

**Evaluation of a programme to
facilitate positive youth development**

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Summary

Evaluation of a programme to facilitate positive youth development

Keywords: Positive youth development; positive youth development intervention model (PYDI model); early adolescence; process-related; self-regulation; developmental systems theory; mixed-methods study; thriving; hope; social self-efficacy; coping self-efficacy

The South African context, in particular, is characterized by a definite need for the facilitation of the development of the youth in a more positive trajectory. Family structures are not always robust enough to support the positive development of the youth, owing to the demands made on single-parent families, amongst other reasons. Community structures may also be less supportive of the development of the youth, because of the impact of the changes associated with the transitional phase of the country during the past sixteen years (Meehan, Peirson & Fridjhon, 2007).

Furthermore, young people under the age of 15 years comprise almost a third of the total South African population (Statistics South Africa, 2009), and in the future, they will have to be prepared for an adulthood faced with previously unknown challenges (United Nations Population Fund). The importance of the development of the youth, in order to enable them to contribute to their country in future, is acknowledged by the South African Government (National Youth Commission website).

This study was conducted within the parameters of the newly developing positive youth development (PYD) paradigm. The empirical level of this paradigm is well represented in the literature, indicating that the content areas, or the “what” of PYD, have been well elucidated. However, there is a lack of theory, especially with

regard to models describing developmental change (Larson et al., 2004), and evaluation of interventions aiming at the facilitation of PYD.

In order to contribute to the answering of the questions regarding the “how” of development, this study had the following main aims: a) the compilation of a theoretical model, describing developmental change in the youth; b) the operationalization of this model for intervention purposes; and c) the evaluation of a programme and the model on which it is based. The study is reported on in an article format, and comprises a total of three articles. The first article focuses on the process of the compilation of a theoretical model by means of: a) the construction of a comprehensive meta-theoretical matrix, b) the integration of theory that features in the PYD literature, and c) the expansion of the latter with theory from other compatible sub-disciplines in psychology. The resultant *Positive Youth Development Intervention* (PYDI) model provides a process-related description of developmental change – and is one of the first models to do so.

The second article describes the operationalization of the PYDI model, by means of an indication of the relevant constructs, phenomena and processes to be facilitated. Although recent research points to a relation between PYD and self-regulation, there has been no model, describing the role of self-regulation in the facilitation of the positive development of the youth. This study adapted a model from an educational context (Heckhausen & Gollwitzer, 1987 (as cited in Boekaerts & Niemivirta, 2005)), in order to describe the regular self-regulatory processes constituting the bi-directional interactions between the youth and their primary life contexts, as proposed by developmental systems theory (Lerner, 1998), the meta-theory to PYD (King *et al.*, 2005). A further specific contribution is that the presentation aspects of the programme material, aimed at facilitating the integration thereof, are addressed on a theoretical level.

The third article describes the evaluation of the PYDI model and programme, with young adolescents in a school in a rural area as participants. A mixed-methods study, which has been shown to render much richer information than a quantitative study alone, was applied. Although the quantitative data did not prove the success of the programme, the qualitative data suggested that some aspects of self-regulation had indeed been facilitated successfully. A second follow-up assessment, conducted seventeen months later, indicated that certain skills had only become internalized by that time, suggesting that the implementation and evaluation of such a programme should be expanded over an extended time-frame.

This study has contributed to the level of theory of PYD, by indicating, a) the lacunae, and b) that theory in compatible sub-disciplinary paradigms could be used in order to devise workable models for PYD. Furthermore, the process-related nature of the PYDI model and programme, owing to its adaptability to different needs, may be adapted and extended to be applicable to the needs of the diverse South African population. Recommendations regarding future application and research, especially within the South African context, have also been put forward in the study.

Opsomming

Evaluering van 'n program ter fasilitering van positiewe jeugontwikkeling

Sleutelwoorde: Positiewe jeugontwikkeling, Positiewe Jeug-Intervensiemodel (sg. PYDI model), vroeë adolessensie, proses-matig, selfregulering, ontwikkelings sisteemteorie, kwantitatiewe-kwalitatiewe navorsingsontwerp, ontwikkelingswelstand, hoop, sosiale self-effektiwiteit, probleemoplossing-self-effektiwiteit.

Die Suid-Afrikaanse konteks word spesifiek gekenmerk deur 'n behoefte aan die fasilitering van die positiewe ontwikkeling van die jeug. Weens verskeie redes, onder meer die druk wat op enkel ouer gesinne geplaas word, is gesinstrukture nie altyd sterk genoeg om die positiewe ontwikkeling van die jeug te fasiliteer nie. Jeugontwikkeling kan moontlik ook minder steun vanuit die gemeenskap kry as gevolg van die impak van veranderinge wat te weeg gebring is deur die land se oorgangsfase (Meehan, Peirson & Fridjhon, 2007) oor die afgelope sestienn jaar. Volgens Statistiek Suid-Afrika (2009) bestaan amper een derde van die Suid-Afrikaanse bevolking uit kinders en jongmense jonger as vyftien jaar, en hulle moet in die toekoms voorberei word vir volwassenheid en verskeie onbekende uitdagings (United Nations Population Fund). Die Suid-Afrikaanse regering (National Youth Commission website) erken ook die belang van hierdie demografiese groep se ontwikkeling in terme van die bydraes wat hulle in die toekoms tot die land kan maak.

Hierdie studie is onderneem vanuit die raamwerk of paradigma van positiewe jeugontwikkeling, 'n paradigma wat nog in 'n ontwikkelingfase is. Die empiriese vlak van hierdie paradigma word goed verteenwoordig in die literatuur en die inhoud, of die “wat” van positiewe jeugontwikkeling, is goed uiteengesit. Daar is egter 'n leemte

in die teorie, veral ten opsigte van modelle wat veranderinge in ontwikkeling en die fasilitering daarvan beskryf (Larson *et al.*, 2004).

Ten einde 'n bydrae te maak ten opsigte van die “hoe” van ontwikkeling was die hoof doelwitte van die studie die volgende: a) die saamstel van 'n teoretiese model wat ontwikkelingverandering in die jeug beskryf; b) die operasionalisering van hierdie model vir die doel van 'n intervensie; en c) die evaluering van 'n program en die model waarop dit gebaseer is. Die studie word in artikel formaat beskryf. Die eerste artikel fokus op die ontwikkeling van 'n teoretiese model deur: a) die konstruksie van 'n omvattende meta- teoretiese matriks; b) die integrasie van teorieë wat in literatuur rakende positiewe jeugontwikkeling genoem word; en c) die uitbreiding van laasgenoemde met behulp van teorie uit ander toepaslike subdissiplines in die sielkunde. Die resultaat hiervan, die Positiewe Jeug-Intervensiemodel (sg. PYDI model), bied 'n prosesmatige beskrywing van ontwikkelingverandering, en is een van die eerste modelle wat dit doen.

Die tweede artikel bied 'n uiteensetting van die operasionalisering van die PYDI model deur middel van 'n indikasie van die relevante konstrunkte, fenomene en prosesse wat gefasiliteer moet word. Alhoewel onlangse navorsing toon dat daar 'n verband is tussen positiewe jeugontwikkeling en selfregulering, was daar tot op hede geen model wat die rol van self-regulering in die fasilitering van die positiewe ontwikkeling van jongmense beskryf nie. Die meta teorie van positiewe jeugontwikkeling, naamlik ontwikkelingssteemteorie (King *et al.*, 2005), verwys na die tweerigting interaksieprosesse tussen die jeug en hulle primêre lewenskontekste (Lerner, 1998). Hierdie studie het 'n model vanuit 'n opvoedkundige konteks (Heckhausen & Gollwitzer, 1987 (soos aangehaal deur Boekaerts & Niemivirta, 2005)), aangepas om sodoende die selfreguleringsprosesse waaruit die tweerigting interaksie tussen die jeug en hul primêre lewenskontekste bestaan, uit een te sit. 'n

Verdere spesifieke bydrae is dat die wyse van die aanbieding van die programateriaal, om sodoende die internalisering daarvan te bevorder, op 'n teoretiese vlak aangespreek word.

Die derde artikel beskryf die evaluering van die PYDI model- en program wat onderneem is met jong adolessente in 'n plattelandse skool. 'n Kwantitatiewe-kwalitatiewe navorsingsontwerp is gebruik omdat dié metode meer en ryker inligting bied as 'n kwantitatiewe studie alleen. Alhoewel die kwantitatiewe data nie die sukses van die program bewys het nie, het die kwalitatiewe data getoon dat sekere aspekte van selfregulering wel suksesvol gefasiliteer is. 'n Tweede opvolg assessering, sewentien maande later, het aangedui dat sommige vaardighede eers lank na die aanvanklike program geïnternaliseer is, en dui dus aan dat die implementering en evaluering van so 'n program uitgebrei moet word oor 'n langer tydperk.

Hierdie studie dra by tot die veld van positiewe jeugontwikkeling op die teoretiese vlak en toon aan dat a) daar leemtes in die bestaande teorie is, en b) dat teorieë in ooreenkomstige subdissiplinêre paradigmas gebruik kan word om werkbare modelle vir positiewe jeugontwikkeling saam te stel. Vanweë die model se proses-gebaseerde aard, kan die PYDI model aangepas en uitgebrei word om te pas by verskillende behoeftes in die diverse Suid-Afrikaanse kontekste. Aanbevelings is gemaak vir verdere navorsing en praktiese toepassings veral binne die Suid-Afrikaanse konteks.

Preface

- This thesis is presented in an article format, in accordance with rules A13.7.3, A13.7.4 and A13.7.5, as well as A14.4.2, as prescribed by the *North-West University*.
- The three articles comprising this thesis were submitted to the *Journal of Child and Adolescent Mental Health*. Article 1 and article 2 are currently under review.
- The referencing and editorial style of this thesis are in keeping with the guidelines as set out in the *Publication Manual* (5th edition) of the *American Psychological Association (APA)*. However, the three articles were compiled according to the guidelines of the journal to which the articles were submitted, namely the *Journal of Child and Adolescent Mental Health*.
- In order to present this thesis as a unit, the page numbering is consecutive, starting from the introduction and proceeding to the references. However, for submission purposes, the pages of each of the three articles were individually numbered.
- Prof. M.P. Wissing, the co-author of the three articles comprising this thesis, has provided consent for the submission of these articles for examination purposes regarding a Ph.D degree, in accordance with rule A13.7.4.

Letter of consent

Permission is hereby granted for the submission by the first author, A.J.W. Brink, of the following three articles for examination purposes, towards the obtainment of a Ph.D degree in Psychology:

A model for a positive youth development intervention.

Towards a theory-based positive youth development intervention.

Evaluation of a theory-based positive youth development programme.

Prof. M.P. Wissing

Co-author and promoter

Section 1

Introduction

Introduction

This study is conducted in the context of the Positive Youth Development (PYD) approach. In order to contextualize the study, an overview of the current state of the paradigm is necessary. Despite the fact that the PYD paradigm is complex in nature, there is consensus regarding its objectives and philosophical viewpoint. The main focus is on the positive development of the youth. PYD can be classified under the fortigenic paradigm, with a focus on health and strengths, rather than under the more traditional pathogenic paradigm, which focuses on pathology and psychological weaknesses (Wissing, 2000). The widely-quoted guiding phrase coined by Pittman, “Problem-free is not fully prepared”, describes the essence of the PYD paradigm (Catalano, Berglund, Ryan, Lonczak & Hawkins, 2002; Roth & Brooks-Gunn, 2003; Steen, Kachorek & Peterson, 2003). Benson (1997, p.18) highlights this aspect of preparation, or development of assets in the youth: “Instead of focusing on fixing problems, it centres on nurturing the positive building blocks of development that all young people need.”

The term PYD is a broad conceptualization that is variously used in the literature: It refers to the normal development of adolescents, characterized by their ability to understand and interact with their life contexts in ways that benefit both themselves and these contexts (Hamilton, 1999; Lerner, 2002 (as cited in King et al., 2005)). Secondly, PYD refers to a unifying philosophical stance characterized by a positive, strength-focused approach towards the youth (Whitlock & Hamilton, 2001 (as cited in Small & Memmo, 2004)). Thirdly, the term is used to refer to guidelines for programmes aimed at the provision of opportunities for the facilitation of the development of the youth (Blum, 2003; Eccles & Gootman, 2002; Lerner, 2004; Roth & Brooks-Gunn, 2003a, 2003b (as cited in King et al., 2005)). The third denotation, namely that of application, is specifically relevant for this study, which focuses on the development and evaluation of a theory-based PYD programme for young adolescents, with the aim of promoting their optimal development.

It is particularly in terms of the application aspect that key facets have not yet been fully clarified. In this regard, in 2003, Roth and Brooks-Gunn addressed the exposition of what a PYD programme entails. However, although these authors did provide some answers, no exposition of all the relevant aspects of a PYD intervention has been put forward as yet. A further aspect which has not yet been comprehensively explicated pertains to the indicators of positive developmental outcomes. Although PYD theoreticians have recently agreed on a set of six indicators of thriving (Lerner et al., 2005; Phelps et al., 2009), these have not been operationalized and standardized for the purpose of serving as indicators of positive developmental outcomes related to interventions. Lately, the focus has fallen on a clarification of the role of PYD practitioners: a) the role of PYD practitioners as mentors is being considered (Deutsch & Spencer, 2009; Larson, 2006); and b) the kinds of skills pertinent to PYD practitioners are being researched (Larson, Rickman, Gibbons & Walker, 2009).

In the second instance, the complexity of the application aspect of PYD is reflected by the many different approaches to interventions. There are interventions with a direct, formalized focus on the facilitation of the development of the youth (Catalano et al., 2002), whereas others apply a more indirect focus, e.g. using arts education (Larson et al., 2004) or participation in organized sport (Perkins & Noam, 2007) to facilitate skills in the participants which could contribute to the facilitation of their development. However, the processes related to the facilitation of skills in terms of these more indirect approaches, have not yet been clarified (Larson et al., 2004). The contexts addressed by interventions vary too: amongst others, the school context (Catalano et al., 2004; Pianta & Hamre, 2009) and the community context (Benson, 1997) are targeted by interventions, whilst the focus also falls on a combination of certain contexts, e.g. that of the school and that of the family (Catalano et al., 2004). Interventions aimed at the community context entail, *inter alia*, the empowerment of the youth in order to advocate for the provision of resources relevant to the youth on a community level (Deschenes, McLaughlin & Newman, 2008), and the facilitation of

collaboration between different organizations in the community in order to provide structures which can support the development of the youth (Bringle, Officer, Grim & Hatcher, 2009). Approaches also display variation regarding the facilitators of the development of the youth. Benson (1997) indicates that professionals could be involved in more formalized endeavours, but also advocates the assumption of responsibility by all adults in a community for the enhancement of the development of their youth.

In order to arrive at a better understanding of the PYD paradigm with a view to conducting a study in the context of this paradigm, possible explanations for the complexity and lack of clarity regarding certain key aspects of the application aspect of PYD, should be considered. The problem relating to complexity may be explained by a combination of factors. Firstly, the paradigm is a relatively new one, which had only been in existence for more or less 15 years by 2005 (King et al., 2005), and may consequently still be evolving. A second possible explanation is the lack of collaboration between different researchers and theoreticians; there is little reference to and expansion on the existing research and theorizing. These isolated, independent endeavours curtail the systematic and scientific progression of the PYD paradigm. The lack of clarity may also be explained by the fact that development, along with the facilitation thereof, is a complex process which has not yet been comprehensively explicated. A final possible explanation, which may be found on the level of the meta-theory to PYD, lies in developmental systems theory (DST) (King et al., 2005), which postulates development as being accomplished on the relational interfaces between the multiple systems contributing to the development of the individual (Lerner, 1998). These multiple systems allow for many different foci for interventions. Furthermore, a consideration of the process-related aspect of DST may explain its role in the complexity of PYD, since a variety of approaches may be applied in the operationalization of a process-related theory.

Despite the lack of clarity regarding key aspects related to application, PYD has a very important role to fulfil, especially in the current South African context. There are many

reasons why deliberate efforts should be made to facilitate development – which is actually a natural process – in the youth. Structures in the South African context, especially family structures, which should support the positive development of the youth, are not always robust and vibrant enough to do so, owing to the demands made on single parents nowadays, amongst other factors. This scenario reflecting a decrease in the availability of support for development characterises the situation of American youth, too (Benson, 1997). The most recent available statistics regarding South African families indicate that in 2001, 27,7% of white youth between the ages of 14 and 19, and 64,33% of black youth in the same age group, belonged to families in which both parents were not living in one home. Furthermore, the fibre of the South African community is being impacted by changes on the economic, political and cultural levels, associated with the transitional phase that the country is undergoing (Meehan, Peirson & Fridjhon, 2007). Lastly, the South African youth of fifteen years of age and younger, who, according to Statistics South Africa (2010), comprise almost one third of the total population, need to be prepared for an adulthood with many previously unknown challenges, owing to the rapid global change that has been pointed out by, *inter alia*, the “State of the World Population Report 2003” (United Nations Population Fund). The need for the development of the South African youth is recognized by the South African Government too; the youth are viewed as “a vital resource whose future prospects are inextricably tied to [those] of the country as a whole” (National Youth Commission website). A Government organisation, the National Youth Commission (NYC), was set up in 1996 by means of the National Youth Commission Act (1996) with the purpose of creating opportunities for the development of the South African youth to their full potential (National Youth Commission website). In view of the emphasis placed on the development of the youth by the South African Government, the lack of local research published in South African journals is striking. A review that was carried out by means of the Sabinet search instrument revealed very little evidence of research and theorising in accredited South African journals regarding the

development of the youth. An exception in this regard is a published work by Ebersöhn and Eloff (2003) regarding the acquisition of life skills and assets.

In view of not only the relevance of, but also the urgent need for, the facilitation of the development of the youth in a more positive trajectory, a methodical overview of the PYD field is necessary in order to determine the lacunae, with a view to making a contribution to this paradigm in a systematic manner.

The meta-perspective formulated by Madsen (1988) provides a framework for such an overview of PYD. This framework proposes a three-level perspective on reality and science (Madsen, 1998). In this discussion, the meta-level refers to, *inter alia*, assumptions about the human psyche. The hypothetical level refers to theories, models and hypotheses regarding those phenomena in reality that comprise the object of the focus. The empirical level consists of observations (Madsen, 1998). The three levels are interlinked, and consequently influence each other (Madsen, 1998).

The meta-stratum of PYD comprises developmental systems theory, which is a process-related theory (King et al., 2005). The empirical level of PYD has the strongest representation in the PYD literature. This may be ascribed to the fact that, in a field with a strong focus on application, knowledge regarding the relevant content areas and skills to be addressed for the purposes of interventions, is needed. The strong representation of the empirical stratum is demonstrated by the prominence of a voluminous body of research by two particular groups of researchers. The research by Catalano and his collaborators is widely quoted in the PYD literature (Caldwell, Baldwin, Walls & Smith, 2004; Gillham, Reivich & Shatté, 2002; Hansen, Larson & Dworkin, 2003; Lopez & McKnight, 2002; Moore, Zaff & Hair, 2002; Peterson & Seligman, 2004). Catalano et al. (2002) reviewed twenty-five programmes and determined, *inter alia*, the constructs which the effective programmes addressed. These broad categories were *moral, cognitive, emotional, social and behavioural competencies*. The research of the second group of researchers, affiliated to the *Search*

Institute, is well represented in the literature too (Benson, 1997; Peterson & Seligman, 2004; Richardson, 2002; Scales & Leffert, 2004). These researchers reviewed studies pertaining to resilience, prevention and adolescent development literature, and also consulted with young people, education specialists, parents and youth development practitioners (Benson, 1997; Scales & Leffert, 2004). As a result of their research, a specific framework, comprising forty assets that support development in a positive trajectory, was formulated (Scales & Leffert, 2004). Twenty of these assets comprise internal assets that relate to intra-psychoic strengths in the youth (Scales & Leffert, 2004). The twenty external assets refer to the characteristics of the different life contexts that support the development of the youth, e.g. the presence of boundaries in families (Scales & Leffert, 2004). The *Search Institute* developed a self-reporting questionnaire to measure the forty assets, as well as indicators of thriving behaviours (Scales & Leffert, 2004); and an expansive database was subsequently configured. The latter may contribute to the expansion of the hypothetical stratum, in the sense that it serves as a resource for PYD researchers. Theokas et al. (2005) used these data to research the concept of thriving, whereas Zimmerman, Phelps and Lerner (2008) applied the data in order to investigate the different positive and negative developmental trajectories in the youth. However, apart from the latter studies, there is a general lack of inter-relation between the empirical and hypothetical levels of PYD. This lack of integration between the empirical and hypothetical strata is illustrated by the fact that the data obtained by Catalano et al. (2002), as well as the data issued by the Search Institute (Scales & Leffert, 2004), have not been comprehensively contextualised in theory.

