

A Group-based Career Guidance Intervention for South African High School Learners from Low-income Communities



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Abstract This chapter describes the design, implementation and evaluation of a group-based career guidance and counselling intervention with learners attending resource-constrained high schools in South Africa. In the South African education system, the Grade 9 level represents a crucial milestone in that learners are required to make decisions about their choice of school subjects for the final phase of their schooling (Grades 10 to 12). Indications are that in the prevailing absence of career guidance services in many public schools and with the challenges faced in their home and community contexts, many learners are making uninformed, trial-and-error, and haphazard decisions about their school subject choices that may compromise their future career options. Drawing from literature that argues for a contextual understanding of structural conditions and social justice concerns that may limit or compromise career exploration and decision-making, we describe an integrated career guidance intervention to combine quantitative and qualitative methodologies with a group-based approach to assist learners to engage with proactive career planning. The career guidance intervention incorporates the following components:

- Individual career interest assessment using the *South African Career Interest Inventory*
- Career guidance workshops aiding learners to explore their personal career attributes using quantitative and qualitative data
- Integration of emerging information into a career life design matrix to inform subject choice
- Identification and mitigation of barriers and challenges that may impede or limit career aspirations
- Development of an action plan to motivate learners to pursue their career goals.

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The intervention seeks to harness both quantitative and qualitative career assessment processes to help learners initiate a life design approach to their career development, to align their school subject choice (for Grades 10 to 12) with their career aspirations.

Keywords Career guidance · Group-based intervention · Adolescent career transition · Social justice · Developing countries

Introduction

There are indications that children in developed countries, where career education and guidance services are in place, are engaging in the dynamic process of career exploration—exploring the world of work, examining the self, and understanding how these two are related—from an earlier age (Hirschi, Niles, & Akos, 2010). Evidence suggests that from an early age, children are able to use their interests, abilities, values and beliefs to guide how and what they learn, and to formulate their occupational goals in relation to the world-of-work (Hartung, Porfeli, & Vondracek, 2005). A different reality is emerging from developing countries where political and economic conditions present a more challenging developmental press for young adolescents influencing their career preparation and aspirations (Stead & Watson, 1998).

With career counselling in South Africa being available primarily to people who can afford to pay for the service (Naidoo, Pretorius, & Nicholas, 2017), the importance of career guidance and counselling at secondary school level cannot be underestimated, and the integration of career education into the curriculum of all learners from pre-school to school-leaving age has been strongly advocated (Akhurst & Mkhize, 2006). In this chapter, we describe the design, implementation and evaluation of a group-based career guidance and counselling intervention with learners attending resource-constrained high schools in South Africa. The intervention sought to expose Grade 9 learners to both quantitative and qualitative career assessment processes to help initiate a proactive life design approach to their career development to align their choice of school subject (for Grades 10 to 12) with their career aspirations.

Chapter Structure

In the first part of the chapter we examine the status of career guidance specifically pertinent to the school context. We examine the dominant discourses underpinning career guidance before elucidating the macro-environmental context of career guidance in South African schools. The Career Guidance (CG) intervention is then presented with accompanying quantitative and qualitative assessment results. In this chapter the term *learners* refers to individuals attending high school as used in the South African context.

The Status of Career Guidance

Sultana (2017) asserts that CG continues to feature high on the international public policy agenda. This resurgence is stimulated in part by the severe economic downturn, and by resultant policy steers from such supranational and transnational entities such as the Organization for Economic Co-operation and Development, the World Bank, and the European Union. Watts and Sultana (2004) broadly define CG as a range of services to assist an individual or groups of individuals to make educational, training and occupational choices and to manage their careers in various educational and occupational environments. These services may be face-to-face or distal (including helplines and web-based services) and may include career information, assessment and self-assessment tools, counselling interviews, career education and career management programmes, taster programmes, work search programmes, and transition services.

There is growing recognition of the importance of career education and guidance in schools, not only in helping young people to make the immediate choices that confront them but also in laying the foundations for lifelong learning and lifelong career development. This is evident, for example, in the inclusion of career education in the curriculum, incorporating career awareness, career exploration, and the development of career management skills (Watts & Sultana, 2004).

In developing countries such as South Africa, the pressing nature of the personal and behavioural problems of many students may result in guidance counselors spending much of their time on these problems at the expense of focusing on helping students in relation to their educational and vocational choices. There is an increasing risk of career education and guidance in schools becoming marginalised (Flederman, 2009).

