitative data. A QUAN+QUAL, concurrent triangulation design lent itself to the study, as equal priority was given to the quantitative and qualitative data as it was collected at approximately the same time. Thereafter, the respective data-sets were analysed independently. More specifically, a quasi-experimental, pre-test-post-test comparison group design (see Figure 2) was employed. The CAAS was administered prior to and following a career intervention programme. Pre- and post- (quantitative) results of this questionnaire were analysed for the experimental and comparison groups.

Procedure

The career intervention programme that was implemented aimed to enhance the career adaptability of participants focussed on the career transition experiences of two groups of Grade 11 learners in contrasting educational settings, before and after two groups from the respective settings participated in a career intervention programme (see: Tables 1 and 2) based on career and self-construction. Another two groups continued to participate in the standard, traditional Life Orientation lessons offered by their respective schools.

Summary of the career intervention programme

Eight lessons were used for the participants from the experimental group to participate in the intervention programme while participants from the comparison groups took part in the standard, traditional Life Orientation lessons taught by their teachers over a period of two months. In the first lesson, participants from the experimental groups from both schools completed the CAAS. These participants were subsequently given two lessons to complete the narrative questions in the *Career Interest Profile (CIP)* (Maree, 2010c). Thereafter, these participants spent two lessons making collages that depicted how they saw themselves. Further, two lessons were spent drawing lifelines noting significant life themes.

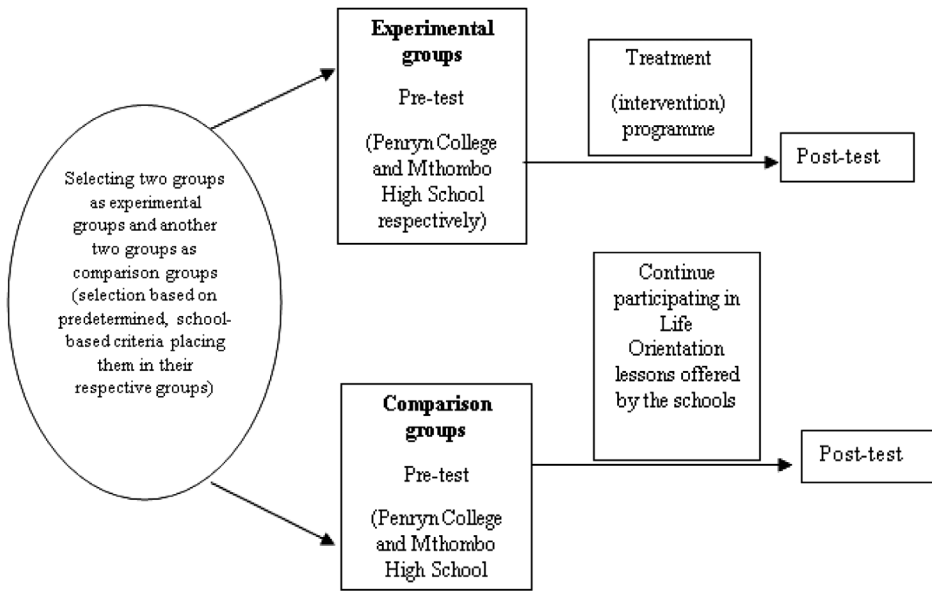


Figure 2. Pre-test/post-test comparison group design. Source: Adapted from Maree and Pietersen (2016, p. 168).

Table 1. Description of intervention activities.