The research on the empirical stratum has elucidated the “what”, or the relevant content areas, to be addressed by means of interventions; but the “how” of the facilitation of positive development in the youth has not yet been explicated (Larson et al., 2004). The lack of knowledge in the PYD paradigm with regard to the processes related to developmental change (Larson et al., 2004) is reflected by the current state of the hypothetical stratum. This

stratum is currently characterized by insufficient attention to theory (Delgado, 2002; Larson' 2000). There is a lack of clarity regarding terminology (Small & Memmo, 2004). This factor is elucidated by the research of King et al. (2005), which indicates that the terms used by academics on the one hand, and practitioners, parents and youth, on the other hand, display a general lack of congruity (King et al., 2005). Furthermore, a literature review yielded no evidence of a comprehensive theoretical model that describes developmental change, and which could serve as a foundation for a PYD intervention.

Catalano et al. (2002), as well as Roth and Brooks-Gunn (2003), emphasize the need for the scientific evaluation of PYD programmes. The evaluation of a programme, and the theoretical model explicating positive development, on which it is based, may in the first instance make a contribution to the hypothetical stratum of PYD, since such an evaluation may provide some information regarding developmental change. In the second instance, with reference to the application aspect, it may contribute to the elucidation of the constructs to be addressed by an intervention, as well as the “mechanisms” or “processes” that underlie these, and which should be facilitated (Catalano et al., 2002; Maggs & Schulenberg, 2001, Small & Memmo, 2004). The latter information is not only of importance to the efficacy of a PYD intervention, but may also be of assistance in the consideration of certain aspects of an intervention which may potentially have a detrimental effect on the participants (Silliman , Kerpelman, Bogenschneider & Gross, 2004).

Against the background of the definite need for theory-based PYD programmes, as well as the need to consider the aspect of the processes relevant to development (Larson et al., 2004), the core aspects regarding an intervention should be considered. The key issues in this regard pertain to: a) the question as to what developmental change in the youth entails, as well as b) the question of how developmental change can be facilitated in the youth in order to optimize their development. Within the parameters of developmental systems theory, with

specific reference to relative plasticity (Lerner, 1998), such an intervention could be understood as facilitating the developmental trajectory in a more positive direction.

The general aim of this study is, firstly, to conceptualize an integrated theoretical model that describes some aspects of development, and which can be used as a basis for the development of a programme to enhance youth development; secondly, to develop such a programme; and thirdly, to evaluate its effectiveness for the promotion of youth development. A report on this study will be provided in an article format, comprising three articles. The first article will report on a theoretical model that includes a) the construction of a comprehensive meta-theoretical matrix in order to guide the focus of the model, b) the integration of the available theory that features in PYD, and c) the augmentation of the latter with theory from other compatible sub-disciplines in psychology. The modus operandi in constructing this model, which will differ from the usual approach in that it will entail the expansion of existing theory, may contribute to the hypothetical stratum of PYD in a more systematic manner. Article 2 will report on an intervention programme that is built upon the model described in article 1, and refers to the identification of the relevant constructs, phenomena and processes to be facilitated. Knowledge gleaned from general psychology, e.g. regarding the facilitation of the exploration of identity, will be applied in order to provide guidelines regarding the facilitation of the relevant aspects. In order to attain developmental validity, i.e. the generalization of change – as facilitated in the programme – to general life contexts (Bronfenbrenner 1980), a consideration of the ways in which the relevant skills and knowledge could be facilitated, is necessary. The importance of the latter aspect is highlighted by Roth and Brooks-Gunn (2003), as well as Ebersöhn and Eloff (2003). This facet pertaining to the manner of the facilitation of the programme contents will also be addressed in article 2. Article 3 will focus on the evaluation of the envisaged theoretical model and programme. The appraisal of this programme will be conducted by means of a mixed-methods research design,

in which the results of the experimental group are compared to those of a study-guidance programme presented to the control group.

This study will be concluded with a section consisting of reflections and integrating conclusions regarding the study as a unit. The conclusion will also include recommendations for future studies.

A final way of contextualizing this study will entail the provision of a brief exposition of developmental systems theory, which is the meta-theory to DST (King et al., 2005), in terms of the main assumptions. A description of the life trajectory, which is included in the introduction to a biography by Clingman (1998), highlights the four main assumptions of DST, as specified by Tobach and Greenberg (1984, as cited in Lerner 1998) and explicated by Lerner (1998). These are: a) the concept of plasticity, in other words the potential for change across the life span; b) the concept of different systems, including the intra-psychic system and the primary life contexts, amongst others, which jointly contribute to the development of the individual; c) the influence of the historical context, or *zeitgeist*, on development; and d) the aspect of the idiosyncrasy of the development of each individual.

Though it (a life) has its own inner time, its own inner dimension and volume, when it emerges and takes shape it does so against the pressure, resistance and influence of a surrounding history and ethos. It enters into the flow of this time, wafted this way and that, driven by it, sometimes altering its direction, matching as best as it can its inner being to the demands of the time outside it. Both dimensions are real, inner and outer, and together they form the matrix that makes the path and trajectory of a life (Clingman,1998).

Even though general theoretical principles regarding developmental change, and the facilitation thereof, comprise the focus of this study, this investigation will be conducted with

due cognizance of the fact that the developmental journey of each human life is characterized by a beauty and uniqueness of its own, as aptly pointed out by Clingman (1998).

Section 2: Article 1

A model for a positive youth development intervention.

submitted to the

Journal of Child and Adolescent Mental Health

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Haynie DL (2000) *The Peer Group Revisited: A Network Approach for Understanding Adolescent Delinquency*. PhD Thesis, Pennsylvania State University, Pennsylvania, USA
Louw J (1990a) Comorbidity of conduct and anxiety disorders. *Southern African Journal of Child and Adolescent Psychiatry* 5: 43–51
Louw J, Mkize AC and Naidoo DH (1990) Cultural disorders. In: Isaacs S (ed.), *Psychiatric Disorders in South African Children*. Cape Town: Juta & Co. pp 84–96
McRoy RG, Grotevant HD and White KL (1988) *Openness in Adoption: New Practices, New Issues*. New York: Praeger Publishers
Population Reference Bureau (2002) Untitled fact sheet.
Available at: http://www.prb.org/content/navigationMenu/Other_reports/2000-2002/sheet1.html. [Accessed 22 February 2002]

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African Association for Child and Adolescent Psychiatry and Allied Professions

2.2 Manuscript

A model for a positive youth development intervention

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Abstract

Modern-day life necessitates the application of interventions to facilitate the development of the youth in a more positive trajectory. Lacunae in the Positive Youth Development (PYD) paradigm include, *inter alia*, the lack of integration between theory and application, as well as a lack of exposition of the processes underlying developmental change. The aim of the current study was to develop a theoretical model for the facilitation of the development of the youth in early adolescence. The proposed model builds on existing models, namely the Phenomenological Variant of Ecological Systems Theory and the Selection Optimization and Compensation (SOC) model. A literature review of the PYD paradigm and other areas of psychology with a similar strength-based focus, yielded theory which could be used to expand on the basic framework. The resulting Positive Youth Development Intervention model (PYDI) is described with reference to meta-theoretical assumptions, theoretical hypotheses, and constructs referring to phenomena and processes to be facilitated on an empirical level. This model can be operationalized to develop an intervention, which can then be evaluated, contributing thereby to the bridging of theory and application in PYD.

Keywords: Positive Youth Development, Developmental Systems Theory, Ecosystems Theory, process-related focus, Selection, Optimization and Compensation (SOC) model, a Phenomenological Variant of Ecological Systems Theory (PVEST), thriving.

A model for a positive youth development intervention

Introduction

The purpose of positive youth development interventions is to optimize development and to increase thriving (Theokas *et al.* 2005). Thriving is a process (Theokas *et al.* 2005) and not an end-product. The facilitation of positive development should thus entail the facilitation of the developmental trajectory in a more positive direction. Even though the Positive Youth Development (PYD) literature is characterized by a fair amount of theorization, comprehensive theoretical models to guide the development of interventions aimed at facilitating positive development in the youth are largely absent.

Deliberate, scientific efforts with a view to the positive development of the youth are necessary. Such efforts are especially important in South Africa, where the need for the development of the youth is very high. According to *Statistics South Africa* (2010), the mid-year estimate of the percentage of the youth below the age of 15 years, is 31,4% of the total population of an estimated 49,32 million; in other words almost one third of the total estimated population of South Africa. The most recent available statistics regarding family structure (*Statistics South Africa 2005*) indicate that in 2001, an average of 41,75% of the total population of the youth between the ages of 14 and 19 years belonged to families in which both parents were present at home; the latter scenario was true for 35,67% of the black population and for 72,3% of the white population. These figures, viewed against the total number of the population, indicate that quite a large number of single-parent families may be experiencing additional strain, in terms of the obligation to support the development of the youth. Furthermore, the fibre of South African society is being impacted by the economic, cultural and political changes associated with the present transitional phase of the country, entailing more challenges - but also windows of opportunity (Meehan, Peirson and Fridjhon 2007). The problem of reduced availability of developmental support for the youth is also

prevalent in the USA (Benson 1997). A second motivation for facilitating the positive development of the youth is that the current adolescent population needs to be prepared for adulthood, because, as adults, they will be confronted with many previously unknown circumstances (United Nations Population Fund).

The Positive Youth Development (PYD) movement

The Positive Youth Development (PYD) movement focuses specifically on the facilitation of the development of the youth. The current study is contextualized within this approach.

Although the PYD movement initially developed in relative isolation from other similar foci in psychology as a science, the PYD paradigm can be delineated by demonstrating the differences and convergences in relation to other, comparable paradigms. PYD is a relatively new paradigm, which emerged approximately two decades ago (King *et al.* 2005). Like prevention science, it developed in the context of growing dissatisfaction with the prevention approaches for youth development at the time (Catalano *et al.* 2002). Prevention science focuses on reducing risk factors and facilitating protective factors in the youth, whereas the PYD approach specifically focuses on the facilitation of positive developmental outcomes or strengths, congruous with developmental tasks and the life contexts of the youth (Catalano *et al.* 2002). Besides the PYD and prevention approaches, Small and Memmo (2004) identify the resiliency approach as the third approach relevant to youth development in general. Resiliency is defined within the context of having to deal with stressors of a greater intensity than the normal life stressors, with particular reference to a person's positive functioning or adaptation in spite of having to navigate these (Small and Memmo 2004). Neither the PYD approach, nor the prevention or resiliency approaches should be viewed as superior; all three of these approaches have a role to play in supporting the youth. The chosen approach would depend on the needs and circumstances of the specific target group of an intervention (Small and Memmo 2004).

Although PYD developed independently from positive psychology, it shares common features with the latter. Both of these paradigms share the view that the absence of pathology does not necessarily indicate the presence of health; both adopt a strength-oriented, rather than a deficit-oriented perspective of the human psyche (cf. Peterson and Seligman 2004). PYD exhibits convergence with applied developmental science (ADS) in respect of a focus on the facilitation of positive development, although ADS focuses on development over the entire lifespan and has as its main aim the conjoining of academic expertise and the needs of people in the community (Lerner, Fisher and Weinberg 2000).

PYD is a developing field with a strong focus on application. However, currently, on a theoretical level, it is characterised by a) a lack of consensus regarding terminology (King *et al.* 2005, Small and Memmo 2004), b) lacunae in the relevant knowledge regarding, *inter alia*, the processes underlying the developmental change to be effected in the youth (Catalano *et al.* 2002, Small and Memmo 2004) and c) a lack of integration between theory and practice (Catalano *et al.* 2002); PYD practitioners have thus far accorded insufficient attention to theory (Delgado 2000, Larson 2000). This scenario is a cause for concern, because theory not only augments the efficacy of interventions; it also plays a role in averting possible detrimental effects to the participants in an intervention (Silliman *et al.* 2004).

A shortcoming, especially regarding the application aspects in the literature, is that the term “youth” is often used without indicating the specific target age-group or developmental stage. Kaplan and Sadock (1998) divide adolescence into three developmental stages, namely early (11-14 years of age), middle (14-17 years of age) and late adolescence (17-20 years of age), whereas Newman and Newman (2003) divide adolescence into two stages, namely early adolescence (12-18 years of age) and later adolescence (18-24 years of age); and the developmental tasks of the latter two stages display qualitative differences (Newman and Newman 2003). The current envisioned Positive Youth Development Intervention model (PYDI) is intended for adolescents of the ages of 14-17 years, since the early stage of

adolescence is characterized by changes in all spheres of human functioning (Newman and Newman 2003). These changes tend to have an extensive impact on the homeostasis of these adolescents, which may result in a greater openness towards growth (Richardson 2002). In accordance with the description by Newman and Newman (2003), the chosen age group will be referred to as early adolescence.

Aim of the study

The aim of the present study is to compile a theoretical model for a PYD intervention (the PYDI model) by selecting, integrating and building upon existing models, and expanding these with perspectives and theory from other sub-disciplines in psychology. This PYDI model could then be implemented and evaluated in further studies. The scientific evaluation of a theory-based intervention could provide answers with a view to obtaining a better understanding of the processes needed to facilitate positive developmental change. The proposed model will serve the purpose of bringing about greater integration between the theoretical and application dimensions of PYD as a sub-discipline in psychology as a science.

Strategy and Approach

The relevant literature was accessed by means of a search of the databases ERIC, PsychINFO, Academic Search Premier and Science Direct. In addition, the guidelines provided by the references of recent articles were followed in order to access relevant theory. Not many books addressing PYD have been published. This may be explained by the fact that PYD is a relatively recent paradigm. A few books were identified by searching the website of Amazon, an electronic book retailer. A search of the catalogues of two academic libraries yielded no results. The principle advocated by Bronfenbrenner (1980) and Small and Memmo (2004), namely that theorizing in a particular field should extend the already-existing knowledge, was

applied in the formulation of the envisioned model. Relevant theoretical models which could be used to configure a foundation from which to depart, were identified. A review of the relevant articles revealed a confluence between PYD, positive psychology and applied developmental science; and consequently these fields were also considered in the search for applicable models.

The meta-perspective formulated by Madsen (1988) will be used to guide the process of integrating the existing models, the contributions from research and theory from other, compatible sub-disciplines into a theoretical model, namely the Positive Youth Development Model for Intervention (PYDI model). This meta-perspective proposes a three-level view of reality and science. In this perspective, the meta-level is the most abstract of these three levels and consists of assumptions about the nature of the world, or a part of it (in psychology, this would refer to assumptions about human nature and the human psyche), as well as about the nature of science. Most often these assumptions are relatively vague and are not explicitly articulated in scientific work. The hypothetical level consists of theories, models and hypotheses regarding the phenomena encountered in reality which are the object of focus. The empirical level of science is comprised of observations and actions. These three levels are interlinked and mutually influence each other. Findings from an analysis of relevant literature that was conducted in order to substantiate the proposed model, will be presented in terms with the above- mentioned abstracted levels of science.

Meta-theories

The explored PYD literature did not contain clear explications of all the meta-theoretical assumptions as indicated by Madsen (1988), although many of these assumptions are implicitly followed. However, some relevant meta-theories, which can be viewed as overarching assumptions about reality, the nature of human beings and their psychological functioning, were identified in an analysis of the relevant literature. These broad theories can

be implemented as an overarching framework for the integration of more specific theories for a model, as a theoretical backdrop for the enhancement of positive youth developmental processes.

In view of the fact that *developmental systems theory* presently guides the PYD paradigm (King *et al.* 2005), this theory will constitute the basic identified broad overarching theory. Developmental systems theory is grounded on four basic assumptions (Tobach and Greenberg 1984 in Lerner 1998). The first assumption is that of relative plasticity, which postulates that change in people is possible and can be effected in practice (Tobach and Greenberg 1984 in Lerner 1998). This concept indicates that the developmental trajectory may be influenced by intervention, *inter alia* (Lerner 1998). The second assumption is that of the interrelation between various developmental systems pertaining to a person's life (Tobach and Greenberg 1984 in Lerner 1998). These "multiple systems" are the biological, the psychological, the proximal social (including the peer group and family), the socio-cultural (including the educational and economic spheres) and the natural and physical systems (Ford and Lerner 1992 in Lerner and Castellino, 2000; Homans 1961 and Hartup 1978 in Lerner and Castellino 2002). This concept of "relationism" postulates that developmental change takes place on the relational interface between the different developmental systems. The third assumption highlights the role of timing in development (Tobach and Greenberg 1984 in Lerner 1998). Differences in the timing of physiological changes in adolescence, for example, would result in widespread interpersonal variation regarding development, because of the interrelationships between the different developmental systems (Lerner 1998). The fourth assumption points to developmental diversity and the lack of generalizability amongst people (Tobach and Greenberg 1984 in Lerner 1998).

Ecosystems theory has been identified as a second promising meta-theory in order to form a meta-theoretical matrix for the PYDI model. Ecosystems theory constitutes an integration between general systems theory, ecology and cybernetics (Moore 2000). The

central focus is on the individual person against the background of the relations with his/her life contexts (Moore 2000). A view of human nature is provided, in terms of which: a) people are regarded as autonomous or self-regulatory, which implies that they are actively involved in their development and growth; and b) that the central concept of *appraisal*, which could be defined as that of people's perception of reality constituting *their* reality, is elucidated (Moore 2000). Ecosystems theory furthermore provides a more detailed description of the communication networks which comprise the relations between systems and subsystems, as proposed by developmental systems theory. These communication networks are described according to the principles of cybernetics (Schoeman, Nel and Wessels 1983). The flow of information or communication between people and their life contexts is a given, owing to the fact that human beings are viewed as open systems, although there are varying degrees of openness. This communication is constituted by circular, bi-directional feedback loops. The processes of development and growth are viewed as being the result of balancing the processes of homeostasis (a protection of the integrity of the system) and heterostasis (adapting to formerly unknown circumstances) (Schoeman *et al.* 1983; Schwartz 1984 in Shapiro and Schwartz 2005). Ecosystems theory converges with developmental systems theory (Lerner *et al.* 2002) in its description of optimal functioning, which is defined as being characterized by relationships between an individual and his/her life contexts, which are beneficial to all the relevant parties (Moore 2000).

A third meta-theory, namely "a general systems perspective on personal growth and development", was formulated by Amerikaner (1981). The principles of general systems theory were applied to indicate the convergences between the humanistic personality theories in respect of their description of personal growth (Amerikaner 1974). This meta-theory describes human nature by highlighting the intra-psychic aspects of a person as a system. The boundaries between a person and his/her life contexts are described. These boundaries should be permeable enough to be receptive to feedback-information, but should also, on the other

hand, be strong enough to enable the person to develop towards increased autonomy.

Furthermore, the aspects of intra-psychic communication networks, as well as the importance of the consolidation of identity in order to enable a person to adapt to change in a growth-enhancing manner, are elucidated.

All three of these meta-theories are based on general systems theory and are therefore compatible. The unique perspectives of each meta-theory can be used in a complementary fashion, in order to configurate the meta-theoretical matrix for the integration of different theoretical aspects with a view to compiling the PYDI model.

Developmental theories

The lacunae in the theory of the PYD paradigm are particularly noticeable in terms of the description of change from a developmental perspective. The perspective of developmental psychology is not explicitly linked to the kind of skills that should be facilitated in the youth, although the internal assets as described by the Search Institute (Scales and Leffert 1999) do reflect some of these skills, e.g. the ability to resist peer pressure.

Keeping in mind that the aim of the PYDI model is the description of the facilitation of the development of the youth by means of an intervention, the concept of development needs to be elucidated. Furthermore, in an effort to delineate the content of the developmental processes to be facilitated, as explicated by developmental systems theory, the PYDI model will incorporate developmental psychological perspectives, with particular reference to the developmental tasks of early adolescence.