Discourses About Career Guidance

Undergirding the definitional characteristics of CG (Watts & Sultana, 2004) is the question of how CG is construed and implemented. Sultana (2017) draws on a typology articulated by Habermas (1971) to identify three fundamental discourses about CG. Each discourse serves to organize or construct our thoughts and actions in particular ways. What we actually do in the real world, the way we organize our services and how we interact with others reveal particular ways of construing the world and valuing specific aspects over others. Different discourses function as lenses that incline us to consider certain social practices as problems, to articulate such ‘problems’ in particular ways, and to prefer one set of solutions for them over another (Sultana, 2017).

One of the dominant discourses of CG is referred to by Sultana (2017) as a ‘technocratic’ or ‘social efficiency’ approach. With the main concern here being to ensure a smoother relationship between the supply and demand of skills for the benefit of

the economy, the role of the career guidance consultant is to help individuals identify their skills profile and to match this as closely as possible with the presumed needs of the labour market. This 'social efficiency model' is premised on the smooth functioning of the economy, and while it values the aspiring of individuals, it is equally quick to exhort clients and citizens to be realistic, to adapt to the prevailing employment market, and to take on what is available. In this discourse, there is little space for critiquing the way the economy works, or little recognition of the way in which the skills components of many jobs have been diluted, or how temporary work, short-term contracts and overall job insecurity might generate profits for the organization but provide very little if any opportunity for personal growth and fulfilment (Sultana, 2017).

A second foundational discourse that serves to guide career guidance practices Sultana (2017) refers to as 'developmentalist', 'hermeneutic', or 'humanist'. In this approach, the personal growth and fulfilment of the individual are foregrounded, to support the self-discovery and flourishing of his/her capacities and aspirations. In this approach, the notion of 'choice' is paramount, as is that of constructing identity through a satisfying integration in the different arenas and roles of the life rainbow (Super, 1990) that include but go beyond paid employment. The central focus here is to facilitate self-exploration and self-construction, or, as it is now referred to, 'life design' (Savickas, 2012).

A third approach to career guidance Sultana (2017) terms 'social reconstructionist' or 'emancipatory'. Whereas the previous two discourses tend to endorse liberal notions of the individual who is seen to be a rational actor who exercises choices in relation to economic and or personal priorities, emancipatory discourses are more social and communitarian in their scope, and committed to questioning the status quo rather than encouraging people to fit in. This approach is preoccupied with developing the knowledge that leads to freedom—where, rather than remaining insulated from critiques which are outside their immediate frame of reference, individuals are enabled to decode the way in which the economy and labour market functioning undermine the development and fulfilment of whole groups of citizens. Implicit in this approach is a critical engagement with the way work is organized in contemporary society, where the accumulation of capital in the hands of a few has severe negative repercussions at national, regional, and even planetary levels (Sultana, 2017).

The goal of the CG practitioner would therefore be to 'conscientise' individuals and groups in the Freirian sense (Freire, 1970) as to the source of their troubles, which, while experienced as on a personal level, emanate from the structural arrangements in place. Conscientisation is typically accompanied by social mobilisation and advocacy initiatives that ensure that unjust structures are challenged in the hope that they are ultimately, transformed (Silva, Paiva, & Ribeiro, 2016).

In a middle-income country such as South Africa that is struggling with contending developmental challenges, the social justice imperative for career guidance is of particular relevance. In the next section, we discuss some of the environmental press conditions impacting CG at school level in South Africa.

The South African Macro-Environmental Context

Democratic South Africa continues to face burgeoning challenges to its educational system, which are affecting the quality of education, the levels of high school attrition, and the resulting growth in unemployment. Concerns have been expressed about the poor school pass rates and levels of national numeracy and literacy. School attrition has reached alarming proportions: approximately 60% of first graders will ultimately drop out rather than complete Grade 12 and only 12% of high school graduates will be eligible to pursue higher education (Department of Basic Education, Republic of South Africa, 2015). One consistent finding is that dropping out of school results in poorer psychological, physical, social, and economic health for the school dropout (Lamb, 2011).

School attrition also impacts employability. In the third quarter of 2018, unemployment rates were 27.5%, with the majority of the unemployment burden shouldered by youth (Statistics South Africa, 2018). The normative developmental expectation for youth to transition from adolescence to adulthood, consolidate a personal and social identity whilst considering work and other social roles may be an impossible mission within these contexts of adversity. For many youth, identity formation and work role transitioning may be under threat because of the interplay of adverse structural conditions that undermine this process (Blustein, 2013; Dube-Addae, 2019). The study-career-work nexus appears daunting for many South African high school students.