Activity	Process	Number of lessons	Duration
CAAS	Pre intervention administration of the CAAS	1	Approximately 45 minutes
Career Interest Profile (CIP)	Completion of the narrative questions in the CIP (Maree, 2010b)	2	Approximately 45 minutes
Collages	Making collages depicting how participants saw themselves	2	Approximately 45 minutes
Lifelines	Drawing lifelines noting significant life events	2	Approximately 45 minutes
Post intervention administration of the CAAS	Post intervention administration of the CAAS	1	Approximately 45 minutes
Journal entries	Participants from the experimental groups from both schools kept journal entries on their experiences of the intervention programme after each activity	8	No time limit was imposed

In the last lesson, participants from the experimental groups completed the CAAS for a second time. Participants from the afore-mentioned groups kept journals documenting their respective experiences of the intervention programme after they had engaged in each of the activities. The activities in the intervention programme and the intervention process are outlined in Tables 1 and 2 below.

Measure

The CAAS-South African form (Maree, 2012)

Maree (2012) reports on the following psychometric properties of the CAAS-South Africa based on 435 Grade 9 and Grade 11 learners, with a mean age of 15.49 years (SD = 1.32), who participated in the research. The total score for the CAAS-International had a reported reliability of 0.92, which was higher than the subscale scores for concern (0.83), control (0.74), curiosity (0.79) and confidence (0.85) (Savickas & Porfeli, 2010). The reliabilities for the CAAS-South Africa were slightly lower than those for the total international sample. The reliability for the total score was 0.91, which was higher than the subscale scores for concern (0.77), control (0.71), curiosity (0.78) and confidence (0.80). Based on the results of

Table 2. Description of intervention.

Session	Process		Expected outcomes
	Participants ...		
1. Orientation and first CAAS assessment session.	From the comparison and experimental groups were orientated to the intervention programme by giving them a brief overview of the study. Thereafter, they completed the pre intervention CAAS		Participants would be motivated to take part in the intervention programme. The CAAS results would be used to assess whether the pre-intervention, CAAS scores of the two schools were significantly different from each other (between school comparisons) with the intention of determining whether or not there was initial bias between schools and groups. The pre-intervention CAAS scores would also be used in the final analysis of quantitative data (see session 8)
2-3. C/P	From the experimental groups completed the narrative questions in the C/P and were given the opportunity to share their responses with other learners in their group		The aim of this activity was to identify and explore the participants' interests according to their opinions and understanding of their life experiences. It was anticipated that the participants would gain insights into what was meaningful in their lives and acquire self-knowledge
4-5. Collages	From the experimental groups were invited to depict their lives pictorially by making collages. Thereafter, they shared the contents of their collages by discussing it with their fellow learners		The purpose of these activities was to enable the participants to narrate their life stories; ultimately giving them the opportunity to identify life themes inherent in the story-telling process. In so doing participants could potentially identify what was meaningful in their lives
6-7. Lifelines	From the experimental groups were asked to draw a lifeline depicting significant life events. Facilitative questions were asked prompting them to reflect on and elaborate on these life events. The content of the lifelines was shared in group discussions		Participants were given the opportunity to make sense of their lives and further identify life themes by considering the past and present as well as anticipated (future) life experiences
8. CAAS	From the experimental and comparison groups were asked to complete the CAAS for a second time		The post-intervention CAAS results were statistically analysed with the pre-intervention CAAS results to ascertain whether or not the intervention programme significantly improved participants' career adaptability compared to the standard, traditional Life Orientation lessons
1-8. Journal entries	From the experimental groups were asked to reflect upon and record aspects of their experience of the intervention programme, emotions that were evoked while they completed any of the tasks, thoughts and images they had regarding themselves and their lives		Reflections in the journal entries potentially gave participants deeper insights into their life worlds. In so doing they could identify life themes to ultimately arrive at more meaningful understandings of themselves and their lives

the statistical analyses, Maree (2012) concluded that the *CAAS-South Africa* performed similarly to the *CAAS-International* in terms of reliability.

Data collection

Quantitative and qualitative data were simultaneously collected and then integrated. Scores from the CAAS were analysed in conjunction with information obtained from qualitative data. Only the quantitative results are reported on here (Cook & Maree, 2016).