Development is defined from a developmental systems perspective, which has a process-related focus. The ecological perspective of development, formulated by Bronfenbrenner (1980), is widely quoted in the PYD literature (Benson 2002; Granger 2002; Luthar and Lantendresse 2002; Scales and Leffert 1999) and has played a guiding role in PYD regarding the contextual approach (Peterson and Seligman 2004). The reformulated and

refined version (Bronfenbrenner and Morris 1998) is classified along with the “contemporary developmental theories”, which are characterized by a developmental systems perspective of development as a meta-theory (Lerner, 1998). The definition of development by Bronfenbrenner and Morris (1998) is the definition that will be used. However, this definition will be expanded, especially regarding the description of positive development, by an additional definition, derived from the contemporary developmental theories (Lerner *et al.* 2002).

Psychosocial theory (which includes the theory of Erikson), like developmental systems theory (Lerner 1998), considers interaction between an individual and his/her life contexts, views the individual as actively involved in his/her development and takes a lifespan perspective of development (Newman and Newman 2003). In the light of these convergences, psychosocial theory can be viewed as compatible with developmental systems theory. The psychosocial theory of development provides information regarding the salient challenges of adolescents’ lives, as well as the skills that are necessary to navigate these (Newman and Newman 2003).

Specific models for the facilitation of youth development

The next step is to identify already-existing models which describe positive development in the youth and to incorporate these into the framework constituted by the meta-theoretical matrix and the chosen developmental perspectives.

A literature review revealed a paucity of theoretical models. Two applicable models could be identified, and are combined to configure the foundation of the envisaged new model. The identified models are: a) the Phenomenological Variant of Ecological Systems theory (PVEST), which features in the PYD literature (Swanson *et al.* 2002), and b) the Selection, Optimisation and Compensation model (SOC model), a model that has its origins in positive

psychology but which, within the applied developmental science paradigm, is applied to adolescent development (Lerner, Freund, De Stefanis and Habermas 2001). The latter paradigm, like PYD, has a developmental systems perspective as a meta-theory, and will therefore be used as one of the two specific models.

PVEST adopts a phenomenological standpoint in respect of the ecological perspective of development, as formulated by Bronfenbrenner (Swanson *et al.* 2002). This model is constituted by a combination of the ecological model and the concepts of self-appraisal and self-efficacy, as formulated by Bandura (Swanson *et al.* 2002). PVEST will be explicated according to the exposition given by Swanson *et al.* (2002). This model describes the processes involved in the navigation of stressors and highlights the crucial role of the process of the appraisal of “risk factors”, as well as of the available “protective factors”. A unique contribution is made by PVEST, in the sense that it indicates that coping methods which render results that could be interpreted as being of value to the ego, may be applied regularly. These coping methods, which may be functional or dysfunctional, may become part of a person’s characteristic coping style and may even be assimilated into a person’s identity.

Lerner *et al.* (2001) apply the Selection, Optimisation and Compensation model (Baltes and Baltes 1980; 1990 in Lerner *et al.* 2001) to describe the regulation of the relations between adolescents and their life contexts, and thus their consequent development. In view of the fact that resources such as time and energy, even in the lives of adolescents, are not limitless, successful development would entail the effective allocation of these resources. This occurs by means of a process whereby adolescents formulate goals, that are relevant to their lives (the process of selection) and apply their resources and skills to the pursuit of these goals (optimization). The process of optimization also entails the acquisition and refinement of the skills and resources that are needed to accomplish the goals that have been formulated. Should it happen that the resources needed for goal attainment are threatened, compensatory measures are necessary to maintain the same level of functioning. Should these measures still not deliver

the envisaged results, it might be necessary to adjust the initial goals. The concept of identity, the consolidation of which is a central developmental task of adolescence, is connected with the SOC model in the sense that identity is viewed as a necessary construct for regulating interactions with the life contexts by means of the selection, optimization and compensation processes. However, it is also by means of such processes that the youth's sense of identity is developed.

Both PVEST and the SOC model offer a unique perspective of development, but because these perspectives are complementary, the two models could be used in combination.

Relevant models from other paradigms

In order to obtain further guidelines regarding the facilitation of developmental change by means of an intervention, paradigms other than PYD were explored. A key question that needed to be addressed from a theoretical perspective, is that of how the developmental changes on the relational interface, as postulated by the developmental systems perspective of development, are brought about. This question could be answered in terms of self-regulation as a concept and a process. The process could be defined in the following manner: "Self-regulation refers to self-generated thoughts, feelings and actions that are planned and cyclically adapted to the attainment of goals" (Zimmerman 2005: 14). Self-regulation is a process applied in order to: a) maintain the integrity of a person as a system, and b) adapt to unforeseen circumstances (Shapiro and Schwartz 2005). Considering the aspect of the autonomy of the system, in other words the fact that a system directs its own actions (Moore 2000), as well as the fact that self-regulation constitutes the process by means of which the equilibrium of a system is maintained, it is clear that self-regulation constitutes the process by means of which developmental change, as described by PVEST and the SOC model, is accomplished. The latter assumption is reiterated in research by Zimmerman, Phelps and Lerner (2008) indicating a positive relation between self-regulation and positive development

in the youth. Gettsdottir and Lerner (2008) equate self-regulation with the SOC processes as described by the SOC model. As the SOC model refers to longer-term goals (Lerner *et al.* 2001), the PYDI model adopts a perspective that is similar to Bronfenbrenner and Morris's (1998:996) description of "proximal processes" as taking place "on a fairly regular basis, over an extended period of time.". This perspective refers to the regular interactions with the life contexts, which over time, may constitute the bi-directional processes referred to by the PVEST and SOC models.

The concept of self-regulation originates from social-cognitive theory, which is implicit in PVEST (Swanson *et al.* 2002); but other authors have expanded on this initial exposition of the concept (Boekaerts and Niemivirta 2005; Zimmerman 2005; Shapiro and Schwartz 2005). In keeping with ecosystems theory, the individual is viewed as being actively involved in his/her own development (Bandura 1986, 2001 in Bandura, 2006). Furthermore, self-regulation correlates with the concept of cybernetics, in ecosystems theory, which refers to the circular feedback-loops between the individual and his/her life contexts.

Bearing in mind the ecosystems principle of autonomy, as well as the goal of the proposed model, namely the facilitation of the development of the youth in a more positive trajectory, it could be concluded that the youth have an active role to play regarding the optimalization of their development. In order to accomplish the latter, the youth need to be actively and effectively involved in their relations with their life contexts. In addition, they must be motivated towards the positive regulation of these interactions. The importance of the motivational aspect is emphasized by Larson (2000: 170): "A central question of youth development is how to get adolescents' fires lit, how to have them develop the complex of dispositions and skills needed to take charge of their lives."

Larson (2002) views initiative as a key construct regarding motivation and postulates that initiative could be facilitated by the participation of the youth in structured leisure activities. However, the aspect of motivation in the youth still calls for a great deal of research

(Larson 2000). Lopez and McKnight (2002) address the aspect of motivation by means of two constructs from positive psychology, namely hope and “experience of joy”, to describe the positive involvement of the youth in their own lives, which results in the expansion of their strengths and resources. However, this model is not expounded in fine detail, and no further reference to it could be found in the literature.

In order to address the aspect of motivation, two theories which feature in positive psychology are incorporated into the PYDI model. These are: a) social-cognitive theory (Bandura, 1978; Maddux 2002), and b) hope theory (Snyder 2002). Social-cognitive theory is a logical choice, since not only is the aspect of appraisal, originating from this theory, a key aspect in PVEST, but social-cognitive theory also features as the exponent of self-regulation, and is therefore implicit in the proposed model. Although the concept of self-efficacy was formulated before positive psychology came into the picture, it has been applied within the positive psychology realm, e.g. by Caprara *et al.* (2006) and Maddux (2002). Within the context of the description of human agency, Bandura (1997 in Bandura 2006:170) elucidates the central role of self-efficacy: “Among the mechanisms of human agency, none is more central or pervasive than belief of personal efficacy.” Self-efficacy is not a trait; rather, it is constituted by a person’s beliefs about what he/she can do (Maddux 2002). It influences the goals that people set during self-regulation. Higher levels of self-efficacy regarding certain areas of their lives, will result in people setting higher goals for themselves in these areas (Bandura 1986, Locke and Latham 1990 in Maddux 2000). Furthermore, self-efficacy has an effect on the effort expended towards the reaching of goals, as well as on persistence in striving towards these goals when an individual is faced with obstacles. Higher levels of self-efficacy should lead to increased motivation in the youth regarding effective interaction with their life contexts.

Hope theory, a theory featuring in positive psychology, and which was formulated at a later stage than social-cognitive theory (Snyder, Rand and Sigmon 2002; Maddux 2002), is

also applied to expand on the basic framework for the proposed model. The exposition of hope theory will demonstrate that the way in which hope operates is, in fact, circular, making it compatible with the concept of cybernetics in ecosystems theory. Hope, according to Smith (1991 in Lazarus 1999), as paraphrased by Lazarus (1999: 666), is the “galvaniser of action”, as far as coping is concerned. Hope is conceptualized as an individual’s perception of his/her ability to a) formulate clear goals, b) work out pathways to reach these goals in ideal, as well as stressful circumstances (“pathways thinking”), and c) start implementing the devised plans and following them through (“agency thinking”) (Lopez *et al.* 2004; Snyder *et al.* 2002). Hope theory is described according to Snyder’s (2002) exposition. The theory describes the goal-directedness of all behaviour and adds an emotional component (Shorey *et al.* 2002). The memories of previous goal pursuits are strongly associated with emotions. Success-experiences are associated with positive emotions, whereas the converse is also true. Hope theory postulates that people with more positive emotional experiences regarding goal pursuit, will approach their goals in a more active manner. Once the process of goal pursuit has commenced, emotions pertaining to the appraisal of the initial process will be elicited, and will influence the remainder of the process - either positively or negatively. If the initial attempts at achieving a specific goal are perceived as not proceeding smoothly, people with lower levels of hope will be more easily deterred by the negative emotions elicited by the feedback. This in turn will impact negatively on their efficiency during the remainder of the process. When they encounter obstacles in pursuing their goals, people with higher levels of hope will be more able to devise alternative pathways and to channel their energy into the implementation of these. Increased levels of hope should lead to increased motivation towards the active and effective pursuit of goals, and consequently enhance relations with life contexts and, therefore, also development. The circular or recursive nature of hope is summarized by Snyder *et al.* (2002: 260): “hope theory involves an interrelated system of goal-directed thinking that is responsive to feedback at various points in the temporal sequence.”

The aspects of the formulation of goals, devising pathways towards these and the appraisal of feedback, are compatible with the definition of self-regulation. The concept of hope, in conjunction with the concept of self-efficacy, will be used to describe the motivational aspects of the model. These concepts of self-efficacy and hope will also be used as indicators of positive development. An understanding of the latter could be achieved, if it is kept in mind that both of these result from, *inter alia*, success-experiences regarding specific goal-directed behaviours. Increased levels of self-efficacy and hope could indicate that: a) the intervention has succeeded in facilitating the relevant skills in such a manner that the participants will be able to apply these skills successfully in their everyday lives, b) the relations between the youth and their life contexts have been facilitated, and c) the developmental trajectory has consequently been facilitated in a more positive direction. Although the developmental trajectory constitutes a continuum, the levels of hope and self-efficacy at different points in time (before, after and during follow-up assessments) can be indicative of a change in the gradient of the trajectory.

The PYDI model: An integration of the different components

Three theories have been identified to serve as a meta-theory. These are: a) ecosystems theory, b) developmental systems theory, and c) a general systems perspective on personal growth and development (Amerikaner 1981). These meta-theories configure a theoretical matrix which provides the parameters for the theoretical model of developmental change. Keeping in mind that systems theory considers a variety of systems – for example the family – the meta-theoretical framework assists in directing the focus of the model, namely as a) a primary focus on the individual as a system (ecosystems theory), and b) a focus in terms of which developmental change is regarded as being constituted on the relational interface between the individual and his/her primary life contexts (developmental systems theory). Besides this

indication of the focus for developmental change, guidelines regarding developmental change are provided: a) the individual is viewed as being actively involved in his/her development (ecosystems theory), b) the interactions between the individual and his/her life contexts are described as being circular or bi-directional in nature (ecosystems theory), c) developmental change is accomplished by means of the balancing of the processes of heterostasis and homeostasis (ecosystems theory), and d) optimal development is described, namely as being characterized by interactions between the individual and his/her life contexts which benefit both the individual and the relevant life contexts (ecosystems theory and developmental systems theory).

The *general systems view of growth and development* meta-theory (Amerikaner 1981) highlights aspects pertaining to the individual as a system; reference is made to a) the permeability of the boundaries of the individual, which could be linked to the aspect of the communication networks between the individual and his/her life contexts (ecosystems theory), b) the internal information feedback-loops within the individual as a system, and c) a central structure, which can be interpreted as identity, governing the system.

Having set out the parameters of the meta-theoretical matrix, the next step is to define the aspect of development. For the purposes of the proposed model, the definition by Bronfenbrenner and Morris (1998), whose theorizing can be classified under developmental systems theory (Lerner 1998), is applied. Development is described as follows: “Human development takes place through processes of progressively more complex reciprocal interaction between an active, evolving biopsychological human organism and the persons, objects and symbols in its immediate external environment” (Bronfenbrenner and Morris 1998: 996). The developmental process is influenced by, *inter alia*, the characteristics, skills and knowledge of the individual, as well as by the characteristics of the environment (Bronfenbrenner and Morris 1998). This definition highlights the notion of development taking place on the relational interface, but focuses primarily on the fairly regular interactions

between individuals and their immediate life contexts, accentuating the fact that these interactions need to become more complex as development progresses. Furthermore, it highlights the fact that development is not only effected by interaction with other people, but that it may also include having to deal with life circumstances. The reference to interaction on a symbolic level indicates that interaction with symbols through contemplation, may affect development too. The main advantage of this definition of development is that it provides guidelines for an intervention: developmental change could be brought about by, *inter alia*, the facilitation of the skills and knowledge needed to effect positive interaction with the life contexts.

The definition by Bronfenbrenner and Morris (1998) can be expanded by the definition of what positive development entails, by Lerner *et al.* (2002). Lerner *et al.* (2002) define positive development in the youth as being accomplished by means of relationships between the youth and their life contexts, characterized by a process in terms of which the youth effect changes in themselves to adapt to their life contexts, while also making changes to these life contexts to support themselves. These exchanges will not only benefit the youth, but will also be beneficial to their life contexts, e.g. their family or community. Lerner *et al.* (2002) elucidate and clarify this viewpoint of optimal development, as described by developmental systems theory, by describing it in a manner that is more practically applicable; thriving youth will not only “contribute to self”, but will “transcend themselves” in order to “contribute to others” – for example their community – which presupposes a moral aspect. Owing to the fact that this definition of positive development features on a more abstract level, it is not applied, in the proposed model, in order to guide the identification of thriving outcomes, but rather, in order to address an important facet of development and the facilitation thereof. This description of positive development by Lerner *et al.* (2001) and Lerner *et al.* (2002) indicates that the youth should not only be encouraged to engage in endeavours to help others, but that a process of enabling them to clarify their values should be facilitated, in order to cultivate an

awareness, on their part, of the need to refrain from behaving in ways that are detrimental to others.

In view of the fact that psychosocial theory and developmental systems theory are compatible, the latter could be applied in order to provide guidelines regarding the skills and knowledge to be facilitated by means of an intervention, based on the PYDI model.

Against the background of the assumptions constituted by the meta-theoretical framework, as well as the definitions of development and positive development (thriving), the hypotheses pertaining to the PYDI model should be formulated in order to bring greater clarity regarding the implementation of the model by means of a programme. On the hypothetical level, the PVEST and the SOC model, in combination, configure the basic framework of the PYDI model. Brändstadter (1998), from a developmental systems perspective, offers a focus on development, which enables PVEST and the SOC model to be used as complementary developmental models. Individuals are viewed as being autonomous regarding their development, but it is pointed out that it should be kept in mind that unexpected events could alter the course of their lives (Brändstadter 1998). The SOC model could be viewed as being in keeping with the notion of individuals actively regulating their development, whereas PVEST has a bearing on the scenario of being confronted by unexpected events, which could be interpreted as stressors. However, the compensation aspect of the SOC model is in keeping with the latter scenario too. For the purposes of the PYDI model, it is postulated that the youth have the ability, at least to some extent, to direct their development by means of the formulation and effective pursuit of goals, relevant to their lives. The effective allocation of time, energy and resources should advance their development (SOC model). Being confronted by unexpected events, however, could interfere with these goal-directed endeavours. In the case of the latter scenario, the youth will have to apply effective strategies in order to overcome these obstacles in a growth-enhancing manner (PVEST). If the means that are necessary to achieve these goals are compromised, compensatory measures are indicated as

ways to achieve these goals (SOC model); or, as a last resort, these goals must be adapted (Lerner *et al.* 2001). PVEST describes the navigation of all stressors (Swanson *et al.* 2002), although this could also be interpreted as a description of the navigation of obstacles to goal pursuit. The basic framework, constituted by the PVEST and the SOC model, describing developmental change in the youth, is not presented as a comprehensive exposition of development. Rather, this framework provides one perspective on the development of the youth, taking cognizance of the fact that development has many facets.

The key questions about the bi-directional interactions between the youth and their primary life contexts, pertain to the nature of these interactions, with a view to operationalizing them for the purposes of the implementation of the envisaged model. The answer to these questions could be found by means of a consideration of the construct of self-regulation (Zimmerman 2005).

Although, for the purposes of the PYDI model, positive development is defined from a developmental systems perspective, more specific indicators of thriving are needed. Two concepts featuring in positive psychology, namely those of self-efficacy and hope, are used for the latter purpose, as well as to describe the motivational aspects of self-regulation, which constitutes the proposed “mechanism” by means of which the interactions with the life contexts are established. Both the concepts of hope and self-efficacy refer to the pursuit of goals and to people’s perception of their performance at the latter, which, as explained by Magaletta and Oliver (1999), will influence future attempts at similar goal pursuits. Research by Magaletta and Oliver (1999) has shown these two constructs to be related, yet separate constructs. Hope can be indicative of the participants’ perception of their ability to formulate and pursue goals, as postulated by the SOC model, whereas self-efficacy refers to their perception of their ability to apply skills to attain specific goals. Taking cognizance of the fact that self-efficacy is domain-specific (Maddux 2002), self-efficacy as a thriving indicator needs to be specified and aligned with the envisaged model. In this regard, the concept of coping

self-efficacy can be operationalized as an indication of the participants' view of their ability to use adaptive strategies in coping with stressors, as postulated by PVEST. In the envisaged model, the concept of social self-efficacy will be indicative of the ability to manage interactions with other people, which constitutes an important facet of self-regulation (Demetriou 2005), *inter alia* during goal pursuit or the navigation of stressors.

It is postulated that the following deductions could be made regarding the measurement of the effect of an intervention which could succeed in raising the levels of hope and coping- and social self-efficacy in the participants: a) the intervention should succeed in facilitating the skills necessary for the formulation of goals, the pursuit of these, as well as social skills and the skills needed for coping, b) the acquisition of these skills should lead to success-experiences in the participants' everyday lives, and c) the motivation of the participants towards active and effective engagement in relations with their life contexts (self-regulation) in future should be enhanced. An increase in the levels of these phenomena could indicate that the developmental trajectory of the participants has been facilitated in a more positive direction, and that there is an increased likelihood of development continuing along this more positive trajectory in future.

In order to operationalize the PYDI model for the purposes of a programme, which could be evaluated in order to expand the existing body of theory in PYD, the final stage is to formulate the model more parsimoniously.

Basic components, assumptions and hypotheses of the PYDI model

The youth themselves constitute the primary system of focus (meta-assumption; MA). The focus for developmental change is on the relational interfaces between a system and its supra-systems, and in particular on the bi-directional interactions between the youth and their primary life contexts, e.g. peers and families (MA). It is assumed that the youth are actively involved in these interactions and that they are thus actively involved in their own

development (MA). The interactions with the life contexts are executed by means of the process of self-regulation (theoretical proposition; TP). Developmental change in the youth can thus be accomplished by facilitating their self-regulatory processes (constructs and processes instrumental in developmental change; CP). More effective self-regulation can be accomplished by means of the facilitation of the relevant skills and knowledge (CP). The specific contents and foci regarding the latter are elucidated in terms of the developmental tasks pertaining to early adolescence (CP).

Besides the focus on the relational interface, the intra-psychic aspects of the youth, such as the ability to interpret intra-psychic information regarding emotions, as well as a sense of personal identity, are important too (MA).