With the political transition in 1994, one of the serious casualties in the higher education system was the differential access to career guidance. Prior to 1994, only the historically white schools had full-time trained guidance teachers with no career guidance provided in black schools (Watts, 1980). When the country entered the political transitional period, the role of the guidance teacher was abandoned due to shifting priorities and virtually no guidance was offered in schools (Naidoo et al., 2017). With new policy developments, CG has been included as a part of the Life Orientation (LO) curriculum from Grade R to Grade 12 since 2002. While impressive in its scope, several limitations to effective CG have been identified: the LO curriculum is limited to two hours a week with CG comprising only one-quarter of the curriculum in Grades 10–12; LO teachers often have other competing teaching assignments and many have no background or training in CG; classes are typically large and in excess of 40 learners; schools in rural and township settings may also not have access to adequate resources and ICT facilities (Flederman, 2009). In such low-resourced communities, CG has become marginalised (Watts & Sultana, 2004) and ineffective (Flederman, 2009), and may obscure social justice concerns (Fickling, 2015).

These structural constraints represent formidable barriers for many Grade 9 learners who are expected to make important decisions about their choice of school subjects for the final phase of their schooling (Grades 10 to 12). Indications are that in the prevailing absence of career guidance services in many public schools and the challenges faced in their homes and community contexts, many learners are

left unaided making decisions about their school subject choices that may severely constrain their career development trajectory, and stymie their future career options (Akhurst & Mkhize, 2006).

As noted by Savickas (2001, p. 302), these macro-environmental variables operate through a social opportunity structure that “too often assigns developmental pathways based on gender, race, and ethnicity”. The interaction and intersection between clients’ cultural contexts (for example, gender and race) and large environmental variables (for example, patriarchy, social class, geographical location) may result in differential career development experiences (Sultana, 2017), and, therefore, necessitate alternative interventions.

Innovative Techniques and Approaches

In South Africa, several career researchers (Albien & Naidoo, 2018; Alexander, Seabi, & Bischoff, 2010; Maree, 2006; Stead & Watson, 2006) contend that the post-modern (culturally relevant) career counselling discipline needs to reflect innovative methods, techniques and structures to ensure effective and culturally relevant career counselling. Maree and Beck (2004) have called for career counselling to shift from an objective approach to an interpretative process using new and creative ways of assessment. They aver for the career counsellor to be facilitators rather than prescriptive experts, and learners should be able to speak, act, think and choose for themselves. Learners must be assisted to construct their own meaning in the career exploration process, and to take responsibility for their own choices and development.

Similarly, Morgan, Naidoo, Henn, and Rabie (Chapter 27 in this volume) contend that career counselling should not be a linear process with the counsellor merely administering and scoring an interest inventory and then providing recommendations to the learner based on these scores. Instead, career counselling should be a recursive process in which both the counsellor and learner are actively engaged in constructing meaning (Maree, 2018; McIlveen & Patton, 2007) factoring in the realities of the learner’s family and community contexts (Albien & Naidoo, 2017).

In a recent article, Maree (2018) recommended the integrated use of qualitative assessment instruments and techniques in conjunction with “traditional” quantitative assessment instruments as the test-and-tell positivist approach on its own often falls short of either bringing about change in people’s career-lives, accommodating subjective client data or capturing and assessing qualitative changes in people’s self-narratives (Rehfuss, 2009). Maree (2018) suggests that the integrative strategy can be successfully implemented to help clients transition from career indecision, rediscover a sense of agency, purpose and meaning, gain confidence in eliciting their career-life story and draw on their own advice (under the guidance of a career counsellor). Several researchers and practitioners have acknowledged the need to re-establish the rigour and efficiency of career counselling interventions, especially when an integrative, qualitative + quantitative approach is used (Blustein, Kenna, Gill, & DeVoy, 2008; Hartung, 2011; Savickas, 2015).

Added to Maree's (2018) advocacy for post-modern career counselling practice to reflect innovative methods, techniques and structures, is the need (and the social justice imperative) (Lee & Hipolito-Delgado, 2007; Toporek, Lewis, & Crethar, 2009) to harness effective group-based career guidance (GBCG) as a methodology. There is increasing evidence, although not always explicitly stated, that GBCG interventions may be effective in achieving career behavioural outcomes in the school context, particularly in disadvantaged communities (see Akhurst & Mkhize, 2006; Albien, 2018; Dube-Addae, 2019; Maree & Beck, 2004; Maree, Cook, & Fletcher, 2018; Maree & Molepo, 2004; Miles & Naidoo, 2017). Peer support and learning from peers have also been identified as important career guidance enablers (Albien & Naidoo, 2018).