Ethical issues

The purpose of the research was made clear to participants and their respective roles and rights in terms of their participation were clarified at the outset. Written informed assent and consent were obtained and permission was granted for the anonymous publication of the findings. Results were communicated to participants for verification of the findings and avoiding misinterpretation of data. Counselling services were availed to participants should that become necessary.

Results

Pre-intervention data analysis

Statistical differences were found at the 5% level of significance in the Confidence scores (21.20 vs. 23.40) between the learners in Penryn College ($N = 44$) and Mthombo High School ($N = 41$), respectively (Table 3).

Tables 4(a) and 4(b) show that no significant differences existed at the 5% level of significance between the experimental and control groups in each of the two schools. However, moderate evidence ($p < 0.10$) existed of differences in the Curiosity scores between the experimental (21.20) and comparison (18.60) groups of Penryn College.

Analysis of difference between post- and pre-intervention scores

From the results of the Kruskal–Wallis test (analogous to a one-way ANOVA) (Table 5), no statistically significant differences were found amongst the four groups (Penryn Experimental Group, $N = 20$; Penryn Comparison group, $N = 23$; Mthombo Experimental group, $N = 20$; Mthombo Comparison group, $N = 19$) with regards to the differences between the post- and pre-scores.

Table 3. Mann–Whitney U Test results for the between school comparisons, pre-intervention.

Variable	Exact 2-sided p -value
Pre CAAS Concern	0.28
Pre CAAS Control	0.86
Pre CAAS Curiosity	0.08
Pre CAAS Confidence	0.01
Pre CAAS Total	0.06

Table 4a. Mann–Whitney U Test results for the comparison ($N = 23$) vs. experimental ($N = 21$) groups within Penryn College (pre-intervention).

Variable	Exact 2-sided p -value
Pre CAAS Concern	0.64
Pre CAAS Control	0.83
Pre CAAS Curiosity	0.07
Pre CAAS Confidence	0.80
Pre CAAS Total	0.68

Table 4b. Mann–Whitney *U* Test results for the control (*N* = 20) vs. experimental (*N* = 21) groups within Mthombo High School).

Variable	Exact 2-sided <i>p</i> -value
Pre CAAS Concern	0.19
Pre CAAS Control	0.93
Pre CAAS Curiosity	0.36
Pre CAAS Confidence	0.15
Pre CAAS Total	0.58

Table 5. Results of the Kruskal–Wallis test.

Dependent variable	<i>p</i> -value (two-sided)
Diff Pre Post CAAS Concern	0.18
Diff Pre Post CAAS Control	0.14
Diff Pre Post CAAS Curiosity	0.81
Diff Pre Post CAAS Confidence	0.71
Diff Pre Post CAAS Total	0.55

Discussion

Pre-intervention results

Penryn College and Mthombo High School

First, at this stage one can only hypothesize about why differences were noted in certain CAAS sub-test scores and not in others. Learners from Mthombo High School seem more confident about their future career prospects despite having had fewer socio-economic opportunities compared to learners from Penryn College. The heightened confidence of learners from Mthombo High School appears unsubstantiated and somewhat impracticable, though – a rather common phenomenon that we routinely encounter while working with learners from previously disadvantaged communities. Moreover, seemingly, learners from Mthombo High School appear more curious about their future careers than learners from Penryn College. Akhurst and Mkhize (2006, p. 165) contend that ‘If there is a mismatch between what is presented and the world of the learners, career education is likely to have little impact, or will lead to unrealistic ideas about careers and the world of work’. Career counselling in Mthombo High School is much less adequate than in Penryn and it seems that learners from the former school in particular harbour somewhat unrealistic ideas about the world of work and entrance requirements at tertiary training institutions; hence a. the mismatch between their career confidence levels and their actual career prospects and b. their heightened curiosity about what the world of work entails.