The focus on the bi-directional interactions is circumscribed to the situations pertaining to: a) the navigation of stressors, and b) the formulation and effective pursuit of goals (TP).

More effective self-regulation will result in the facilitation of the developmental trajectory in a more positive direction- and thus, in thriving (TP). Thriving is reflected by an increased a) coping self-efficacy, which reflects an increased efficacy regarding the navigation of stressors and obstacles to goal pursuit, b) social self-efficacy, which reflects an increased efficacy in respect of interactions with other people, and c) hope, which reflects an increased efficacy in terms of the ability to formulate and pursue goals (TP).

Conclusion

In this article, a theoretical model for a positive youth development intervention (the PYDI model) has been presented. The PYDI model has been formulated by means of the integration of three compatible meta-theories as an overarching framework, followed by an integration of more specifically selected theories from PYD, developmental psychology and related sub-fields in order to form a theoretical rationale or basis for the development of an intervention to

enhance positive youth development. This proposed PYDI model thus integrates meta-theoretical assumptions and hypotheses. A further advantage is that, in providing a description -albeit not on a comprehensive basis- of the developmental processes constituting developmental change, the PYDI model offers guidelines for an intervention. Not only does it indicate the areas of content that need to be addressed; it also describes a process of developmental change that could be facilitated in the youthful participants.

The most important advantage of the PYDI model is that, in providing a theoretical basis for a PYD intervention, the model can be evaluated. This could be done by means of pre-, post- and follow-up quantitative measurements of, *inter alia*, self-efficacy and hope in a mixed-method design, as well as by means of a qualitative assessment of the intervention, after the intervention has been conducted, and also during a follow-up opportunity. The evaluation of the model should provide information which could inform the hypothetical stratum (Madsen 1988) of PYD, thus comprising a step towards better integration between the hypothetical and empirical levels of PYD, as well as the expansion of theory relating to PYD.

Using the PYDI model as a theoretical foundation, the next step in devising an intervention will be the operationalization of the model. The skills needed to facilitate self-regulation, as well as the ways in which these are connected in order to constitute the process of self-regulation, should be identified. Subsequently, the specific content-areas regarding the facilitation of skills should be highlighted, e.g. the promotion of social skills within the context of the peer group. A literature review regarding the various skills that have been identified, e.g. the formulation of goals, will provide more in-depth information relating to these skills, as well as specific ways in which they could be facilitated effectively.

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Section 3: Article 2

Towards a theory-based positive youth development intervention.

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African Association for Child and Adolescent Psychiatry and Allied Professions

3.2 Manuscript

Towards a theory-based positive youth development programme

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Abstract

The aim of this study was to develop and describe an intervention programme for young adolescents, guided by the Positive Youth Development Intervention (PYDI)-model, which provides a perspective on the facilitation of development in a more positive trajectory. The key concepts and processes suggested by the PYDI-model were further analyzed and broadened with the aid of existing literature for operationalization and application purposes. Self-regulation is the central process effectuating developmental change, within the contexts of: a) the navigation of stressors, and b) the formulation and effective pursuit of relevant personal goals. Self-regulation, together with a developmental perspective, provided guidelines regarding the relevant skills and knowledge. These are the facilitation of: a) identity development, b) the formulation of goals congruent with the latter, c) decision-making skills, d) coping skills, e) the regulation of affect and cognition, and f) socialization skills. The relevant content areas and the manner of the facilitation of these are indicated. The theory-based programme can be implemented and its effect empirically evaluated. Levels of hope, coping self-efficacy and social efficacy may serve as, *inter alia*, indicators of developmental change.

Keywords: Positive youth development, early adolescence, self-regulation, process-related, developmental systems theory, hope, social self-efficacy, coping self-efficacy.

Towards a theory-based positive youth development programme

Introduction

The positive youth development (PYD) literature demonstrates a lack of integration between theory and application (Catalano *et al.* 2002; Roth and Brooks-Gunn 2003), which hampers the progress of this field. This study takes a step towards the integration of theory and practice through the development of a theory based intervention programme to facilitate positive youth development. The PYDI model provides one possible perspective on the facilitation of the development of the youth in a more positive trajectory (cf. manuscript 1/ Brink and Wissing). The aim of the current study is to develop an intervention programme, based on the PYDI model, for the facilitation of the development of young adolescents in a more positive direction. The intervention focuses on young adolescents, since this developmental stage is characterized by changes in all spheres of human functioning (Newman and Newman 2003). Such disruptions may give rise to an openness towards personal growth and development (Richardson 2002), thus causing early adolescence to be an ideal stage for intervention.

The process of the development of the intervention will entail: a) the identification of the relevant phenomena and processes to be developed as indicated in the PYDI model, and b) indicating how these identified phenomena and processes could be facilitated by means of the suggested intervention. A theoretical grounding will be provided for each of the relevant aspects. In order to realize the goal of developmental validity (cf. Bronfenbrenner 1980), namely that of facilitating the relevant phenomena and processes in such a manner that they will be internalized and generalized to the everyday lives of the participants, thereby impacting development significantly, the manner of facilitating the relevant contents will be considered too.

Firstly, the PYDI model as the theoretical basis for the envisioned programme will be briefly described.

The Positive Youth Development Intervention (PYDI) model

The PYDI model configures the basic framework which will provide guidelines for the development of the intervention. It will be expounded briefly in terms of the meta-assumptions, the theoretical propositions, as well as the phenomena and processes which support development

(see manuscript 1/ Brink and Wissing).

The basic components, assumptions and hypotheses of the PYDI model

The youth themselves constitute the primary system of focus (meta-assumption; MA). The focus for developmental change falls on the relational interfaces between a system and its supra-systems, with particular reference, in this case, on the bi-directional interactions between the youth and their primary life contexts, e.g. their peers and families (MA). It is assumed that the youth are actively involved in these interactions and thus play an active role in their own development (MA). The interactions with the life contexts are executed by means of the process of self-regulation (theoretical proposition; TP). Developmental change in the youth can thus be accomplished by facilitating their self-regulatory processes (constructs and processes instrumental in developmental change; CP). More effective self-regulation can be accomplished by means of the facilitation of the relevant skills and knowledge (CP). The specific contents and foci regarding the latter are elucidated by the developmental tasks pertaining to early adolescence (CP). Besides the focus on the relational interface, the intra-psychic aspects of the youth, such as the ability to interpret intra-psychic information regarding emotions, as well as a sense of personal identity, are important too (MA). The focus

on the bi-directional interactions is circumscribed to the situations pertaining to: a) the navigation of stressors, and b) the formulation and effective pursuit of goals (TP). More effective self-regulation will result in the facilitation of the developmental trajectory in a more positive direction; in other words, it will result in thriving (TP). Thriving is reflected by an increased a) coping self-efficacy, which reflects an increased efficacy regarding the navigation of stressors and obstacles to goal pursuit, b) social self-efficacy, which is indicative of an increased efficacy regarding interactions with other people, and c) hope, which points to an increased efficacy regarding the ability to formulate and pursue goals (TP).

The phenomena and processes to be facilitated

Based on the PYDI model, the suggested intervention allocates a core role to self-regulation in effectuating interaction with the life contexts. In order to facilitate the self-regulatory processes of the participants, an understanding of the process is important, not only for the purpose of identifying the relevant skills and knowledge, but also in order to facilitate an understanding of the process as such, on the part of the participants. This understanding should facilitate their ability to adopt a meta-perspective on self-regulation, which, according to Zimmerman (2005), is one of the key aspects in executing the process.

The pivotal process of self-regulation as a guideline

Boekaerts, Pintrich and Zeidner (2005) observed that the psychology literature had been addressing self-regulation in an uncoordinated manner. They therefore proceeded to make a compilation based on the work of different authors, in order to bring about greater clarity. This compilation was subsequently used as the primary reference regarding self-regulation. The suggested intervention applies a social-cognitive view of self-regulation, as the circular

viewpoint (Zimmerman 2005) in this regard is compatible with ecosystemic theory (Moore 2000), one of the meta-theories to the PYDI model (cf. manuscript 1/ Brink and Wissing).

The suggested intervention applies the definition by Zimmerman (2005: 14), according to which self-regulation refers to: “self-generated thoughts, feelings, and actions that are planned and cyclically adapted to the attainment of personal goals.” The process-related model of self-regulation by Boekaerts and Niemivirta (2005), which is based on the model by Heckhausen and Gollwitzer (1987 in Boekaerts and Niemivirta) and Gollwitzer (1990 in Boekaerts and Niemivirta), provides a clear and applicable description of the process of self-regulation. This model, in combination with a description of the phases of self-regulation, as proposed by Schunk and Zimmerman (1998 in Zimmerman 2005), constitutes the model of self-regulation, which guides the proposed intervention.

Keeping in mind that self-regulation is a circular process, the arbitrarily chosen first phase is that of the *appraisal* of the current situation, which includes the appraisal by an individual of a) the aspects pertaining to the context, *inter alia* the available resources, b) his/her intra-psychic aspects, including his/her values, beliefs and goal system pertaining to the domain of focus at the time, and c) his/her repertoire of knowledge and skills needed to navigate towards his/her goals in a specific domain. Positive appraisals will facilitate growth-enhancing self-regulatory experiences, whereas negative appraisals may threaten a person’s sense of self, resulting in the person attempting to protect himself/herself from failure by not fully participating in effective self-regulatory practices (Boekaerts and Niemivirta 2005). Appraisal is followed by the *formulation of goals* regarding the relevant situation, and a commitment to these goals. In order to pursue these goals, strategies must be devised. The *decision-making* phase is primarily centred on the planning and selection of actions to follow and ways in which to implement these in order to reach the desired goals. Problem-solving skills support this process of devising strategies. Once the *strategies* have been devised, it is necessary to proceed with the *implementation* of these. Self-efficacy beliefs, as well as

having goals which resonate with the self, enhance motivation regarding the process of carrying the application of a strategy through (Zimmerman 2005). Besides motivation, the regulation of affect is crucial to perseverance in goal pursuit. During this phase of implementation, meta-cognition is of key importance; “self-instruction” and “self-observation” are two of the mechanisms that could be applied to facilitate the effective execution of strategies. The latter refers to a continuous process of monitoring progress regarding the pursuit of a specific goal (Zimmerman 2005). If the process is not on track, adjustments should be made, e.g. changing the strategy or even adjusting the initial goals (Winne 1997; Winne and Perry 2000 in Boekaerts and Niemivirta 2005). The navigation of this scenario, where a strategy has proved to be ineffective, is of crucial importance; it is at this point that people may either choose self-debilitating pathways such as aborting further attempts at goal pursuit, or choose to enhance their efforts (Boekaerts and Niemivirta 2005).

The final phase, namely the *self-reflection phase*, is clearly and comprehensively described by Bandura (1986 in Zimmerman 2005). This phase is characterised by reflection on performance regarding the implementation of strategies. Different criteria can be applied in order to reflect on performance: People can judge their performance against their set goals, previous performances or against the performance of others. Cognitive appraisal plays an important role in the interpretation of these observations. People may, for example, attribute their failure at a specific goal pursuit to themselves, which would influence their beliefs about themselves and therefore also their future attempts at self-regulation in similar circumstances (Boekaerts and Niemivirta 2005).

In summary, it is not only cognitive skills, especially meta-cognitive skills, but also belief systems regarding the self, the ability to regulate affect, motivation towards the self-regulatory process, as well as appraisal, which comprise important constituents of the self-regulation process.

The demarcation of the relevant content regarding the identified phenomena and processes

An understanding of the different aspects of self-regulation facilitates the identification of the skills and knowledge to be developed by the suggested intervention. Goal-formulating skills, as well as decision-making and problem-solving skills, are relevant. Goals that resonate with a person's sense of self will lead to increased motivation regarding the pursuit of these; the suggested intervention should thus facilitate a process of *identity exploration* in the participants. In order to pursue goals, effective strategies must be devised and applied.

Problem-solving skills are not only relevant to the repertoire of the participants in the intervention for the purpose of devising strategies, but, together with *coping skills*, also have a role to play regarding the navigation of any obstacles to goal pursuit that may arise.

Socialization skills should also be addressed by the suggested intervention. Owing to the fact that the life path is not traversed in isolation, self-regulation will sometimes entail having to regulate other people too (Demetriou 2005).

Besides the acquisition of the skills necessary to execute each of the phases of self-regulation, the suggested intervention will also address aspects that could influence the effective execution of the process. The suggested intervention should therefore facilitate: a) an understanding of the sequencing of the different phases of the process, b) the regulation of affect, which plays a key role regarding the effective completion of the process (Bandura *et al.* 2003), and c) the regulation of cognition, especially regarding the appraisal of the self, as well as of the relevant situational aspects (Boekaerts and Niemivirta 2005).

Each of the identified phenomena, e.g. the exploration of identity, is addressed from varying viewpoints in psychology as a discipline. Consequently, a theoretical rationale for the facilitation of each of these needs to be selected and formulated. This process was initiated by means of a literature review: Psychinfo, Academic Search Premier and ERIC were the data-

bases searched for relevant articles. Relevant books were accessed by means of a search of the catalogue of an academic library. In view of the fact that the literature addresses each of these phenomena from different perspectives, and also within a broader age context than that of the youth, the next step was to identify guidelines for the demarcation of contents that were relevant to the suggested intervention. Therefore, the following criteria were applied in order to select the relevant literature: a) compatibility with the PYDI model, b) compatibility with the strength-based focus of PYD, and c) applicability regarding the developmental stage of early adolescence.

Principles guiding the application aspects of the intervention

The PYDI model envisages the effectuation of development on the relational interface between individuals and their primary life contexts, and postulates that this interaction, on a process-related level, is accomplished by means of self-regulation (cf. manuscript 1/ Brink and Wissing). Everybody applies self-regulation, but not necessarily in an effective manner (Zimmerman 2005). The purpose of the proposed intervention is to facilitate the self-regulatory processes of the participants, in order to facilitate their developmental trajectory in a more positive direction. The self-regulatory processes should be facilitated to such an extent that they will be generalized to, and realized in the contexts of the participants' everyday lives. To accomplish the latter, the manner of the presentation of the contents is of prime importance. The participants should not only a) be motivated to assimilate the content of the intervention, but should also b) acquire the skills to such an extent that they will be able to - and motivated - to apply these skills in contexts outside that of the intervention.

Although Roth and Brooks-Gunn (2003) point out the need for information regarding application in PYD programmes and, although these authors have investigated aspects such as the programme activities and atmosphere, they have not yet expounded this aspect

comprehensively. More recently the aspects of commitment to and engagement in programme activities have been researched (Borden *et al.* 2005, Fiester, Simpkins and Bouffard 2005, Lowe Vandell *et al.* 2005, Bartko 2005, Weiss, Little and Bouffard 2005). However, Bartko (2005) and Larson (2006) respectively indicate that the understanding of the presentation of programme activities and the role of the facilitator is not comprehensive enough.

The salient aspects of presentation, as highlighted by research regarding engagement in and commitment to programmes, could be explained by, *inter alia*, self-determination theory, as formulated by Deci and Ryan (2000). Self-determination theory (SDT) originates from the positive psychology paradigm, which converges with PYD in terms of a strength-based focus (Peterson and Seligman 2004). Self-determination theory will be one of the theoretical guidelines regarding presentation in the suggested intervention. This theory posits that a context which provides for the fulfilment of the three basic needs of autonomy, competence and relatedness, will nurture intrinsic motivation regarding the pursuit of goals and growth-enhancing experiences (Brown and Ryan 2004; Deci and Ryan 2000). The need for autonomy refers to a person's need to act in ways that are synchronistic to his/her sense of self. An awareness of the possibility to choose is necessary in this regard. In an educational context, autonomy could be addressed by allowing for choice and criticism, as well as by indicating the relevance of the content (Assor, Kaplan and Roth 2002). To the latter, Brown and Ryan (2004) add the aspect of allowing for the sharing of different perspectives, as well as for freedom of choice regarding the participants' "self-direction". The need for competence refers to, *inter alia*, receiving positive feedback, not being criticized and being provided with experiences of "optimal challenge" (Deci and Ryan 1985 in Brown and Ryan 2005). The need for relatedness refers to feeling accepted and cared for (Brown and Ryan 2004), and also has a bearing on the need to refrain from behaving in an overly-controlling fashion (Ryan, Stiller and Lynch 1994 in Brown and Ryan 2004).

In accordance with this theory, the provision of an intervention context aimed at addressing the three mentioned needs, should increase the likelihood of the participants becoming intrinsically motivated towards the internalization of the content presented to them. Furthermore, in accordance with SDT, a context providing for the meeting of these needs should enhance and facilitate the process of pursuing their goals and dreams (Deci and Ryan 2000). The need for autonomy could be supported by facilitating a sense of their own identity in the participants, as well as by facilitating the formulation of goals congruent with this enhanced sense of their identity. Furthermore, the participants' need for autonomy could be addressed by the provision of opportunities for sharing their opinions, and also for discussing ways of coping which they find helpful in their own lives, with the other participants in a small-discussion group format.

The need for competence is the most difficult to address during an intervention that is restricted by time constraints; ideally speaking, ample time should be spent with each participant in order to provide individual feedback regarding his/her successes. However, within the limits of such constraints, the suggested intervention could apply other, more indirect strategies. The latter could be accomplished through the use of questionnaires, in terms of which the participants could identify the aspects of a certain skill, e.g. coping skills, which they do apply successfully, while also identifying the aspects that they need to work on. Likewise, during role-plays conducted in pairs for the purpose of learning to apply certain skills, e.g. social skills, each participant could be supplied with a checklist providing a breakdown of the basic steps of a skill, in order to provide feedback on the steps that his or her friend is applying successfully. During the course of the intervention, the participants could be encouraged to collaborate, in small groups, in devising a simple community project. They could be presented with a work-chart, structuring the different steps pertaining to their projects, e.g. identifying a need, setting goals and devising strategies. These steps could be carried out in accordance with the concurrent contents of the programme, in order to provide

opportunities for the application of the relevant skills. The participants' progress, as indicated on the work-chart, could be monitored on a weekly basis, with positive feedback being provided regarding all the positive aspects of their attempts.

In order to meet the need for relatedness, the facilitator should expend time and effort regarding the enhancement of positive relationships with the participants. Erickson (1968: 129) indicates that adolescents are highly sensitive towards being "ridiculed" and exposed. Therefore, an environment in which the participants will feel safe enough to participate is of prime importance. In order to create such an environment, guidelines for behaviour could be formulated, in collaboration with the group, e.g. not disclosing personal information concerning other participants. Furthermore, the exercises conducted during the intervention could be completed without disclosure to the larger group. Creating an atmosphere and context that the young participants will be able to identify with and enjoy should enhance experiences of relatedness and belonging. This could be accomplished, *inter alia*, by letting the participants bring their choice of music to the sessions, to be played during the completion of exercises.

The second aspect regarding application pertains to the ways in which the relevant skills could be facilitated in order to enable the participants to assimilate these skills to such an extent that they would be able to apply them in contexts other than that of the intervention. Clear guidelines are provided Zimmerman's (2005) exposition of the steps of the process of the acquisition of self-regulatory skills. These steps are comprised, consecutively, of: a) the observational level, during which the particular skill is demonstrated or described (Zimmerman and Blom 1983 in Zimmerman 2005), b) the imitation of the skill, with feedback and reinforcement (Kitsantas, Zimmerman and Cleary 1999 in Zimmerman 2005), c) the provision of opportunities to practise the skill in circumstances structured by the facilitator, and d) after the prior steps have been mastered, practising the skill in other contexts.