Moreover, Pyle and Hayden (2015) describe how purposefully designed group career guidance interventions may be used to deliver relevant information on matters related to educational, career, social and/or personal development, and offer individuals the opportunity to synthesise and relate the information to the context of their own personal situation. When properly constructed, there is less concern with the delivery of factual information and more with assisting the learner in developing insights and knowledge of self and the world from within her/his own unique frame of reference (Maree, 2018). Tolbert (as cited in Pyle, 1986) lists the following core elements of group career guidance: (1) career planning and decision-making require input about occupations; (2) accurate data about self (abilities, interests and values) are needed; and (3) the process offers opportunities to explore personal meaning, identify and examine subjective aspects of the self, get feedback from others, and try out roles.

Rationale for the Intervention

The Grade 9 year in the South African educational environment represents a crucial career transition (Watson & Stead, 1990). Learners are required to make decisions about their choice of school subjects for the final phase of their schooling (Grades 10 to 12). Indications are that with the prevailing dearth of CG services in many public schools and the absence of parental support and impoverished community contexts (Albien & Naidoo, 2018), many learners are left to make uninformed, trial-and-error, and random subject-choice decisions (Akhurst & Mkhize, 2006; Stead & Watson, 1998) that may later limit access to certain tertiary study options. Inadequate support at school may contribute to poor academic achievement, which, in turn limits career opportunities for learners (Maree, 2006).

Very few schools in the country have access to the services of trained career counsellors, despite Cosser and du Toit's (2002, p. 93) assertion that 'career guidance, in whatever form ... has a positive effect on intention to enter higher education'. This significantly impacts proactive career planning and decision-making and underscores the need not only to improve the quality of career counselling in schools where this facility is available, but, more importantly, to initiate CG and counselling services in schools where these services are lacking (Maree & Molepo, 2004). Fur-

ther, Savickas (1999) contends 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. Studies now emphasise that career management strategies for adolescents should aim specifically at helping them become more planful, adaptive (Savickas, 1999), proactive (Claes & Ruiz-Quintanilla, 1998) and more resilient to cope with predictable and unpredictable career adjustments and transitions, whether they are self-determined or not (Blustein, 2013; Savickas et al., 2009).

The intervention described and reported on in this chapter evolved in response to the challenges outlined above and from research findings from a career development project (Albien & Naidoo, 2018; Dube-Addae, 2019) initiated at two of the schools included in the intervention. It constitutes a response to the question of whether more meaningful career guidance programmes can be designed and implemented in low-resourced schools in partnership with other organizations and tertiary institutions.

Goals of the Study

The primary goal of the study was to design a group-based career guidance intervention to assist learners in making informed career decisions regarding their choice of school subjects. More particularly, we explored the extent to which an integrated group approach combining quantitative and qualitative career strategies can help learners manage career transitions (Maree, 2018). We were interested in not only the quantitative impact of the intervention on their career development but also in their subjective impressions of the intervention.

Procedure

The principals and LO teachers of eight schools in low-income communities in the Cape Winelands district, a peri-urban region about 60 km east of Cape Town, were invited to participate in the project. Given the LO objective for Grade 9 learners to receive assistance with choosing their school subjects, the schools consented to allocating 10 to 12 h of their LO classes for the intervention which were organized into three \times 4 h workshops (see Table 1 for an overview of the intervention sessions). The LO teachers were included in the intervention to facilitate logistical planning, capacitation, and for continuity of the CG themes into the school's LO curriculum.

The CG intervention incorporated the following components:

- Assessment of objective career interests using the *South African Career Interest Inventory* (Morgan, 2014, Morgan, de Bruin, & de Bruin, 2015);
- Facilitation of two CG workshops to aid learners to explore their personal career attributes using quantitative and qualitative data and integrating or merging of the

- information into a career life design matrix to inform subject choice (see *Career Flower* discussed in a later section);
- Discussion of barriers and challenges that may impede or limit career aspirations;
 - Designing an action plan to motivate learners to pursue their career goals.

A career booklet was designed for the intervention by Psychology and Industrial Psychology students as part of their academic module requirements. The booklet provided spaces for the Grade 9 learners to insert their personal information; the booklet also provided pertinent information about career resources, bursaries, institutions for higher learning, and other career-related services and learnerships, internships, apprenticeships and bursary applications. The students received training to facilitate the intervention in teams of three per Grade 9 class.