Second, the experimental and comparison groups were selected according to pre-established classes at the school. Learners from Penryn College are assigned to specific classes according to their respective choices of learning areas. Universities have prerequisites for entry into tertiary courses and/or there are job requirements based on learning areas selected. This could explain why learners from the same school (Penryn College) but from different groups are somewhat more curious about their future careers as their choice of learning areas opens up more opportunities for them in terms of prerequisites for entry into tertiary courses or job requirements. It could be argued that curiosity levels and ultimately level of career adaptability are dependent on learning areas selected at school in that choices made in that regard open up more opportunities for certain learners. Having different opportunities can perhaps explain why there are differences between some of the CAAS subtest scores for learners from the two groups from Penryn College.

As stated previously, Savickas (2002) maintains that attitudes, beliefs and competencies are core issues of career adaptability. Aspinwall, Richter, and Hoffman (2001) identify optimism as a key attitude that facilitates flexibility in individuals who are more responsive in changing environments. Bearing this statement in mind, it could be argued that learners from Mthombo High School, are likely to be more optimistic about their futures. The vast majority of Mthombo learners grew up in challenging

circumstances and had to negotiate multiple challenges, which clearly seem to have contributed to their raised levels of adaptability and, hence, their sense of optimism; hence the initial differences in some of the CAAS (Savickas, 2011b; Savickas & Porfeli, 2010) subtests and total score. However, it seems clear that '[more] appropriate assessment of the needs of individuals with diverse backgrounds is critical' (Whiston & Rose, 2015, p. 56).

Analysis of differences between post- and pre-intervention scores

In a longitudinal study with adolescents from rural areas, Lapan et al. (2003) found that enhanced career development in high school helps learners deal with the career transitions they face. In that study, Grade 8 to Grade 12 learners were exposed to four intervention strategies, namely, classes were organized around specified career goals; learners were made aware of the relevance of course content to the world of work; work-based experiences were made available to learners; and learners participated in connective learning activities. The findings showed that linking career goals to the course of studies enhanced participants' perceptions that their education was helping them achieve their career aspirations and motivated them to further their studies. In a study with ninth grade Finnish learners, Pietarinen, Pyhälto, and Soini (2010) show that pedagogical practices adopted by schools affect the ways in which learners manage the variety of transitions they face.

Similar to some previous studies (Cardoso, Janeiro, & Duarte, 2017), the quantitative findings of the current study do not confirm that the career intervention programme implemented during the study significantly improved participants' career adaptability compared to the standard, traditional Life Orientation lessons as there are no significant differences between the post- and pre-scores for all four groups from both school on all four subscales and for the total scores in the CAAS (Savickas, 2011b; Savickas & Porfeli, 2012). It is therefore not possible at this stage of the discussion of the research results to surmise that the career intervention carried out in the study, or the standard, traditional Life Orientation lessons for that matter, have the potential to enhance or have little or no impact on individuals' ability to manage career transitions. Our findings do not therefore support the afore-mentioned results of studies conducted by Lapan et al. (2003), Cranmer (2006), as well as Pietarinen et al. (2010).

Savickas (1999) asserts that there are numerous studies that focus on the experiences of youth in making transitions from school to work. He furthermore argues that educators and career counsellors can be instrumental in helping learners make informed choices, and ultimately managing career transitions, through teaching, coaching and rehearsing. Although it is acknowledged that school-based intervention strategies have the potential to support learners' career development, on closer examination, studies in this context are not seen to provide adequate support to learners (Lapan et al., 2003). Cotton (2008), Poole and Zahn (1993) justifiably call for the development of employability skills at school that can be utilized in future jobs. However, Cranmer (2006) has found that skills that are generally taught at school do not correspond with the demands of the labour market. Our findings neither confirm that the career intervention programme implemented during our study significantly improved participants' career adaptability compared to the standard, traditional Life Orientation lessons nor support the afore-mentioned results of studies conducted by Lapan et al. (2003), Cranmer (2006), as well as Pietarinen et al. (2010).