An intervention that is subject to time constraints cannot realize all of these levels of skill acquisition comprehensively; the main focus will inevitably fall mostly on the observational level. In order to lay a solid foundation regarding the first level, the information could be presented in ways aimed at facilitating both the consolidation of the information and the quick accessing of the relevant information in situations in which the participants might need it. In accordance with the research by Lauver and Little (2005), indicating the importance of ensuring that programme activities are fun-filled, and age-appropriate, a greater susceptibility to the learning experiences and thus a better integration of programme contents should be enhanced by presenting the programme material in a graphic and design format that young people will be able to identify with. In order to aid the retrieval of the information, the material could be presented by, *inter alia*, creating associations with a cellphone key-pad and acronyms. Other ways of facilitating access to relevant information could include presenting the participants with objects for everyday use, imprinted with cues regarding important skills, e.g. a bookmark depicting the acronym for decision-making. The second and third levels of self-regulatory skill acquisition could be realized through the provision of opportunities to apply these skills within the group context, e.g. by completing exercises, structured in a manner aimed at demonstrating the consecutive steps of the skill, and by means of role-plays, with each partner providing feedback to the other. The community project could comprise a way of providing a structured exercise for the application of some of the skills that are important constituents of self-regulation, in a context other than that of the group. The latter concept of using outreach activities as opportunities to exercise skills, is applied in the Adolescent Social Action Program (ASAP) too (Velarde, Starling and Wallerstein 2002). Facilitating the fourth level of self-regulatory skills acquisition, namely the generalization of the application of the acquired skills to other contexts, presents a challenge. Traditionally, programmes address this aspect by means of homework assignments. However, in the school-attending youth, there may be a resistance to such assignments, because of the obligation to

cope with homework on a daily basis. One way of overcoming this obstacle may be to encourage the participants to apply the skills of a particular session during the coming week and to provide an opportunity for feedback on their experiences during the following session.

Effective self-regulation does not only require mastery of the skills constituting the basic building blocks of the process, but also an understanding of the sequencing of these. Regarding the facilitation of an understanding of self-regulation as a process, it should be taken into consideration that the potential participants in the suggested intervention are still in the process of the acquiring formal-operational thinking skills (Newman and Newman 2003); not all participants will be conversant with these more abstract levels of reasoning. The suggested intervention could handle this scenario by conveying the more abstract information on a more concrete level. Different symbols could be used to represent each of the consecutive stages of the process, e.g. the symbol of a flag may represent the aspect of the formulation of goals. These symbols could figure prominently in the programme material related to each of the relevant aspects.

The suggested intervention programme

The intervention is designed to be applied during twelve weekly sessions, of one hour's duration per week. For evaluation purposes, it would be easier to have time allocated for such an intervention in the context of the school setting, during school hours. However, a more comfortable venue, other than the school premises, may be more conducive to learning experiences.

The suggested intervention will be expounded in terms of the different constituents that comprise the intervention. The goals, theoretical foundation and method of facilitating each of these constituents will be indicated.

The first constituent: Setting the scene and facilitating an initial understanding of self-regulation (one session)

The goals of this session are: a) to initiate the process of facilitating the intrinsic motivation of the participants regarding the content of the intervention, and their own development, and b) to facilitate a basic understanding of the process of self-regulation, in order to enable the participants to acquire a basic understanding of the sequence of the different aspects of self-regulation that are to be addressed in future sessions.

The principles of self-determination theory are relevant, although these will be applicable in all sessions of the intervention. The needs in respect of relatedness and autonomy, especially, will be salient in this session. Regarding the facilitation of self-regulation, the proposed model regarding self-regulation is applicable.

In order to address the need for relatedness, the facilitator and the group must become acquainted; an “ice-breaker” exercise could be used for this. A second way of addressing the need for relatedness could be effectuated by involving the participants in the formulation of guidelines for behaviour pertaining to the group sessions in order to enhance their experience of the group environment as being safe. The need for autonomy could be addressed in a way which has a second purpose, namely that of introducing the participants to a relaxation exercise, which is an important coping mechanism: the group could be guided to visualize a personal journey of their choice, e.g. travelling to a new country or hiking in unknown territory. The latter could serve the purpose of representing participation in the intervention as a personal journey, unique to each participant.

Self-regulation could be explained by presenting the participants with a laminated graphic representation of a path, with symbols depicting the different aspects of self-regulation, which also represent the different constituents of the intervention. These symbols would include: a) a question mark, representing the aspect of the process of exploring one’s identity in order to formulate goals which are attuned to one’s sense of self, b) a flag at the end

of the pathway, representing the aspect of the formulation of goals, c) a pathway, with a footprint, depicting the choice of strategies (pathways) in order to reach the goals, d) a rock representing a stumbling block, as well as a symbol portraying tools, respectively depicting the stumbling blocks that may present themselves during the pursuit of goals and the skills necessary to navigate these, and, e) the symbol of a dove above the pathway, depicting the aspect of adopting a meta-perspective of one's progress towards the set goals, as well as adapting the strategies or goals, when one's progress is not on track.

The second constituent: The facilitation of a sense of identity (two sessions)

The goals are: a) to enhance the process of the youth's exploration of their identity, b) to highlight aspects of their identity, including their values, in order to enhance a commitment towards these, and c) to facilitate an appreciation of their own uniqueness on the part of the participants.

Effective self-regulation, as applied within the PYDI model, entailing the effectuation of development by means of the pursuit of goals which are aligned to a person's intra-psychic resources, is impossible without a sense of identity (cf. manuscript 1/ Brink and Wissing). Early adolescence is characterized by the exploration of identity, *inter alia* in the context of peer group affiliation (Newman and Newman 2003). Identity is only consolidated in late adolescence (Patterson, Sochting and Marcia 1992). Consequently, the suggested intervention should not focus on facilitating a consolidation of identity, but on facilitating the processes relevant to the acquisition of identity.

Identity is a complicated construct; much theorizing on the subject has been conducted from different theoretical perspectives (Finkenauer *et al.* 2002; Van Hoof 2001). The suggested intervention applies Erikson's theorizing as a foundation of the view of identity, because of its compatibility with the PYDI model, since both consider the interaction between individuals and their life contexts (cf. manuscript 1/Brink and Wissing, Newman and Newman

2003). A comprehensive overview regarding theorizing about identity, based on the foundation of the views of Erikson, and expanded on by other theorists, is provided by Schwartz (2001) and is taken as the point of departure. The suggested intervention focuses primarily on one of the aspects of identity, namely the concept of personal identity, which features on the relational interface between an individual and his/her life contexts (Erikson 1974 in Schwartz 2001). The concept of personal identity refers to, *inter alia*, a person's goals, values and characteristic ways of behaving (Erikson 1974 in Schwartz 2001). Furthermore, the concepts of goals and values are integral to the PYDI model (cf. manuscript 1/ Brink and Wissing). The process-related view of identity put forward by Berzonsky (1990 in Schwartz 2001) and Berzonsky and Adams (1999 in Schwartz 2001) describes the acquisition of identity as a continuous process, which is accomplished by means of the processes of exploration and commitment. Exploration could be defined as the process that people apply to gain information regarding themselves from their life contexts, in order to make important decisions about their lives (Grotevant 1987 in Schwartz 2001), whereas the concept of commitment refers to decisions to support specific goals and values (Marcia 1980, 1988 in Schwartz 2001). The exploration of identity in adolescents is elucidated by Roeser and Lau (2002: 93): “[it is] discovering who one is, who one belongs with, what one is good at, and where one is going in future.”

Identity exploration could be facilitated by means of an informal questionnaire regarding the character strengths and virtues, as identified by Peterson and Seligman (2004); this focus regarding identity is in accordance with the strength-based focus of PYD (Benson 1997).

These twenty-four character strengths and virtues are defined as processes or mechanisms by means of which the *virtues* are manifested (Peterson and Seligman 2004) and could thus be interpreted as characteristic ways of interacting with the life contexts. This process-related view is in line with the PYDI model (cf. manuscript 1/ Brink and Wissing).

The constellation of signature strengths in a specific person is viewed as unique to that person, and also as relatively stable (Peterson and Seligman 2004), and could thus be viewed as an indication of identity. The facilitation of identity could furthermore be accomplished by enhancing each participant's awareness of his/her value system (Erikson 1974 in Schwartz 2001). Values or virtues, common across different cultures, were identified by Peterson and Seligman (2004). For the purposes of the suggested intervention, these could be reformulated in more "user-friendly" terms, e.g. the term "temperance" could be reformulated as "self-discipline". The participants could be provided with a list of these values and virtues, followed by a small-group discussion regarding the role of moral guidelines for behaviour. Following this discussion, the participants could complete an exercise in which they identify the values that are important to them and which they would like to use as guidelines concerning their behaviour. These values could be written down on a drawing of a shield, symbolizing the protective nature of values. An appreciation by every participant of his or her uniqueness could be facilitated by means of reading a story (metaphor) (Lucado 1997) with this theme to the group.

It should be kept in mind that the facilitation of identity should not be limited to the two sessions allocated for this purpose; identity is of primary relevance and could be facilitated in all sessions of the intervention, e.g. by facilitating an awareness in the participants of their characteristic ways of coping with problems. The facilitation of a sense of identity will configure the foundation for the first step of self-regulation, namely the formulation of goals.

The third constituent: The formulation of goals (two sessions)

The goals are: a) to empower the participants with the relevant skills, b) to facilitate a process of becoming aware of some of their talents in order to formulate goals in relation to these, and c) to enhance the participants' motivation towards the pursuit of their goals.

The description of the relevant aspects of goal formulation, as expounded by Lyubomirsky (2007), is used to facilitate these skills in the participants. One of the key aspects of successful goal formulation and pursuit, according to Lyubomirsky (2007), is “to choose ones that fit you well”. The concept of “personal expressiveness” as defined by Waterman (2004) elaborates on this aspect of compatibility between a person’s goals and his/her talents. Personal expressiveness refers to the aspect of an inner motivation regarding the pursuit of goals related to one’s inherent potential, and is related to the concept of “flow” as described by Csikszentmihalyi (1975,1988 in Waterman 2004). Research by Waterman (2004) reveals a correlation between an experience of personal expressiveness regarding a specific activity and a person’s perception that this activity is attuned to his/her potential. The suggested programme applies this concept of personal expressiveness to help the participants to identify at least one of their talents. The rationale regarding the latter is: a) to heighten the participants’ future awareness of their potential (on the basis of their experiences of personal expressiveness), and b) to increase the motivation towards, and consequently the chances of success at the pursuit of their goals. The aspect of motivation regarding goal pursuit is also addressed by the self-determination theory of Deci and Ryan (2000); goals which are congruent with a person’s sense of identity will, together with experiences of competence and relatedness, increase the intrinsic motivation to pursue these goals.

The session could be opened with a group discussion on the relevance (or irrelevance) of goals to modern-day youth. The discussion could be guided to convey the notion that goals can act as pointers regarding one’s focus and choice of activities on the life path (Locke and Latham 2002). The participants should furthermore be guided towards an understanding of the fact that progress towards one’s goals should be continuously monitored, and that strategies should be adapted, and/or goals reformulated, should the process not be on track.

The relevant aspects of the skill of goal formulation, as described by Lyubomirsky (2007), could be demonstrated by means of, a) a table-top soccer game, e.g. to illustrate the

importance of keeping one's eye on the goal, b) graphic illustrations of, *inter alia*, the aspect of breaking goals down into sub-goals, and c) providing the relevant information on an information sheet. A short informal questionnaire based on the *Personal Expressiveness Activities Questionnaire* (PEAQ) by Waterman (1998 in Waterman 2004) could be completed in order to encourage the participants to identify at least one of their talents (the exercise should have the additional effect of enhancing a sense of identity too). The participants could then complete a structured exercise which cues the formulation of goals in relation to one of their talents, as identified in the previous exercise.

The aspect of the community project could be introduced during this phase of the intervention. The participants could be encouraged to identify a need in their community, and to formulate a goal(s) for their projects.

Although decision-making skills must be applied in order to choose specific goals, these skills are also of particular importance for the choice of strategies in the pursuit of the chosen goals (Zimmerman 2005).

The fourth constituent: The facilitation of decision-making skills (one session)

The goals are: a) to facilitate the basic decision-making skills, b) to become aware of the positive role of the application of values regarding the consequences of decisions, c) to create an initial awareness of the possible derailing effect of intense emotion on the quality of decisions, and d) to create an initial awareness of the detrimental effect of negative cognition on the quality of decisions.

Although decision-making is a complicated process (Jacobs and Klaczynski 2001), and although the way in which the relevant skills develop has not yet been completely clarified (Jacobs and Klaczynski 2001), it is important that at least the basic aspects of decision-making should be facilitated, because even adults err when it comes to making decisions (Klaczynski, Byrnes and Jacobs 2001). The basic steps of the skill can be adapted from Byrnes (2002) and

Furby and Beyth-Marom (1992 in Trad 1993). In addition to these steps, there are important principles that should guide the process of decision-making. These are: a) considering the planned course of action thoroughly, b) not rushing the process, and c) keeping in mind that decision-making should be guided by values (Galotti 2001). Furthermore, the quality of decision-making is influenced by emotional aspects (Gutnik *et al.* 2006); stress causes a narrowed focus and an incomplete consideration of all the options (Keinan 1987 in Klaczinsky, Byrnes and Jacobs 2001). The basic steps of decision-making could be conveyed by means of an acronym that is congruent with the adolescent world. For example, the acronym *www.plans.con* could be used to refer to the relevant steps: *what* information do I need, *whom* could I consult, which *plans* could I devise and what are the possible *consequences* of each plan? The participants could be presented with a bookmark, containing a graphic representation of the acronym, to be kept in a regularly-used book. In order to provide an opportunity to apply these skills, a case study, including specific questions regarding decision-making, could be discussed in small groups. An opportunity for application could also be provided by expanding on the exercise, where goals have been formulated, by devising strategies to pursue these goals. This exercise could be structured to cue the different steps of decision-making. The community project could provide a further opportunity for application in structured circumstances. These newly acquired skills could, with the guidance of the facilitator, be applied to formulate strategies for the participants' community projects.

A group discussion regarding the derailing effect of intense emotions and negative cognitions could be conducted in order to create an awareness of these aspects. In the group discussions, the role of the application of values in decision-making, especially regarding the consequences thereof, could be addressed too. This will also pave the way for the acquisition of resistance skills, to be addressed in the section on social skills.

Bearing in mind that the regulation of affect not only influences the decision-making phase, but also the complete process of self-regulation, it should be addressed more

comprehensively, in a separate session.

The fifth constituent: Affect regulation (one session)

The goals regarding this aspect of the intervention programme are: a) to facilitate participants' ability to identify their emotions, b) to facilitate an awareness of the derailing effect of intense emotion on the self-regulation process, c) to facilitate an awareness of the difference between sudden intense emotion and longer-lasting emotional states, as characteristic of, *inter alia*, depression, and d) to empower the participants with strategies to diffuse intense emotion as effectively as possible, before any action is taken with regard to self-regulation.

The prime importance of the regulation of affect, especially in circumstances that create emotional unease, in order for self-regulation to proceed effectively, is reiterated by Bandura *et al.* (2003). Intense emotion, which usually arises when people perceive any threat to themselves, could "hijack" the more rational thinking processes, leading to an inability to rationally consider all the relevant aspects (Goleman 1996). The regulation of affect could influence the quality of social relationships too (Lopes *et al.* 2004).

The importance of the ability to identify one's emotional states, as an aspect of emotion regulation, is highlighted by research. A longitudinal study by Ciarrochi, Heaven and Supavadeeprasit (2008) indicates that adolescents with poor emotion identification skills, do not regulate their emotions effectively. Ciarrochi *et al.* (2008) postulate that this would have a negative effect on these adolescents' ability to cope. The skill of the identification of emotions is complex, and entails much more than merely being able to name emotions. It also implies that people should have an awareness of the confluence of different emotions at the same point in time in themselves and others, and entails an ability to differentiate one's own emotions from the emotions of others (Ciarrochi *et al.* 2008). The *color-your-life* technique (O' Connor 1983) is especially suitable for the facilitation of the above-mentioned aspects of emotion identification.

The session could commence with music being played by participants who have volunteered to do so, depicting a specific emotion to the group. This will serve the purpose of creating an atmosphere conducive to the awareness of emotion. After being familiarized with the “color-your-life” technique (O’Connor 1983) the group could be engaged in a discussion regarding the influence of emotions on decision-making and encouraged to think of times in their lives when incorrect decisions followed emotional turmoil. The next step would be to focus on the management of intense emotion. The latter could be accomplished by means of a worksheet with different areas allocated to different intense emotions, e.g. anger, anxiety, sadness and excitement. Suggestions put forward by Goleman (1996) to diffuse these emotions could be listed, e.g. using physical exercise to “cool down” when one is very angry; and spaces could be provided for the participants to indicate the strategies that they currently apply and find effective. An opportunity could be provided to share these strategies in smaller discussion groups, in order to learn from each other. The group could be guided, by means of questions, to become aware of the differences between intense emotion and longer-lasting emotional states; they should be able to identify signs of depression and be empowered with strategies to address these, e.g. consulting a professional person.

Not only intense emotions, but also negative cognition, can compromise the efficiency of the self-regulation process.

The sixth constituent: The regulation of debilitating cognitions and appraisal (one session)

The goals are: a) to facilitate an awareness of the impact of negative cognition on appraisal, b) to facilitate an awareness in the participants regarding their typical thinking errors, and c) to equip the participants to confront and deal with the latter.

The Oxford Dictionary defines the verb “appraise” as follows: “[to] estimate the value or quality of”. Appraisal of the context relevant to the particular process of self-regulation and of one’s own repertoire of skills to execute the necessary actions, is of key importance for self-

regulation (Boekaerts and Niemivirta 2005). The appraisal of the manageability of a stressor, together with an appraisal of one's abilities to formulate strategies to reach one's goals, and to pursue these effectively, is also an integral part of the PYDI model (cf. manuscript 1/ Brink and Wissing). Taking account of the fact that peoples' habitual thinking styles have an influence on their interpretation of events (Reivich and Shatté 2002), the aspect of appraisal could be addressed by focusing on these styles. The participants' awareness of their typical thinking errors, which distort appraisal, could be facilitated and they could be equipped to correct these errors.

Transparencies with images from a training manual for business people, by Scannell and Newstrom (1994), depicting situations that could easily be misinterpreted, could be used to illustrate that perceptions regarding a situation may vary amongst different people and may even be biased; in other words, that a person's initial interpretation of an event may not always be completely correct.

Graphic depictions could be used to familiarize the participants with the typical thinking errors. The erroneous beliefs to be represented could include: a) the "causal beliefs" and the "implication beliefs", as well as b) the "iceberg beliefs", as expounded by Reivich and Shatté (2002). The causal beliefs and the implication beliefs could be paraphrased as the "why?" and the "what next?" questions that people typically ask after being confronted by negative events (Reivich and Shatté 2002).

All the thinking errors could be presented as "thinking-knots". Lévesque *et al.* (2002) propose a few questions that could be used to "unravel" and rectify thinking errors. Some of these questions could be presented in an acronym format and presented as tools to be used to "untie" the "thinking-knots". In order to illustrate the negative effect of dysfunctional cognitions and appraisal on emotions and consequent behaviour, each of the thinking errors could be discussed in terms of its possible effects on decision-making, coping and the accompanying emotions.

An understanding of the effect of cognition on appraisal, paves the way for the section on problem-solving, as appraisal constitutes a key aspect of the relevant skills (Folkman *et al.* 1991 in Lévesque *et al.* 2002).

The seventh constituent: Coping skills (one session)

The goal is to facilitate the ability to apply an effective repertoire of coping skills in the participants.

Coping skills are necessary to handle the obstacles that may arise in the pursuit of goals, as well as the stressors presented by the unforeseen events of life. The PYDI model views the ability to successfully handle both of these scenarios, as having a defining effect on the developmental trajectory of young people (cf. manuscript 1/ Brink and Wissing).

A combination of theorizing by two groups of authors is applied. The appraisal of the manageability of a stressor, as described by Folkman *et al.* (1991 in Lévesque *et al.* (2002), comprises the first aspect. The appraisal aspect refers to determining whether: a) the stressor could be changed, b) aspects of the stressor could be changed, or c) the stressor could not be changed or addressed. Regarding the coping aspect as described by Folkman *et al.* (1991 in Lévesque *et al.* 2002), it is suggested that in the case of the first two scenarios, specific strategies could be applied to address the problem, whereas in the case of the last scenario, strategies to ease the emotional burden could be applied.

Frydenberg and Lewis (2004) add a third element to the coping model as devised by Lazarus and Folkman. They point out that people may apply ineffective coping strategies which are of no functional value, e.g. worrying. Frydenberg and Lewis (2004) elaborate on the latter by means of a perspective which brings about greater clarity regarding problem-solving in everyday life, and which has significant implications for interventions. They indicate that even though people may be applying functional strategies, they may still not be coping well if their repertoire of dysfunctional strategies is larger than their repertoire of functional ones

(Frydenberg and Lewis 2004). Interventions should not only focus on increasing the repertoire of functional strategies, but also on the aspect of diminishing the dysfunctional strategies (Frydenberg and Lewis 2004).