Participants

Across the eight high schools participating in the intervention, all thirty two Grade 9 classes (1098 learners) were included. The sample mean age was 15 years ($SD = 1.02$), and was distributed relatively equally across gender, comprising 613 females (55.8%) and 485 males (54.2%). Sixty percent of the sample was Afrikaans-speaking, 30 percent isiXhosa-speaking, and 7 percent English-speaking. All the learners were conversant in English (at least as a second language). Most of the present study's participants came from a lower socioeconomic background, with 20.95% ($n = 230$) of parents or caregivers unemployed, 45.08% ($n = 495$) of caregivers employed in unskilled labour, and 19.13% ($n = 210$) of caregivers employed in skilled labour.

Data Gathering Instruments

We used four instruments to gather data pertinent to the goals of the study.

The South African Career Interest Inventory (SACII; Morgan, 2014). The SACII is a measure of career interests, and is an operationalisation of Holland's (1997) vocational personality theory in the South African context (Morgan et al., 2015). To provide a detailed analysis of an individual's interest structure, the SACII consists of 142 items across six scales—namely Realistic, Investigative, Artistic, Social, Enterprising and Conventional. The SACII has demonstrated promising psychometric properties in the South African context to date, with sufficient reliability coefficients reported in a number of studies with diverse samples (Morgan et al., 2015; Rabie & Naidoo, 2019). In particular, Rabie (2017) demonstrated the SACII to be a reliable and valid measure of vocational interests in a sample of adolescent secondary school learners in the same region as the current study.

My Career Flower (Naidoo, 2011). The *My Career Flower* depicted in Fig. 1 is a flexible heuristic tool designed and adapted to be used with high school learners

Table 1 Overview of the Intervention Programme

Session	Process	Intended Outcomes
1. Overview, Ethics & Pre-test	<ul style="list-style-type: none"> - Participants are introduced to the purpose of the study. - Assent forms are completed. - <i>Career Maturity Inventory</i> is completed. - <i>South African Career Interest Inventory</i> is completed. 	<p>Participants are motivated to become fully involved in the intervention.</p> <p>The <i>CMI</i> pre-test data are obtained to determine initial career adaptability status.</p> <p>The <i>SACII</i> is scored to obtain the three highest measured interest scores of the participants for use in the next session.</p>
2. Completing the <i>My Career Flower</i>	<ul style="list-style-type: none"> - Participants receive their own CG booklet and fill in their own subjective information for each of the petals of the <i>My Career Flower</i>. Favourite school subjects; hobbies/sports; role models; dream jobs, and challenges or barriers are filled in. - The <i>SACII</i> scores are transferred to indicate the participants' top three inventoried interests. - Facilitators assist participants to complete the <i>My Career Flower</i>. 	<p>The aim of this activity is help participants begin to construct their subjective career stories and manifest interests.</p> <p>The <i>SACII</i> scores provide the participants with an objective measure of their interests. These inventoried interests can be compared with their subjective information and with other resources, in the manual to identify career clusters associated with the participant's profile.</p>
3. <i>My Career Flower</i> synthesis	<ul style="list-style-type: none"> - The facilitators process each petal with the participants and use participant examples to illustrate significance of particular career attributes in the participant's narrative. 	<p>Participants are given the opportunity to reflect on their own objective and subjective information and make sense of their own lives.</p>

(continued)

Table 1 (continued)

Session	Process	Intended Outcomes
	<ul style="list-style-type: none"> - Participants are encouraged to weave or develop their own career narrative from the information they have presented. - The career information is collated and career options are considered linked to objective and subjective interests. Appropriate school subjects are identified and selected. - Participants develop an action plan to gain more information about their career options. 	<p>By listening to the narratives of their peers, learners are also exposed to other career perspectives and information thus expanding their knowledge of the world of work.</p> <p>Participants are motivated to assume agency to explore and plan their career pathway.</p>
4. Post-test and Evaluation	<ul style="list-style-type: none"> - Participants complete the <i>CMI</i> post-test and evaluation questionnaire. 	<p>Data is obtained to assess the intervention quantitatively and qualitatively.</p> <p>Learners are referred to the university for further information or for individual career counselling.</p>