The benefit of using a standardised test in this regard reflects one of the recommendations made by Swanson and Fouad (1999) who state that school-to-work programmes should ideally use test results to facilitate self-exploration. Savickas et al. (2009), however, express concern with (career support) practices that only rely on the discovery of pre-existing, scientific facts and advocate using approaches based on life design principles that facilitate the development of narrative realities instead. Although overall results are clear, the study did show that in one of the experimental high schools, an effect size of 0.5 was noted for increase in concern and control. Perusing the pre-test scores revealed a substantial difference between the two schools: Mthombo High School had a CAAS median of 94 compared to Penryn College (85.5). Therefore, the learners from these schools entered the research with different degrees of adaptability. At Penryn, the comparison and experimental group had pre-test medians

of 86 and 89; however, on post-test, the originally higher comparison group dropped to 92 and the experimental group increased to 96. Comparing the two experimental groups reveal that the Mthombo High School mean CAAS score had increased from 88.3 to 93 (an effect size of ca 0.4). The Penryn College experimental group mean CAAS score had only increased from 85.1 to 87.4. This may suggest that learners scoring higher as motivated agents gain more from a narrative intervention, especially in regard to career concern and control. Whether this relates to their readiness to learn based on greater adaptability should be investigated in future studies.

Recommendations for the improvement of practice

First, recognizing that career development starts in childhood (Patton, 2011), we suggest that intervention programmes should be implemented in schools earlier than Grade 11. In so doing, learners will be able to explore themselves and the world of work without the pressure of having to make immediate decisions about their futures. Second, sufficient time should be allocated to the completion of the tasks in intervention programmes so that learners have more opportunities to identify cultural scripts and to engage in dialogue with their peers, educators and parents. Third, it is essential to allow sufficient time for follow up discussions (Savickas & Taber, 2006). Fourth, intervention programmes based on similar principles to ours should be presented in the mother tongue of the learners to enable learners to express their emotions openly. Fifth, future policies may benefit from making provision in the school curriculum for interventions based on career and self-construction to help learners in this regard.

Limitations of the study

First, relying only on the CAAS to measure career adaptability proved insufficient. Another form of measurement might have helped assess the impact of whether the activities in the career and self-construction programme helped students to better articulate and identify what matters to them as opposed to those in the Life Orientation group. If 11th graders can better understand what matters to them and what they tend to strive for, intervention career programmes should be successful in meeting the terms and goals of self-construction and life design. This would not have been measured using career adaptability scores but rather designing some type of questionnaire that measures before and after whether students can articulate what matters to them. Second, indirect intervention focused on the narrative author does not increase career adaptability of the motivated agent (Savickas M. L., personal communication with the authors, 2016).

Conclusion

The potential benefits of receiving school-based career support are widely advocated in the literature (Cardoso, Gonçalves, Duarte, Silva, & Alves, 2016; Janeiro, Mota, & Ribas, 2014). Consistent and comprehensive career support initiatives in this regard are particularly relevant and necessary to prepare learners for the school-to-work transitions they face and future transitions they will inevitably have to manage in an ever changing, unpredictable and globalized world. The quantitative results in our study suggested that the intervention programme did not improve participants' career adaptability compared to standard, traditional career counselling lessons as measured by the CAAS. However, designing and utilizing of measures of self-reflection and meaning-making to test the direct effects of experimental interventions may have yielded different results. Whiston and Rose (2015, p. 55) emphasize the need for 'diagnostically appropriate instruments and the standardization of assessment measures for career counselling'. We concur with this statement.

Lastly: Our research extends previous research by showing that when the experimental interventions are of a narrative nature, a quantitative assessment of the experimental interventions direct effects should ideally use a measure of selfreflection and one of meaning making. This is the case because

narrative intervention directly addresses these variables. This matter (and related matters) warrant further research and suggest a new direction for research.

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No potential conflict of interest was reported by the authors.

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