The information in this section could be linked to the symbol of an elephant, with an accompanying slogan such as: "How does one eat an elephant?", representing the aspect of tackling a stumbling block in manageable steps. This section of the intervention could provide an opportunity to help the participants to integrate the skills and knowledge acquired in previous sections. The steps comprising problem-solving, to be used if the stressor can be changed, could be depicted on a graphic representation of an elephant, with each step being represented on a body part. The first two steps, the regulation of affect and the regulation of debilitating cognitions, could be represented on the ears of the elephant. The third step would be to divide the stressor into manageable portions. The fourth step refers to the skills of decision-making in order to devise strategies, the fifth to the application of a specific strategy, the sixth to the aspect of "keeping on", or determination regarding the application of the strategy, the seventh to reverting to a different strategy, should the previous strategy prove to be ineffective, while the eighth step refers to tackling another aspect of the stressor, if the attempts to deal with the previous aspect have proved to be effective.

The functional coping strategies as described by Frydenberg and Lewis (2004) could be explained to the group, followed by small-group discussions on the relevance and applicability of these. The aspect of emotional coping could be explained by highlighting the relevant strategies, e.g. finding support from others. In order to address the aspect of the repertoire of functional coping strategies (Frydenberg and Lewis 2004), an informal questionnaire, based on the eighteen "conceptual" areas which provide the foundation of the *Adolescent Coping Scale* (ACS), could be drafted by converting these conceptual areas into statements and dividing the latter into the two categories of effective and ineffective strategies. The completion of this exercise could provide an overview of these strategies, and also create

an awareness, on the part of the participants, of their current repertoire of coping strategies. The emotional scaffolding effect of functional strategies, as well as the possible consequences of the dysfunctional strategies, could be addressed by means of a group discussion. An opportunity for the application of the participants' knowledge of coping skills could be provided by a small-group discussion of a case study, depicting a young person confronted by a stumbling block. Questions could be used to structure the discussion and to provide initial cues regarding the relevant steps. An opportunity to discuss any stumbling blocks that might have arisen in the execution of the community projects, as well as possible ways to address these, should also be provided.

In the following section the focus, which has fallen mainly on the youth as individuals up to this point, broadens to incorporate the aspect of interaction with other people.

The eighth constituent: Socialization skills (two sessions)

The most important goals are: a) to facilitate the participants' ability to interact with other people—a skill that is likely to be needed for self-regulatory purposes, and b) to facilitate their positive “connectedness” with people who are of significance in their lives. A sub-goal in this regard, which also comprises a prerequisite in relation to these primary goals, would be the facilitation of the interpretation of intra-psychic information

In view of the fact that life is not lived in isolation, the statement by Demetriou (2005), namely that self-regulation might even include the regulation of other people, makes sense; other people often play a role in the fulfilment of personal needs (Demetriou 2005). Besides constituting some of the important “tools” of self-regulation, socialization skills play an important role in creating experiences of “connectedness”, which configure a buffer against the stresses of life in the youth (McGraw *et al.* 2008). Keeping in mind that the peer group constitutes an important developmental niche, in the sense that it can provide an environment conducive to “self-exploration, validation and evaluation” (Sullivan 1953 in Azmitia 2002:

173), the third important function of an ability to socialize effectively during adolescence, is that of enhancing affiliation to a peer group, which, in the words of Newman and Newman (2003), exerts a positive influence. However, in the light of the fact that the peer group could influence the members in negative ways too (Newman and Newman 2003), the question arises as to which factors contribute to a susceptibility to such negative influences. For the purposes of the current programme, it is postulated that the youth might choose to belong to groups exerting a negative influence, if these groups meet some of their unmet needs, as specified by reality therapy (Glasser 1984). Three of these five basic needs, as proposed by reality therapy, namely the need: a) to belong, b) for fun, and c) for freedom (Glasser 1984), may play an important role in the socialization patterns of the youth.

The basic building blocks for effective inter-personal communication have been identified by social psychologists and are clearly indicated in the literature (Wilkinson and Canter 1982). The literature also provides guidelines, mainly from a behavioural perspective, regarding the ways in which these could be facilitated (Wilkinson and Canter 1982). These steps, which derive their origins mainly from behavioural psychology (Wilkinson and Canter 1982), show a remarkable concurrence with the developmental levels of the acquisition of regulatory skills, as postulated by Zimmerman in Boekaerts, Pintrich and Zeidner (2005). In accordance with the assumptions of the PYDI model (cf. manuscript 1/ Brink and Wissing), the intervention regarding socialization does not only focus on the inter-personal aspects of communication, but also on the intra-personal aspects thereof. In the latter regard, an awareness of emotions, bodily sensations and thoughts could provide information regarding a person's underlying wants and needs (Weinhold and Elliot 1979). Such an awareness could, to a certain extent, alert people to their susceptibility to involvement in negative relationships which may fulfill some of their unmet needs.

Techniques as described by Weinhold and Elliot (1979), e.g. becoming aware of sensory experiences in the present, could be used to facilitate more effective interpretation of

intra-psychic information. Furthermore, the participants could be reminded of the “color-your-life” exercise, with which they were familiarized in the session on affect regulation, in order to aid the identification of their emotions. An awareness of their basic human needs, as well as an awareness of the link between needs and feelings, could be facilitated by means of an exercise in which these aspects are demonstrated. After the explanation of the basic human needs, as described by reality therapy (Glasser 1984), two short checklists regarding any relationship of importance could be completed. These checklists, denoting positive and negative relationships respectively, could characterize relationships in terms of the feelings associated with them, thus conveying the notion of feelings as a barometer of the needs that a relationship fulfils.

The social skills to be addressed are: a) the interpretation and application of non-verbal communication, b) starting and maintaining a conversation, c) self-assertion skills, d) listening skills, and e) conflict-resolution skills. The basic information regarding social skills could be provided on an information sheet in the format of a “fun quiz” which entails the identification of non-verbal cues in photographs of people. Furthermore, the participants could be involved in small-group discussions regarding the application of non-verbal cues, e.g. in order to accomplish positive contact with others, but also to assert themselves against negative influences. Additional questionnaires could be used in order to encourage the participants to rate their level of proficiency and style regarding their listening skills (Johnson 1972) and conflict management skills (Verderber and Verderber 1983). These questionnaires could be constructed by breaking the relevant skills down to their basic elements, as described by the literature. Another function of the questionnaires could be to inform the participants of all the relevant aspects of the skill. Role-plays in pairs will provide opportunities for the application of social skills. Each participant could receive a checklist, indicating the different aspects comprising the skill of, *inter alia*, starting and maintaining a conversation, in order to provide feedback to his or her partner in the role-play regarding his/her application of the relevant skill. Taking heed of the caution relating to the definition of strengths, as applied by the PYDI

model, with regard to the context-specificity thereof (cf. also Aspinwall and Staudinger 2003), the importance of the interpretation of the context of behaviour, especially regarding socialization, should be brought to the attention of the participants in this section. This could be accomplished by presenting the participants with a photograph of a part of an object, demonstrating the fact that all aspects of an encounter with another person should be considered, rather than coming to premature conclusions based on insufficient facts. A small-group discussion, providing opportunities for sharing personal experiences regarding this aspect of incorrect conclusions, could highlight the context-specificity of behaviour to a greater extent.

In view of the important developmental role of relationships, time should be allocated to discussing these. The participants could be given an opportunity to anonymously formulate questions regarding relationships, in writing, to be addressed by means of a group discussion, with a facilitator present. Ideally speaking, the parents of the participants should be personally involved, in order to facilitate the interactions between the young participants and their parents, if necessary. However, this is not always practically possible; and consequently, the suggested intervention follows an alternative route by involving the participants' parents, via their children, in the completion of exercises at home regarding the values of the family, and a "fun" exercise aimed at determining how well they know each other. The purpose of the latter is to highlight the fact that families do not always know each other as well as they think they do, and to encourage participants and their families to take more trouble to get to know one another better. Family values constitute one of the positive bonds in families (Newman and Newman 2003), and the elucidation of these may serve the purpose of enhancing family ties.

The ninth constituent: Conclusion (one session)

This final session has the following goals: a) to provide a review of the sequence of the different aspects constituting the self-regulation process, b) to facilitate the application of these

steps in the everyday lives of the participants, c) to provide an opportunity for reflection on the value of the community projects to the recipients, as well as to those executing the projects, and d) to bring the intervention to closure.

Each of the groups involved in a community project should receive an opportunity to share the outcomes of their project, as well as their reflections on their experiences regarding their involvement with the rest of the participants. The facilitator could stress the positive experiences in order to highlight the aspect of contributing to the well-being of others, as proposed in the PYDI model (cf. manuscript 1/ Brink and Wissing). The intervention could be concluded by providing the participants with the opportunity to share their experiences of the intervention, as well as their recommendations for future groups. This could be done verbally, but also in writing, through the completion of an evaluation of the intervention. In order to: a) bring closure, b) refresh their memory of the consecutive steps of self-regulation, and c) enhance the generalization of their newly acquired knowledge, the participants could be presented with a lanyard, with the symbols depicting the different steps of self-regulation printed on it, as a farewell gift.

Conclusion

The objective of this study was to suggest and describe a positive youth development intervention programme. This programme is based on the PYDI model, which describes developmental change in the youth. Self-regulation was identified as the central process, constituting the interaction between the youth and their primary life contexts, by means of which developmental change is effected. It was postulated that the facilitation of the effective application of the self-regulation process will facilitate the developmental trajectory in a more positive direction. The envisaged result, which could also be described as thriving, will be displayed in increased levels of hope, social self-efficacy and coping self-efficacy, as indicated

by the theoretical propositions of the PYDI model.

A model describing self-regulation, together with perspectives from developmental psychology, was used to identify the relevant constructs, phenomena and processes; these provided guidelines regarding the skills and knowledge to be facilitated by means of the programme. The contribution of this study lies in the proposed intervention programme with a process-related focus, congruent with developmental systems theory. This suggested intervention links theory and practice. The ways in which the relevant skills and knowledge could be facilitated in order to at least approach the achievement of the aim of developmental validity, albeit not comprehensively so, as described by Bronfenbrenner (1980), were expounded and motivated.

The description of the intervention, including the objectives regarding the facilitation of each of the relevant phenomena and the activities used to approach these, allows for the implementation and evaluation thereof. The latter may inform further theory development and expand scientific knowledge in the domain of PYD.

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Section 4: Article 3

Evaluation of a theory-based positive youth development programme

submitted to the

Journal of Child and Adolescent Mental Health

4.1 Guidelines for authors

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Haynie DL (2000) *The Peer Group Revisited: A Network Approach for Understanding Adolescent Delinquency*. PhD Thesis, Pennsylvania State University, Pennsylvania, USA
Louw J (1990a) Comorbidity of conduct and anxiety disorders. *Southern African Journal of Child and Adolescent Psychiatry* 5: 43–51
Louw J, Mkize AC and Naidoo DH (1990) Cultural disorders. In: Isaacs S (ed.), *Psychiatric Disorders in South African Children*. Cape Town: Juta & Co. pp 84–96
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Population Reference Bureau (2002) Untitled fact sheet.
Available at: http://www.prb.org/content/navigationMenu/Other_reports/2000–2002/sheet1.html. [Accessed 22 February 2002]

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4.2 Manuscript

Evaluation of a theory-based positive youth development programme

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Abstract

Objective: The aim was to evaluate a process-related programme, based on the Positive Youth Development Intervention (PYDI) model for the facilitation of the development of early adolescents.

Method: The PYDI programme, and an alternative study-guidance programme, were presented to experimental (n=24) and control (n=21) groups respectively, over 13 weekly sessions. A mixed-methods design, with pre-, post-, and follow-up quantitative evaluations, as well as post- and two follow-up qualitative evaluations, was followed. The quantitative measures included measures of hope and social and coping self-efficacy, amongst others. The effect sizes between and within groups were calculated.

Results: The quantitative data did not show many positive results. However, the qualitative data indicated some positive results: a) the intervention succeeded regarding the facilitation of certain aspects of self-regulation, which the PYDI model proposes as constituting the central mechanism of developmental change; and, b) the aspect of the internalization of skills emerged during the second follow-up evaluation. Both groups reflected positive results regarding the presentation aspects of the programmes.

Conclusion: A mixed-methods design renders richer information than quantitative results only. The internalization of skills may stretch across an extended time-frame. Guidelines regarding future application and the evaluation of positive youth development programmes could be deduced.

Keywords: Positive youth development programme, early adolescence, process-related, mixed-methods design, thriving

Evaluation of a positive youth development programme

Introduction

The positive youth development paradigm (PYD) is primarily focused on the facilitation of the positive development of the youth (Benson 1997, Theokas *et al.* 2005). The need for the fostering of strengths in the youth is indicated by research (Benson 1997, Scales and Leffert 2004) and reiterated by professionals involved in the PYD field (Theokas *et al.* 2005, Larson 2000). Besides this viewpoint according to which the development of the youth must be supported because of the low levels of support provided by their life contexts (Benson 1997), the need for positive development of the youth is also motivated in terms of the objective of enabling the youth to develop optimally; the youth are viewed as “resources to be developed” (Lerner *et al.* 2002: 11), *inter alia* with the future economy of a country in mind (Delgado 2002). Furthermore, thriving youth may make positive contributions to the social fibre of communities, and will most probably continue to do so as adults (Lerner *et al.* 2002)

The PYD paradigm has a definite need for more extensive theoretical foundations (Catalano *et al.* 2002 and Small and Memmo 2004). Theokas *et al.* (2005) describe this need for theory in finer detail, by pointing out that there is a need for a theoretical explanation of what positive developmental change entails. Even though this question may be addressed by the scientific evaluation of PYD programmes, this avenue has, as yet, not been satisfactorily explored (Catalano *et al.* 2002, Eccles and Gootman 2002 and Roth and Brooks-Gunn 2003). Furthermore, although developmental systems theory features as a meta-theory to PYD (King *et al.* 2005), a literature review yielded no indication of theoretical models and programmes which operationalize this meta-theory; in other words, which adopt a process-related perspective of development in the youth. An exception in this regard is the proposal by Lerner *et al.* (2001) that the selection, optimization and compensation model could be applied in order to understand development in adolescence. However, no indication of the evaluation of an

intervention related to this model could be detected in the literature. The hypothetical level (Madsen 1988) of PYD can be expounded by means of an evaluation of a theory-based programme, aligned with the meta-theory of the PYD paradigm. In addition, such an evaluation should provide important information for future application (Eccles and Gootman 2002).

The opinion of Larson (2006), namely that the term “positive” in positive youth development is superfluous, can be refuted by a consideration of the aspect of relative plasticity, as described by developmental systems theory (Lerner 1998). Relative plasticity indicates the potential for positive change in all human beings (Lerner *et al.* 2005), although these changes cannot be limitless (Lerner *et al.* 2002.) It is thus clear that the inevitable unfolding of the developmental course could potentially be facilitated in a more positive or more optimal direction, within the constraints of the life contexts of each individual. The intriguing question of how these positive developmental changes could be effected by means of an intervention, is difficult to address, because development takes place in a variety of contexts. These include, *inter alia*, the primary life contexts of an individual, and may also even include other contexts that affect a person’s primary contexts, although he/she does not actively participate in these other contexts (Bronfenbrenner 1980). This array of developmental contexts, each exerting a unique influence, is demonstrated in the different kinds of interventions as described in the literature. For example, there are interventions aimed at the school and family contexts of the youth (Catalano *et al.* 2002), while others have a community focus (Benson 1997).

A key aspect regarding PYD interventions pertains to the determination of the efficacy of the intervention, or in other words, determining the indicators of positive developmental outcomes or thriving. Research regarding PYD programmes is complicated by the fact that there is, as yet, no clarity regarding the outcomes that indicate thriving or positive development (King *et al.* 2005, Scales *et al.* 2000). The current consensus is that the five

concepts as initially described by Eccles and Gootman (2002), empirically validated by Lerner *et al.* (2005) and empirically proven to be good indicators of positive outcomes in early adolescence by Phelps *et al.* (2009), constitute reliable indicators of thriving in the youth. These components are: competence, confidence, connection, character, as well as caring and compassion (Lerner *et al.* 2005). To these, Lerner *et al.* (2005) added a sixth aspect, namely, contribution. The thriving indicators constitute a wide range; and no comprehensive exposition of the theoretical underpinnings of these has as yet been put forward, although research has indicated that the first five aspects converge on a latent factor, namely positive development (Lerner *et al.* 2005). Furthermore, the relationships between these aspects have not been expounded, which complicates the application of the relevant aspects as thriving indicators for a single intervention.

The current study focuses on the evaluation of an intervention (cf. manuscript 2/Brink and Wissing) based on the Positive Youth Development Intervention (PYDI) model of developmental change in early adolescence (cf. manuscript 1/Brink and Wissing). The PYDI model describes the facilitation of developmental change within the context of the circular relationships between the youth and their primary life contexts, and with a specific focus on two possible aspects of these interactions, namely: a) the effective navigation of life stressors, and b) the formulation of relevant goals for their lives and the successful pursuit of these. The PYDI model (cf. manuscript 1/Brink and Wissing) and programme (cf. manuscript 2/Brink and Wissing) comprise one of the first attempts at describing the facilitation of developmental change in the youth from a process-related perspective, which is aligned with developmental systems theory.

Aim of the present study

The main aim is to evaluate a theory-based positive youth development programme, namely the programme based on the PYDI model (cf. manuscript 1/Brink and Wissing), regarding its

success in terms of the facilitation of the development of the youthful participants in a more positive trajectory. A secondary aim is to obtain information which could, a) constitute possible guidelines for the future application of the programme, as well as b) provide insights regarding the evaluation of PYD programmes.

Method

Design

An embedded mixed-method design was implemented (Creswell and Plano Clark 2007). The aim of the quantitative assessment is to determine the efficacy of the programme regarding the facilitation of positive outcomes indicative of a positive change in the developmental trajectory of the participants. The aims of obtaining the qualitative data are: a) to provide additional information regarding the programme, which may not have been captured by the quantitative data-set, b) to possibly elucidate the quantitative data regarding the programme, and c) to provide information regarding the future application of the programme (Creswell and Plano-Clark 2007). The quantitative data were collected before, during and after one follow-up assessment occasion. The qualitative data were collected after the implementation of the programme, as well as during two follow-up occasions, two months and seventeen months later respectively (Creswell and Plano Clark 2007).

Participants

The participants, of whom the majority were sixteen years of age, while two were seventeen, one eighteen and one fifteen years of age, constituted the two grade ten classes in a secondary school in the Free State province of the Republic of South Africa. One member of the experimental group and three members of the control group lived in a city, but were boarders; the rest of the participants lived in a rural area. The majority of the pupils were Afrikaans-

speaking and white. The school allocated pupils to the two classes according to the alphabetical order of their surnames. The assumption was made that this allocation would present a relatively random sample. The class designated as the experimental group was randomly assigned by means of the flipping of a coin, which was executed by a senior teacher, with the first author and a member of the administrative staff as witnesses. The experimental group started off with twenty-five participants, and the control group with twenty-one participants, one of whom relocated to another school during the course of the programme. During the evaluation after the programme, nineteen participants from each group completed the questionnaires; the others were absent on the day in question. The first follow-up assessment was completed by nineteen participants from the control group and eighteen from the experimental group; a few of the participants had meanwhile relocated to other schools. The second follow-up assessment, conducted seventeen months after the programme, was completed by available participants – fourteen from the initial experimental group and seventeen from the initial control group participated in this assessment.

Intervention programmes for experimental and control groups

The programme based on the PYDI model (cf. manuscript 2/Brink and Wissing) was implemented for the experimental group, whereas a study-guidance programme was offered to the control group. The purpose of the presentation of two programmes was to ensure that any outcomes in the experimental group would be attributable to the PYDI programme, and not to the according of special attention to the experimental group.

The PYDI programme focused on the facilitation of the self-regulation process, in order to facilitate the interactions between the youth and their primary life contexts. The focus of the programme is on self-regulation by the youth within two scenarios, namely, a) the navigation of stressors, and b) the formulation of goals that are aligned with their talents and the effective pursuit of these. The PYDI programme does not only focus on the specific

content areas to be addressed, but also on the manner in which the relevant contents should be facilitated. In this regard, self-determination theory (Deci and Ryan 2000) provided guidelines, namely, a) the attunement of the content of the programme to the participants' sense of identity, b) establishing good relationships with the participants, and c) providing opportunities for experiences of competence. Furthermore, the guidelines relating to the acquisition of self-regulatory skills, for example with regard to opportunities to apply newly acquired skills, were followed (Zimmerman 2005). The study-guidance programme focused on the facilitation of study methods, but included a process-related aspect regarding the management of studies.