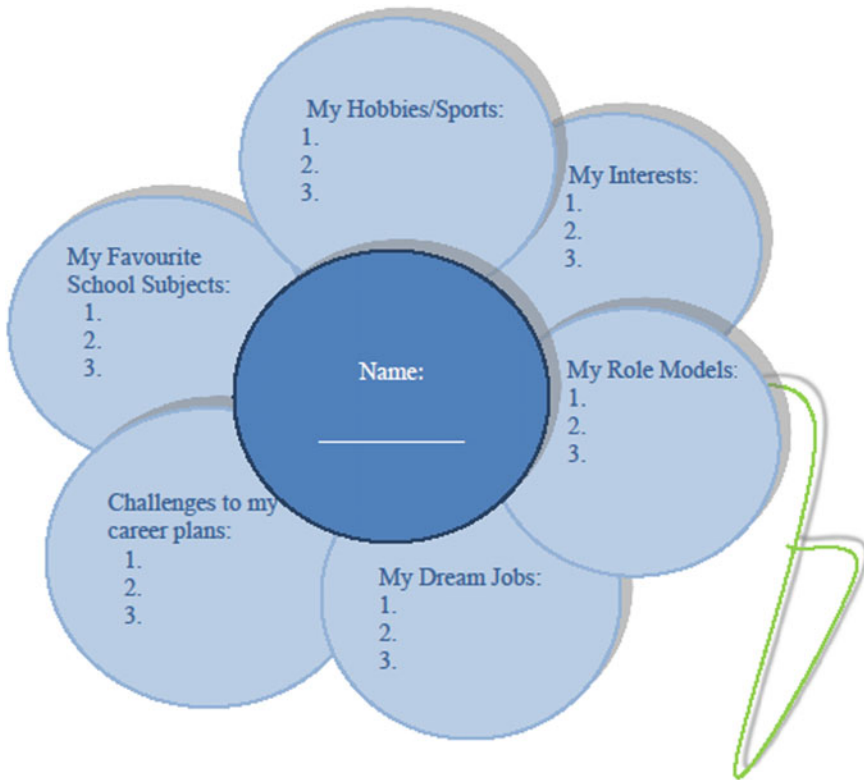


Fig. 1 My career flower-exploring my career plans. Adapted from Naidoo (2011)

either individually or in a group or workshop setting to facilitate career exploration and self-awareness (Naidoo, 2011). It is based on the premise that there are objective and subjective attributes that can be identified and synthesised in exploring and constructing an individual's career life narrative (Savickas, 2015) and in making well-informed career decisions (Maree, 2018). As part of this intervention, participants were asked to fill in the petals on the *My Career Flower* to indicate their favourite school subjects, hobbies, talents or sport preferences, interests, their role models, dream jobs, and the obstacles standing in the way of their career aspiration. For the career interest petal, participants used the top three interest scores from the *SACII* assessment that been conducted in the previous session.

The career counsellor's facilitation of the discussion of the participants' responses to the respective career attributes is crucial to allow participants the opportunity to reflect and make sense of their own inputs on the *My Career Flower*, discover connecting and diverging themes emerging from their responses, and begin to synthesise their own career narrative. There is also the benefit of gaining additional perspectives and insights from their peers' career life narratives (Albien & Naidoo, 2018).

This process allows the participants to link their subjective (qualitative) career attributes with their measured career interests and participants can be guided to make informed decisions (Maree, 2018) regarding the selection of subjects for the last phase of their high school. Participants were encouraged to reflect on the vocational implications of their selections with the view to longer-term career planning.

The Career Maturity Index Form C (CMI-C). The *CMI-C*, used as the pre-test–post-test measure in the study, is a measure of career choice readiness that includes theoretically relevant and practical content scales for diagnostic work within school populations (Savickas & Porfeli, 2011). The *CMI-C* has 24 items that measure career choice readiness across four subscales, namely: Concern, Curiosity, Confidence, and Consultation (Savickas & Porfeli, 2011). The Concern, Curiosity, and Confidence subscales combine to create a composite Total Score, signifying an individual's level of career adaptability and readiness to make an occupational choice. The initial validation study of the *CMI-C* demonstrated sufficient reliability across the five scales and was found to provide an accurate representation of an individual's readiness to make occupational choices (Savickas & Porfeli, 2011). The *CMI-C* has been used as a measure of career-choice readiness in diverse samples (Janeiro, Mota, & Ribas, 2014) and was found to have acceptable reliability coefficients, signifying the cross-cultural applicability of the *CMI-C*.

Evaluation Form. A 12 item evaluation form was used with a 5 point Likert scale assessing the participants' feedback on the workshop. Three open-ended questions assessed what participants considered to be the favourite part of the intervention, the least useful aspect that can be improved, and what the participant learned about himself/herself.

Ethical Considerations

Ethical clearance for the study was obtained from Stellenbosch University's Research Ethical Committee as well as the Western Cape Department of Education. Permission was obtained from eight schools in the Stellenbosch district. All the principals and LO departmental heads were involved in the planning and implementation of the intervention. Caregiver consent was sought and written informed assent was obtained from the learners. Counselling services were made available to participants after the intervention.

Results

The quantitative results for the pre- and post-intervention effects, as measured by the *CMI-C*, are summarised in Table 2. We used one-way repeated measures ANOVA to test the effect of the intervention.

At the end of the second and third workshop, all of the participants completed self-report evaluation forms to assess the organization, facilitation, and content of the workshop. The large majority (81.1%) of the participants gave the intervention a

Table 2 One-way ANOVA results for the pre-post intervention effect analysis

Subscales	Pre- \bar{x}	Post- \bar{x}	Wilk's lambda	<i>df</i>	<i>F</i>	<i>p</i>	η
Total score	8.05	8.97	.967	773	26.261	.000	.033
Concern	3.05	2.78	.983	773	13.596	.000	.017
Curiosity	2.51	2.97	.962	773	30.337	.000	.038
Confidence	2.50	3.22	.915	773	71.394	.000	.085
Consultation	2.02	4.10	.390	773	1208.851	.000	.610

Note N = 774

rating of 1 (the best possible score), with .3% of the sample a rating of 5 (the lowest possible score). More importantly, the sample's self-reported sense of readiness to make future career choices (i.e., choosing subjects at school, deciding on a career path) improved from 42.3% of the learners at the pre-test to 67.0% at the post-test. Learners attributed these improvements to their expanding knowledge about potential career and study choices and the various career trajectories available to them, as well as the motivational and study skills they were exposed to, and the discussion about overcoming the barriers they were facing.

Discussion

Overall, the quantitative results confirm the intervention to significantly enhance early adolescents' career adaptability and ability to engage in the career decision-making process. In resource-constrained communities, access to career-related resources and information and opportunities to engage in discussion about career planning is often limited, impeding young individuals' ability to engage actively in career exploration. Our results suggest that disadvantaged secondary learners' career adaptability can be advanced significantly by providing group-based activities that encourage learners to integrate objective and subjective interests and career attributes with their career plans. In linking their personal objective and subjective career interest data learners enhance their self-awareness and gain confidence in their career decision-making (Maree, 2018; McIlveen & Patton, 2007; Morgan, Naidoo, Hein, & Rabie, in press).

Participants were encouraged to reflect on the vocational implications of their selections with the view to longer-term career planning (Watts & Sultana, 2004). Access to career information and resources and career guidance services need to be regarded as sine qua non for an improved education dispensation for all South African high school learners. Collaboration of schools with universities and community organizations is needed (Ebersöhn & Mbetse, 2003) to attain this emancipatory goal, given limited state resources.

Regarding the regression observed in the Concern subscale, which measures the extent to which individuals are involved in their career decision-making process, Savickas and Porfeli (2011) posit that this involvement is determined by how

imminent the career development task is. The most important developmental task for the Grade 9 learners is choosing their senior phase school subjects—a task that is imminent. However, the items of the *CMI-C* Concern subscale are related to choosing an occupation (not subjects)—something that may be a distant thought for Grade 9 learners. Thus, the observed regressive intervention effect could be an item-level error reflection as these items may be regarded by this sample and age group as being not applicable to their context.

The significant finding with the Curiosity subscale may reflect the exposure to a variety of career options and information surfacing in the intervention activities and from the group discussions. This may stimulate learners' exploration of the study-career-work nexus and information-seeking behaviour about occupations and their requirements. These results are supported by the qualitative findings of learners actively engaging with teachers and community members about their occupations (Shirley, 2018; Venter, 2018).

The improvement in the Confidence subscale score is significant. We contend that many learners, who have learnt to adapt to the challenging structural and social conditions in their community contexts (Albien & Naidoo, 2018), may not have an optimistic outlook on their future, and subsequently may have their sense of self-efficacy and agency severely undermined, impacting on their confidence to make an informed career/subject decision. However, as the intervention focuses on promoting self-exploration, agency, and also engages directly with self-identified barriers that participants identify in the *My Career Flower* (many of the barriers identified pertained to constrained financial resources in the family), these discussions potentially open up ideas about overcoming external hurdles and identifying resources (Ebersöhn & Mbetse, 2003) by, for example, accessing bursaries, applying for learnerships, internships and volunteer training opportunities with the Sector Education and Training Authorities. The learners may have gained confidence in their ability to (re)consider career goals they may have initially eliminated and thus are able to reassess their career decisions and realistic occupation choices.