The same number of sessions, namely thirteen sessions of an hour's duration each, were allocated to both groups. However, although an hour was allocated, practical aspects such as the fact that the participants did not always arrive on time, accounted for at least ten minutes of each session, with the result that one session had to be added to the twelve sessions that had originally been planned, in order to complete the programme. Both groups attended the sessions once a week, during one of the two assembly periods, followed by an academic period. The first author presented both of these programmes.

The experimental programme had nine main themes or constituents: a) setting the scene and the facilitation of an initial understanding of self-regulation as a process (one session); b) the facilitation of a sense of identity (two sessions); c) the facilitation of the formulation of goals (two sessions); d) the facilitation of decision-making skills (two sessions); e) the facilitation of affect regulation (one session); f) the facilitation of an understanding of the role of appraisal, as well as of the regulation of debilitating cognitions (one session); g) the facilitation of the ability to handle stumbling blocks, and of coping (one session); h) the facilitation of socialization skills (two sessions); and i) a meta-perspective on self-regulation as a process and the conclusion of the programme (one session).

After the completion of the programmes, each participant was presented with a lanyard as a token of appreciation for his or her participation. However, the lanyard presented to the control group had the name of the group imprinted on it, whereas the lanyard presented to the experimental group was imprinted with the symbols representing each of the stages of self-regulation, in order to remind the participants of their newly-acquired skills, with a view to facilitating the implementation of these in their daily lives.

Evaluation instruments

The impact of the interventions was evaluated quantitatively as well as qualitatively, for both the experimental and control groups.

Quantitative data-collection

Motivation for the selection of measures

In order to devise a battery of quantitative instruments, a careful consideration of the outcomes indicating the facilitation of positive development was necessary. The theoretical model underlying the programme provided the broader guidelines regarding outcomes that could be considered to be indicative of positive developmental change. After these broader guidelines had been determined, the next step was to identify more specific indicators in this regard. In the current study, it was postulated that a successful facilitation of the developmental trajectory of young adolescents in a more positive direction would be reflected by aspects indicating an enhanced interaction with their primary life contexts, within the two specified foci. The PYDI model (cf. manuscript 1/Brink and Wissing) postulates that, a) an increased ability to navigate stressors successfully, as well as b) an increased ability to formulate relevant goals for their lives and to successfully pursue these, will be indicative of enhanced interaction patterns between the participants and their primary life contexts, and thus the

facilitation of positive development. Successful navigation of stressors suggests that the aspect of coping self-efficacy may have been addressed. Self-efficacy beliefs reflect a person's experience of his or her ability to co-ordinate and apply the relevant skills within a specific challenging scenario (Maddux 2002). It was thus argued that an increase in coping self-efficacy will reflect success experiences of coping, thus indicating that the participants have acquired the relevant skills to such an extent that they will be able to apply these successfully in their daily lives. An enhanced ability to navigate stressors may thus be reflected by an increased experience of self-efficacy regarding coping.

The aspect of the formulation of goals, which constitutes the second focus of the PYDI programme (cf. manuscript 2/Brink and Wissing), could be represented by the participants' levels of hope. The latter reflect people's beliefs regarding their ability to formulate strategies to pursue their goals, as well as their motivation to apply these strategies (Snyder, Rand and Sigmon 2002). Success experiences relating to goal pursuit within a specific context will lead to increased levels of hope regarding the specific situation, but also in terms of the general levels of hope (Snyder, Rand and Sigmon 2002). It is thus postulated that, similarly to efficacy beliefs, increased levels of hope will reflect success experiences in terms of the skills regarding goal pursuit, thus indicating that the relevant skills have been acquired to such an extent by the participants that they will be able to apply them in their daily lives. Social self-efficacy reflects a person's beliefs about his or her abilities to apply social skills and to establish and maintain positive relationships with friends (Matsushima and Shiomi 2003). Increased levels of positive beliefs in this regard will reflect success experiences and thus the acquisition of the necessary skills. An improvement in the quality of relationships, as reflected by, *inter alia*, increased experiences of trust and warmth, will be indicative of an improved ability to relate to others. Increased efficacy regarding socialization, as reflected by social self-efficacy and improved relationships, will indicate, a) improved relationships with the life contexts, but also b) improved self-regulatory abilities, since social skills constitute an

important aspect of the self-regulation process. Keeping in mind that both the levels of hope and the levels of self-efficacy will influence future attempts at the application of the specific skills (Chesney *et al.* 2006, Maddux 2002, Magaletta and Oliver 1999), increased levels of these should indicate an increased motivation regarding the application of these skills, and thus the likelihood that the developmental trajectory will continue in a positive direction in future.

The definition of mental health by the World Health Organisation (2004 in Keyes 2007) coincides with the views regarding positive development. These two aspects correlate regarding people's ability to effectively cope with stressors, to actualize their potential and to contribute to their community. It could thus be concluded that a programme aimed at the facilitation of the positive development of the youth should also contribute towards their mental health. The different aspects of mental health, as expounded by Keyes (2007), could be used to indicate positive development in the youth. Mental health is expounded as being constituted by three main aspects, namely: a) emotional well-being, b) psychological well-being, and c) social well-being. Keeping in mind that the first aspect has a hedonic focus, while the other two aspects have a eudaemonic focus (Keyes 2007), the latter two aspects would be more relevant for the current study, since the PYDI model adopts a eudaemonic perspective (cf. manuscript 1/Brink and Wissing). The aspect of social well-being reflects a broader perspective, since it does not focus on individuals *per se*, but rather on their integration in groups, reflecting experiences of, *inter alia*, being embedded in society and contributing towards it (Keyes 1998). The latter aspects, especially that of contributing towards society, are in keeping with the view of the PYDI model (cf. manuscript 1/Brink and Wissing), namely that contributing to society comprises an indicator of thriving. Positive psychological functioning could reflect greater efficiency on the part of the youth regarding their interactions with their primary life contexts, as postulated by the PYDI model (cf. manuscript 1/Brink and Wissing). These interactions include, *inter alia*, the formulation and

pursuit of goals aligned with their potential; experiences of being able to manage their environment in order to manage their lives, for example with regard to the navigation of stressors; acting in accordance with their values and identity; as well as being engaged in satisfying and supportive relationships.

Finally, mainly from a practical perspective, the levels of depression in the participants should be considered too, because depression tends to deplete energy levels and to impact hope negatively (DSM-IV), which could have a negative influence on the outcomes of a programme. Furthermore, because of the fact that depression correlates moderately negatively with mental health (Keyes 2007), the levels of depression at follow-up could also reflect the effect of the implementation of the PYDI programme.

The indicators applied to measure the outcomes of the PYDI programme display a conceptual correlation with two of the six thriving indicators, as researched by Lerner *et al.* (2005): the aspect of coping self-efficacy displays similarities to the aspect of confidence, whereas the social self-efficacy and positive relations aspects correlate with the connection aspect.

Description of measures selected

The Coping Self-efficacy Scale – Short Form (CSE-SF) of Chesney *et al.* (2006) is a thirteen-item self-reporting scale, which measures a person's beliefs regarding his/her abilities to apply coping behaviours (Chesney *et al.* 2006). It measures the three main facets of coping, as formulated by Folkman and Lazarus (1998 in Chesney *et al.* 2006), namely: a) problem-focused coping, b) emotion-focused coping, and c) seeking social support. In this study, scores for each of these categories, as well as the total scores, were calculated. The Cronbach alpha coefficient for this scale was 0,81.

The Children's Hope Scale (HS) (Snyder *et al.* 1997), devised for the ages of seven to sixteen, consists of six self-reporting items. This scale represents two main cognitive aspects

regarding the formulation of goals, namely, a) the participants' belief in their ability to devise strategies to pursue their goals (pathways thinking), and b) the participants' belief in their ability to start and complete the execution of these strategies (agency thinking) (Snyder *et al.* 1997). The total scores, as well as the scores for pathway and agency thinking respectively, were calculated. Although this scale is an indication of dispositional hope, it is argued, in accordance with hope theory (Lopez, Snyder and Pedrotti 2003), that the levels of hope in the participants could be raised by more frequent experiences of successful goal pursuit. The Cronbach alpha for this scale is 0,77 (Snyder *et al.* 1997). The Cronbach alpha coefficient in this study was 0,82.

The Mental Health Continuum – Short Form (MHC_SF) (Keyes 2005, 2006), a fourteen-item self-reporting instrument, was applied in order to measure the degree of emotional, social and psychological/personal mental health. The total score was calculated, as well as the scores for emotional, social and psychological well-being. Satisfactory reliability and validity coefficients are provided by Keyes (2006). In the present study, the Cronbach alpha coefficient was 0,91.

The *Positive Relations with Others (PR)* scale (obtained from Dr C. Ryff; cryff@wisc.edu), a fourteen-item, self-reporting scale, was used to determine the quality of the participants' relationships with others. Dr Ryff indicated via electronic communication (16/03/2005) that this scale would be suitable for young adolescents. A higher score is indicative of “warm, satisfying, trusting relationships with others, being concerned about the welfare of others, a capability for strong empathy, affection and intimacy, and an understanding of the give and take of relationships”. A lower score indicates “few close, trusting relationships with others, finding it difficult to be warm, open and concerned about others, being isolated and frustrated in personal relationships and being unwilling to make compromises to sustain important ties with others”. This scale manifested a Cronbach alpha

coefficient of 0,88, according to Ryff (1998). The Cronbach alpha coefficient in the present study was 0,79.

The *Social Self-efficacy Scale (SSE)* (Matsushima and Shiomi 2003): This self-reporting scale of thirty-one items represents three factors, namely: a) “self-confidence about social skill in personal relationships”; b) “trust in friends”, referring to trust and “stable” feelings towards friends; and c) “trust by friends”, referring to self-confidence regarding a sense of being trusted by one’s friends. In this study, a total score was calculated. These three aspects measure social self-efficacy, which reflects the participants’ appraisal of their social abilities. The reliability and validity levels of this scale were found to be satisfactory (Matsushima and Shiomi 2002 in Matsushima and Shiomi 2003). A Cronbach alpha reliability coefficient of 0,88 was obtained in the present study.

The Patient Health Questionnaire: Depression symptoms (PHQ-9) (Kroenke, Spitzer and Williams 2001), a nine-item self-reporting measure, provides information regarding the presence, as well as the degree of severity, of the clinical symptoms of major depression. In the current study, the Cronbach alpha was 0,83.

All of these scales were translated into Afrikaans, the mother tongue of the participants, by means of the translation-back-translation method, and thus showed good reliability indices for the purposes of the current study.

The participants also completed a six-item questionnaire regarding the presentation and outcomes of the respective programmes. The items, which required answers on a five-point Likert-scale, were as follows: a) That which I have learned in the programme is of value to me, b) I know how to apply what I have learned in the programme to my own life, c) I experienced enough security in the group to be able to participate, d) I am of the opinion that the relationship between the group and the presenter was good, e) The programme has helped me to understand myself better, and f) The programme has helped me to improve my relationships with other people.

Qualitative data-collection

Motivation

The “analytic tools” as described by Strauss and Corbin (1998) and Creswell (2008) can be used to aid the process of inductive reasoning, in order to identify and understand the relationships between the relevant themes in the data. These identified themes can then be further explored, by a) comparing them to the theoretical model underlying the intervention, b) comparing the development of these themes across the different assessment opportunities, and c) comparing the qualitative data of the experimental and control groups.

Process

The data were collected by means of an open-ended questionnaire with two divisions. The first section requested participants to reflect on “What I have gained from this programme”. A few prompts were offered: “What did you learn?; Did you grow and develop?; What was of the greatest worth to you?; In what way(s) have you changed, compared to when you started the programme?”. The second section requested suggestions for future programmes, again with a few pointers: “What would you have liked to have more of?; What would you have wanted to be done in a different manner?; What else should be added?”.

Procedure and ethical concerns

Consent was obtained from the principal of the school, a) to involve the grade ten learners in the research, and b) to apply the programmes during school hours. The research was explained to a few of the parents during a parents’ evening at the school. However, in view of the fact that only a small percentage of the parents attended, because of the long travelling distances, a letter expounding the research was supplied to all the parents of the designated participants, together with a consent form. The parents who did not respond within the time limit were

contacted telephonically in order to obtain their permission. The participants also consented to participate in the study, and were informed of their right to withdraw from the programme at any time. However, cognizance should be taken of the fact that, practically speaking, it is not always easy for a learner to withdraw from such a programme within the parameters of the rules of a school.

After informed consent had been obtained, the pre-evaluation was carried out with both the experimental and control groups. Thereafter, the PYDI programme was conducted with the experimental group, while the study programme was conducted with the control group, over a thirteen-week period. The programmes were implemented in the time-slots during which they could be fitted into the school programme, namely during the last two terms, and ended some days before the final examinations for the year commenced. Post-evaluation was conducted two weeks after the completion of the programme, during the period of the school examinations. The first follow-up evaluation was conducted three months later, during the second week of the new academic year. Qualitative evaluations were conducted at the same time as the quantitative post- and follow-up evaluations, but also included a second follow-up evaluation, seventeen months after the programme was completed, involving the participants who were available at the time. The open-ended questionnaire, with two divisions, was applied during all the qualitative evaluation opportunities.

Data analysis

Quantitative data analysis

Descriptive statistics, as well as Cronbach reliability coefficients for each of the quantitative instruments, were calculated by means of the STATISICA data analysis software system.

Dependent and independent t-tests were applied in order to determine the differences regarding all variables, a) within each of the experimental and control groups on pre-test, post-

test and follow-up test occasions, and b) between the experimental and control groups on pre-test, post-test and follow-up test occasions. The effect sizes, or d-values, were determined and evaluated according to their values. The effect sizes were applied as a measure, because, a) a convenience sample was used (Ellis and Steyn 2003), and b) because an indication of the effect of the intervention in practice, was needed; in other words, it was necessary to determine whether the effect of the programme was of practical significance or not (Ellis and Steyn 2003). In view of the fact that the data were obtained from a relatively small sample, the recommendation by Rosenthal, Rosnow and Rubin (2000) may be followed. These authors point out that even though the p-values may be “non-significant” under these circumstances, the effect size may provide important information that can be followed up with larger data-sets. A value of 0,2 is indicative of a small effect size, whereas an effect size of 0.5 or larger is regarded as a medium effect, and an effect size of 0.8 or larger is considered as a large effect (Cohen 1988 in Steyn 2005).

The covariance (ANCOVA) was also determined by controlling for the PHQ-9 data. These data provide an indication of the presence of the symptoms of major depression (Kroenke, Spitzer and William 2001).

Qualitative data analysis

The aspect of the validity of the data, in other words the need to determine whether the information deduced from the qualitative data comprises an accurate reflection (Creswell and Plano-Clark 2007), was addressed by also having the data interpreted by an independent, professional person who specialized in adolescent functioning (Dr E.M.Luttig), and who had no prior knowledge of what the intervention entailed. Two sessions were then devoted to discussions between the first author and the auditing interpreter in order to reach consensus on identified themes, as well as on possible subjective interpretations by the first author, who was also the presenter of the programmes.

Results

An embedded mixed-methods design, with the quantitative results constituting the primary source of data, was applied; and consequently these results will be the first to be reported, followed by an exposition of the qualitative results (Creswell and Plano-Clark 2007). These two types of data will be discussed and compared in the discussion section.

Quantitative results

Descriptive statistics and reliability indices

The descriptive statistics and Cronbach alpha coefficients for each measuring instrument are shown in Table 1. The indicators of internal consistency regarding all the instruments were satisfactory, indicating that the participants had completed the items on each instrument in a consistent manner, and not haphazardly.

[Insert Table 1 about here]

Comparison of the experimental and control groups

A comparison of scores for the experimental and control groups before, after and at the time of follow-up is shown in Table 2. The guidelines by Cohen (1988, in Ellis and Steyn 2003 and in Steyn 2005) were applied in order to determine the size of the effect: an effect size of 0,2 was interpreted as a guideline regarding a small effect; an effect size of 0,5 comprised the guideline for a medium effect; while an effect size of 0,8 was taken as the guideline for a large effect. Rosenthal, Rosnow and Rubin's (2000) comments on small groups were also taken into account. The pre-test comparison indicated that the two groups were not equal. The control group had higher scores than the experimental group, as suggested by small effect sizes in the case of the SSE, CSE-SUE, and HS, as well as an effect size approaching a

medium-sized effect on the MHC-SF-PWB, although none of these were statistically significant. This is, however, in keeping with the general trend noted, if the mean scores of the two groups are inspected.

[Insert Table 2 about here]

A comparison between the post-test data of the experimental and control groups reveals an effect size of 0.37, approaching a medium-sized effect regarding an increase in the presence of depressive symptoms (*Patient Health Questionnaire: Depression Symptoms* (PHQ-9) (Kroenke, Spitzer and Williams 2001) in the experimental group, which indicates that cognizance should be taken of this aspect.

The emotional well-being aspect, as measured by the MHC-SF scale (Keyes 2005, 2006), deteriorated at the time of the post-test data-collection in respect of the experimental group, to such an extent that this aspect warrants attention; there was an effect size of 0.43, approaching a medium-sized effect relative to the control group.

The follow-up data showed a decrease, as represented by an effect size of 0.45, approaching a medium-sized effect, in the PHQ-9 scores, which is an indication of the level of depression of the experimental group, relative to the control group. No other significant effect sizes between the experimental and control groups reflecting the outcomes of the intervention were exhibited.

Comparison within the experimental and control groups

Comparisons of scores within the experimental and control groups over time are presented in Table 3, providing further insights. The data gathered during the pre-test, post-test and follow-up test occasions for each of the groups respectively, were compared, with the effect size as an indicator of changes over time. The pre-test-post-test comparison for the experimental group exhibited a large effect size of 1.05 regarding the increase in levels of depression (PHQ-9).

The concurrent effect size within the control group qualified as a medium effect size of 0.45 (see Table 3). It could thus be concluded that the levels of depression were higher in both groups, in comparison to the pre-test occasion; but that this increase was more significant in the experimental group, which seemed to be a more vulnerable group. These findings should possibly be viewed in the context of the examination period. The experimental group exhibited a small effect size of 0.30 regarding a decrease in the levels of depression between the pre-test-and the follow-up test occasions, whereas the control group exhibited a small increase as reflected by an effect size of 0.3, relative to their levels of depression during the pre-test phase.

The emotional well-being aspect (MHC-SF scores) of the experimental group showed an increase between the pre-test-and post-test data, as reflected by an effect size of 0.46, approaching a medium effect size.

The post-test data of the *Positive Relations With Others* questionnaire (PR) (obtained from Dr C. Ryff; cryff@wisc.edu) for the experimental group showed a decrease, as indicated by a medium effect size of 0.60 within this group, relative to the pre-test data. This decline regarding the *Positive Relations With Others* (Ryff) scores in the experimental group at the post-test evaluation is not evident in the case of the control group, and was reversed in the follow-up data. The scores on the social self-efficacy scale (SSE) (Matsushima and Shiomi (2003)) did not echo this pattern; no significant effect sizes were demonstrated in this regard.

The experimental group exhibited an effect size of 0.44, approaching a medium-sized effect, for the pathways facet of hope, and an effect size of 0.38, approaching a medium-sized effect, for the total hope scores, indicating that there might have been a small positive change regarding these aspects, as suggested by a comparison of the post-test data and the pre-test data. However, this effect was not sustained during the follow-up assessment occasion.

[Insert Table 3 about here]

The comparison between the pre-test and post-test data, and between the pre-test and follow-up data, for the control group, respectively revealed medium effect sizes of 0.52 and 0.43 regarding the decline of the psychological well-being aspect of the MHC-SF scale. This pattern was not shown by the experimental group.

Comparing the experimental and control groups when controlling for levels of depression

In view of the increase in the levels of depression (especially during the post-test phase), a covariance analysis was performed, and control was carried out in respect of the PHQ-9 scores, in order to rule out the possible effect of depression on the rest of the results. With this correction, the pre-test data of the experimental and control groups showed a large effect size between all aspects of the MHC-SF scales, indicating that initially, the control group had much higher levels of mental health than the experimental group. Consequently, it could be concluded that the possible positive effects that the experimental intervention had on the experimental group, would not reflect clearly against the control group.