The improved scores on the Consultation subscale may indicate that the intervention (which relied on peer group discussion) may have created awareness of the different resources learners have available to inform their career decisions. Moreover, they can discuss their options, based on the information provided in the intervention, with their peers, family members, school teachers, mentors/role models, and even community members involved in the occupations they're contemplating. Here Savickas and Porfeli (2011) argue for considering cultural frameworks at play when interpreting scores on this scale. In particular, the consultation scale score reflects a continuum of family career conversations from "do as we advise" to "it is up to you." This illustrates the individualistic vs communal family dynamics tension that may manifest in South African family structures (Albien & Naidoo, 2018; Stead & Watson, 2006). The higher scores may reflect that salience of the family and the peer group (i.e., interdependent relational style) may be at play here.

Benefits of the Intervention

The major benefit of the intervention was that the entire Grade 9 learner population at eight schools located in low-resourced communities received an 8 h group-based career assessment and guidance programme designed to assist the learners with aligning their required subject choice selection for the final phase of high school with their career plans. The intervention combined quantitative and qualitative methods to link the assessment of inventoried interests with learners' manifest interests and subjective career attributes depicted on their personalised *My Career Flower*. The personalised booklets can continue to be used as a career resource in designing their career action plans for the final phase of their secondary education.

The intervention provided the Grade 9 learners with a novel opportunity to engage with an imminent career transition. According to Savickas and Porfeli (2011), such an encounter provides individuals with the opportunity to engage in reflection and consultation and acquire knowledge, ideas and opportunities that they can use to shape their future. Many participants stated that they felt inspired to engage actively in career consultation as a direct consequence of the workshops (Shirley, 2018).

Limitations of the Study

There were several limitations that impacted the study. Ethical and logistical considerations precluded the use of a quasi-experimental, pre-test post-test comparison group design. This should be considered in a single school setting where it would be feasible to expose the control group to the intervention at a later stage. As the study was conducted as eight different schools by different teams of facilitators using the same materials and process, there was inevitable variability in the intervention that could not be controlled for. For example, there were no electricity plugs in some classrooms, ruling out the use of the data projector. Facilitators improvised and used their laptops to share the workshop information.

Although the facilitation teams had members who were bilingual in English and Afrikaans, there were not sufficient facilitators conversant in isiXhosa and this may have limited the level of discussion in some schools. The career booklet was available only in English which may have been a disadvantage to some of the participants.

Recommendations for Future Research

In addition to the implicit recommendations identified in the previous section to improve the research design, the following recommendations are made with a view to enhancing the outcomes of future intervention:

- The intervention should be redesigned to be presented over a longer period (one session per week for eight weeks) and to fit into the LO 40-min class period.
- Small group activity should be used in the larger classes.
- The intervention should be supported by the opportunity for referral for individual career counselling for the learners. At some schools, parents also requested a parent information session to enable them to support their children with subject choice decision-making and preparation for post-school planning.
- An improved mixed-method research design can be applied to assess the impact of the intervention at the end of the Grade 9 school year and longitudinally in the Grade 12 year.

Conclusion

The results of the study confirm the need to engage young adolescent learners at an early stage in the career exploration process. Rather than using CG to focus mainly on educational decisions viewed as ends in themselves, learners are encouraged to focus rather on the vocational implications of their decision and on longer-term career planning (Watts & Sultana, 2004). The study confirms that learners from resource-constrained communities can benefit significantly from innovative and creative career interventions that harness and integrate both objective and subjective career information, and use group-based activities that allow space for both collective and individual reflection and for designing an action plan. The integration of emerging information into a career life design process such as the *My Career Flower* (Naidoo, 2011), *Career Matrix* (Maree & Taylor, 2016), or *My System of Career Influences* (McMahon, Watson, & Patton, 2005) can provide Grade 9 learners with resources that can assist them make informed decisions about their subject choice in line with their evolving career narrative and plans. As advocated by Albien and Naidoo (2017), crucial in contextualising the career process is an active engagement with identified barriers, myths and concerns that constitute the lived reality of the high school participants.

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