[Insert Table 4 about here]

With the covariance analysis – a comparison of the post-test data of the two groups – a medium effect size regarding the total scores, as well as in the pathway scores of the *Children's Hope Scale* (HS) in the experimental group, became more pronounced (medium effect), compared to the scenario where no correction for the PHQ-9 scores was applied. The increase in the levels of hope in the experimental group was not sustained at the follow-up testing.

A comparison between the follow-up data of both groups indicated a small positive effect regarding the social well-being aspect of the MHC-SF scale in the experimental group.

An evaluation of answers to the questionnaire administered on programme implementation, revealed that both the experimental and control groups showed no significant

differences during the post- and follow-up assessment occasions on any item. However, both groups, during both assessment occasions, indicated an average score, which was higher than a score of three on the five-point scale for each item.

Qualitative results

Despite the findings in terms of quantitative measures, the qualitative results showed some positive aspects regarding the effect of the PYDI programme, and provided important guidelines for the future implementation of the programme. Participants' experience of a sense of having been empowered by their newly-acquired skills, emerged as a category. The experimental group firstly felt empowered regarding their ability to handle stumbling blocks; the latter aspect featured as the sub-category with the strongest representation ("Dit het my baie gehelp om probleme beter op te los en om nuwe maniere van dink te ontdek en gebruik"/ "It has really helped me to solve problems better, and to discover and apply new ways of thinking"; "Ek kon myself kalmeer en oor 'n probleem dink en opbreek in *stukke* en hom dan hanteer"/ "I was able to calm myself down and think about the problem and break it down into smaller parts, and then handle it"). The second sub-category is that of feeling empowered to manage their feelings ("Ek het geleer om my emosies te hanteer" / "I have learned to handle my emotions"). The third sub-category is the aspect of being able to communicate and get along with others ("Ek het beter verhoudings met familie en vriende en ek kan maklik met mense praat en maklik vriende maak"/ "I have better relationships with my family and friends and I find it easy to talk to other people and to make friends"). Empowerment as a category came strongly to the fore during all three assessment occasions.

A category with negative content featured too. During the post- and both follow-up assessment occasions, a few participants indicated that the programme had been of no value to them ("Om eerlik te wees die program het vir my niks beteken nie"/ "To be honest, the programme meant nothing to me").

The rest of the identified themes yielded important information regarding the aspects of the programme which were successfully conveyed, as well as the aspects which need further attention regarding their application in future. The PYDI model (cf. manuscript 1/Brink and Wissing) addresses two aspects of interacting with the primary life contexts, namely: a) successfully navigating stressors, and b) setting goals congruent with a person's talents and effectively pursuing these goals. The aspect of being able to address stumbling blocks was strongly represented in the qualitative data during all three assessment occasions (“Die program het my gewys hoe om moeilike omstandighede te hanteer”/ “The programme has taught me to handle difficult situations”). The aspect of the formulation of goals did not feature clearly. However, the aspect of the facilitation of the exploration of identity (“Die program het my gehelp om myself te ontdek op soveel verskillende vlakke” / “ The programme has helped me to discover myself on so many different levels”), which is a prerequisite for successful goal formulation and pursuit, emerged as a prominent theme. The sub-categories of empowerment, namely communication skills and affect regulation, indicated the other aspects that the programme had succeeded in facilitating, at least to a certain extent.

The conditions during the presentation of the programme emerged as a category too, and provided important guidelines for future application. This category was revealed in the section that entailed recommendations for future programmes, and was distributed across a wide spectrum. Individual differences featured strongly. Some of the participants were of the opinion that too much time had been allocated to the programme (“Dit was lank...”/ “It took too long...”), whereas others felt that more time should have been devoted to it (“Meer tyd kry, ’n uur is te min”/ “More time, an hour is too little”). Besides the sub-category of time, the sub-category pertaining to how “personal” the programme was, emerged too; some of the participants indicated that they had found the material too personal, whereas others felt that it could have been more personal. Being presented with homework assignments elicited a strong negative reaction, which may be understood in the context of students preparing for the end-

of-year examinations. The issuing of homework was discontinued in the early phases of the presentation, when a resistance against this practice was noticed (“Ek sal beslis sê geen huiswerk want dit het my baie negatief laat voel oor die program...”) / “I would definitely say ‘no homework’ because it made me feel very negative towards the programme”). The participants’ recommendations regarding future programmes were: that programmes should be presented in a more “fun” manner (“...speletjies speel wat jou kan help en meer leer..”) / “Playing games which could help you to learn more...”; “Meer speletjies, minder huiswerk” / “More games, less homework”); and that activities should be more practical (“Fisies iets te doen soos die ietsie-vir-iemand projek” / “Physically doing something, such as the ‘something-for-somebody’ project”). A few participants suggested that some of the sessions should be presented in the garden.

A comparison of the qualitative data during the post- and follow-up assessment occasions revealed that the pattern of the themes that had been identified in the first assessment remained very much the same during the other two assessments. However, a major shift regarding the aspect of empowerment emerged during the follow-up assessment seventeen months later, when the aspect of participants’ having internalized certain aspects of the programme content to such an extent that they could indicate the effect of the application of these skills in their daily lives, came to the fore. Reference was made to, *inter alia*, the ability to handle stumbling blocks, improved communication and relationships, and having attended to their weaknesses (“Hoe ek elke dag aanpak het in my lewe verander” / “The way in which I approach every day has changed in my life”; “Vandag is my swak punte aangewerk deur die program en is ek ’n beter persoon” / “My weaknesses have now been addressed by means of the programme and I am a better person”; “Ek is meer hardwerkend en werk aan my foute met my verhoudings wat nou uitstekend gaan” / “I am more hard-working, and I have been working on the defects in my relationships – which are now excellent”).

In the control group, the theme of being empowered emerged as well, but the contents differed from those that came to the fore in the case of the experimental group. The control group referred to the different aspects regarding the management of their schoolwork (“Ek het geleer om korter maar meer te leer”/ “I have learned to cover more material in a shorter amount of time when studying”). Surprisingly, a few of the participants could identify the principles underlying the facilitation of their studies, and were of the opinion that these principles could be applied to the management of their lives in general (“Ek het geleer hoe om situasies te hanteer” / “I have learned how to handle situations”).

Discussion

The main aim of this study was to compare the effect of a positive youth development programme (PYDI) presented to the experimental group, with that of a study programme presented to the control group in a secondary school. A secondary aim was to obtain information regarding future application, as well as regarding the evaluation of PYD programmes. The evaluation was comprised by quantitative and qualitative data. The quantitative results showed few positive effects for the PYDI programme. These findings may indicate limitations in the programme, but may also be explained by contextual aspects, particularly the fact that part of the intervention took place when the learners were already focusing on the preparation for their final exams. In addition, the contextual aspects may have impacted the evaluation results too, especially those which were acquired immediately after the completion of one of their examination papers. In this instance, because of logistical factors, there was no opportunity to rest before the evaluation, and the learners appeared tired and slightly irritable. The lack of quantitative proof could also be explained, at least partially, by aspects on the psychological stratum of the multiple systems (the biological, the

psychological, the socio-cultural, the natural and physical systems), contributing to individual development (Ford and Lerner 1992 in Lerner and Castellino 2002, Homans 1961, Hartup 1978 in Lerner and Castellino 2002), in terms of which the experimental group was shown to be a more vulnerable group. Another possible explanation for the lack of quantitative proof of the effectiveness of the PYDI programme, which primarily focuses on the facilitation of self-regulation, pertains to the biological stratum of the systems contributing to development, with particular reference to the aspect of cognitive and neurological maturation. Aspects of self-regulation, such as the ability to reflect on the implementation of strategies and to plan for longer-term goals, are dependent on the maturation of the pre-frontal cortex, which normally develops during adolescence (Moilanen 2007). In addition, effective self-regulation requires the integrated application of all aspects thereof, which constitutes a complex process (Moilanen 2007). The participants who were in the developmental stage of early adolescence might not have been cognitively mature enough to assimilate the self-regulatory skills comprehensively and execute them in a coordinated manner. This suggests that the PYDI programme should rather focus on older adolescents. Furthermore, the PYDI programme could accord more attention to the integration of the different aspects of self-regulation. More time than the allocated thirteen sessions might be necessary in order to facilitate these aspects. A combination of all of these factors may contribute towards explaining this lack of positive quantitative proof.

The qualitative results indicated some positive effects regarding the PYDI programme, and provide insights regarding the future application and evaluation of PYD programmes. The aspect of feeling empowered, especially regarding the ability to handle stumbling blocks, but also regarding the ability to regulate affect, as well as the ability to communicate, emerged as a category in the experimental group. During the second follow-up assessment seventeen months after the intervention, it became clear that the aspect of empowerment had expanded to include a dimension pertaining to the internalisation of some of the programme contents. This

indicates that the participants might have needed time to apply their newly-acquired skills and to become more proficient at doing so. Consequently, it may be concluded that a more longitudinal focus regarding the evaluation of PYD programmes, as suggested by Theokas *et al.* (2005), should provide a more comprehensive picture of the effects of a programme. The internalisation of the contents could indicate that the participants have been applying these skills and knowledge in their everyday lives, and therefore that these skills should impact their developmental trajectory in a positive manner, which is the ultimate purpose of PYD programmes. This aspect is in keeping with the concept of developmental validity as defined by Bronfenbrenner (1980: 35): “To demonstrate that human development has occurred, it is necessary to establish that a change produced in the person’s conceptions and/or activities carries over to other settings and other times. Such demonstration is referred to as developmental validity”.

Limitations

The assignment of participants to the experimental and control groups was not completely random, as demonstrated by, *inter alia*, the differences regarding initial mental health; this may have obscured the outcomes related to the intervention. A further statistical limitation was that the sample sizes of the two groups were small, which may have curtailed the information provided by the quantitative data. Theokas *et al.* (2005) indicate that, even though individual strengths show a stronger relation to thriving indicators than ecological strengths, a combination of these strengths displays a stronger relation to thriving indicators. This factor highlights a limitation of the current study, which could be rectified in future studies. Owing to logistical aspects, the PYDI intervention did not include the parents and families of the participants directly. The inclusion of the parents and families might have increased the efficacy of the facilitation of the self-regulatory processes between the participants and their families. The qualitative data provided no strong indications of an increased awareness in the

participants of their already-existing strengths and skills. A stronger focus on creating such an awareness in the participants should facilitate a more active involvement in the programme, as well as in their own development, owing to the fact that the needs for competence and autonomy, in particular – as described by self-determination theory (Deci and Ryan 2000) – would thereby be addressed. Although the results indicating that the circumstances at the time of evaluation may have influenced the emotional well-being of the participants (and the data), were informative, the fact that the post-test data were acquired during the final examinations for the year – a time of stress – nevertheless remains a limitation. The fact that programmes were presented to both groups obscured the possible effects related to the presentation aspects of the programme, which comprise an important facet of the PYDI programme (cf. manuscript 2/Brink and Wissing); it might have been better if a similar amount of time had been spent with the control group, without the presentation of a programme, in order to control for the attention aspect. However, this course of action would possibly have created an ethical dilemma, because of the fact that the research was conducted during school hours and education time was sacrificed. Therefore, a better design would be one in which both the study programme and the PYDI intervention are presented to the experimental group, while only the study programme is presented to the control group. Finally, the fact that the participants were not representative of the cultural diversity of this country definitely comprises a limitation too.

Recommendations for future application and research

The first important guidelines are those regarding the determination of the outcomes of a programme. The qualitative data indicated that it might take time for the skills facilitated by a programme to be internalized; and therefore, it is suggested that both the qualitative and the quantitative assessments should be distributed over a more extended time-frame.

The contribution of the information provided by the qualitative data in this study indicates that experimental and quasi-experimental research designs, as suggested by Catalano *et al.* (2002), may not be sufficient; mixed-method designs may constitute richer sources of information. Furthermore, the inclusion of qualitative data is in line with one of the assumptions of the PYD paradigm (Delgado 2002, Zimmerman, Phelps and Lerner 2009), namely that the youth are active participants in their own development; the qualitative data may provide the youth with opportunities to voice their unique experiences and opinions, which may elucidate the quantitative data, and also provide insights which the researchers may not have taken into consideration when devising the quantitative battery of instruments. Additional qualitative data may even be obtained during the course of the intervention, in order to tailor the intervention according to the needs of the specific participants.

Besides the recommendations regarding the evaluation of a programme, suggestions regarding the implementation of future programmes can also be made. In order to facilitate a process of internalizing the skills facilitated by the programme, more opportunities and time for the application of these skills are indicated, as pointed out by Zimmerman (2005) with regard to the acquisition of self-regulatory skills. Following the recommendation of one of the participants, the experimental group could be involved in identifying scenarios congruent with the lives of young people and applying their newly-acquired skills, e.g. regarding problem-solving, to these scenarios, during group discussions. Other ways of generalizing skills to the everyday lives of the participants could comprise an important avenue for future application and research; the idea of using a community project as an opportunity for application, as implemented in the current study, could be expanded in future studies. In accordance with the suggestion of concurrent qualitative data-acquisition, it is proposed that, even though the programme content is determined beforehand, the presentation should be less structured, and adapted to the needs of the specific group. This notion of presenting PYD programmes in such a manner that provision is made for individual differences regarding developmental courses, is

reiterated in research by Zimmerman *et al.* (2009). The qualitative data indicate that there should be a “fun” component, as well as variety in the presentation of the programme content. Finally, future programmes could involve the primary life context of the family to a greater extent.

Owing to the fact that a programme was presented to the control group too, the current study did not succeed in elucidating the effect of the presentation aspects of the PYDI programme (cf. manuscript 2/Brink and Wissing), especially regarding the guidelines provided by self-determination theory (Deci and Ryan 2000), which have a bearing on the PYDI programme (cf. manuscript 2/Brink and Wissing); there is a lacuna regarding the application aspects of PYD programmes (Roth and Brooks-Gunn 2003), and further research regarding these is necessary.

The chosen approach for the development of the PYDI model (cf. manuscript 1/Brink and Wissing) is the one recommended by Bronfenbrenner (1980) and Small and Memmo (2004), which entails expanding on already-existing knowledge. In accordance therewith, it is hoped that the current study may constitute a stepping stone for future process-related PYD programmes.

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Table 1: Descriptive Statistics (pre-, post-and follow-up (fp)) for experimental and control groups, as well as Cronbach reliability indices for measures based on the total number of participants

Scale	Experimental group		Control group		Range	Cronbach Alpha
	M	SD	M	SD		
CSE pre	81.74	18.18	84.32	15.45	95.00	0.81
CSE post	85.80	18.30	80.70	11.24	76.00	
CSE fp	85.97	12.42	84.53	15.66	70.00	
HS pre	22.16	4.57	23.53	5.04	22.00	0.82
HS post	23.89	5.37	22.47	4.97	23.00	
HS fp	23.83	6.25	23.58	4.81	28.00	
MHC_SF pre	42.47	11.59	44.21	11.51	53.00	0.91
MHC_SF post	39.84	10.78	42.45	9.58	43.00	
MHC_SF fp	45.22	11.91	43.21	10.28	44.00	
PR pre	62.71	9.75	61.68	8.09	40.00	0.79
PR post	56.84	11.24	61.00	8.10	43.00	
PR fp	63.11	10.07	62.30	9.13	39.00	
SSE pre	91.89	11.42	94.51	10.60	45.00	0.88
SSE post	92.55	12.71	93.05	10.77	47.00	
SSE fp	94.93	12.55	96.04	9.40	53.00	
PHQ pre	6.89	4.56	6.95	4.49	22.00	0.83
PHQ post	11.68	7.41	8.95	3.78	26.00	
PHQ fp	5.67	3.85	8.26	5.79	24.00	

Note. CSE= Coping Self-efficacy Scale; HS= Children’s Hope Scale; MHC-SF=Mental Health Continuum-Short Form; PR-Positive Relations with Others; SSE=Social Self-efficacy Scale; PHQ = Patient Health Questionnaire: Depression Symptoms.

SD = Standard deviation

M = Mean score

Table 2: Comparison between experimental and control groups

Scale	Pre-test						Post-test						Follow-up test					
	Experimental N=25		Control N=21		p	d	Experimental N=19		Control N=19		p	d	Experimental N=18		Control N=19		p	d
	M	SD	M	SD			M	SD	M	SD			M	SD	M	SD		
CSE_T	81.74	18.18	84.32	15.45	0.64	0.14	85.80	18.30	80.70	11.24	0.31	0.28*	85.97	12.42	84.53	15.66	0.76	0.09
CSE_SUE	23.32	7.67	24.95	6.36	0.48	0.21*	25.37	7.32	23.05	5.38	0.27	0.32*	26.56	7.05	23.42	9.03	0.25	0.35*
CSE_SFF	20.79	7.63	21.32	5.30	0.81	0.07	20.53	6.57	20.32	4.03	0.91	0.03	21.50	4.53	21.89	5.21	0.81	0.08
HS_T	22.16	4.57	23.53	5.04	0.39	0.27*	23.89	5.37	22.47	4.97	0.40	0.26*	23.83	6.25	23.58	4.81	0.89	0.04
HS_A	11.16	2.75	11.95	2.70	0.38	0.29*	11.89	3.14	11.47	2.46	0.65	0.13	11.89	3.31	12.42	2.14	0.56	0.16
HS_P	11.00	2.26	11.58	2.73	0.48	0.21*	12.00	2.98	11.00	2.87	0.30	0.34*	11.94	3.17	11.16	2.99	0.44	0.25*
MHC-SF_T	42.47	11.59	44.21	11.51	0.64	0.15	39.84	10.78	42.45	9.58	0.43	0.24*	45.22	11.91	43.21	10.28	0.59	0.17
MHC_SF_EW B	10.68	2.54	10.84	2.03	0.83	0.06	9.53	2.82	10.74	2.60	0.18	0.43**	10.67	3.63	10.74	2.83	0.95	0.02
MHC_SF_SW B	11.47	4.99	10.63	6.53	0.66	0.13	11.16	4.61	11.21	3.91	0.97	0.01	12.67	5.50	11.05	5.10	0.36	0.29*
MHC_SF_PW B	20.32	5.85	22.74	4.24	0.15	0.41**	19.16	5.05	20.53	4.68	0.39	0.27*	21.89	5.44	21.42	4.55	0.78	0.09
PR_T	62.71	9.75	61.68	8.09	0.73	0.11	56.84	11.24	61.00	8.10	0.20	0.37**	63.11	10.07	62.30	9.13	0.80	0.08
SSE	91.89	11.42	94.51	10.60	0.47	0.23*	92.55	12.71	93.05	10.77	0.90	0.04	94.93	12.55	96.04	9.40	0.76	0.09
PHQ_T	6.89	4.56	6.95	4.49	0.97	0.01	11.68	7.41	8.95	3.78	0.16	0.37**	5.67	3.85	8.26	5.79	0.12	0.45**

Note. CSE_T= Coping Self-efficacy Scale Total, _SUE= Stops Unpleasant Emotions and Thoughts, _SFF = Support From Family and Friends; HS_T= Children's Hope Scale Total, A= Agency Thinking, P = Pathways Thinking; MHC-SF_T=Mental Health Continuum-Short Form, Total, EWB=Emotional Well-being, SWB=Social Well-being, and PWB=Psychological Well-being; PR= Positive Relations with Others; SSE= Social Self-efficacy Scale; PHQ_T= Patient Health Questionnaire: Depression Symptoms, Total

* d ≈ 0.20 : small effect size

** d ≈ 0.50 : medium effect size

Table 3: Comparison within groups

<i>Scale</i>	Experimental group		Control group	
	Pre-test and Post-test	Pre-test and Follow-up-test	Pre-test and Post-test	Pre-test and Follow-up test
	d	d	d	d
CSE_T	0.22	0.15	0.23	0.02
CSE_SFF	0.03	0.06	0.19	0.10
CSE_SUE	0.27	0.37*	0.30	0.22
HS_T	0.38*	0.23	0.21	0.01
HS_A	0.27	0.13	0.18	0.18
HS_P	0.44*	0.28	0.21	0.15
MHC_SF_T	0.23	0.27	0.15	0.18
MHC_SF_EWB	0.46*	0.07	0.05	0.19
MHC_SF_SWB	0.06	0.30	0.09	0.02
MHC_SF_PWB	0.20	0.19	0.52*	0.43*
PR_T	0.60*	0.18	0.08	0.03
SSE	0.06	0.15	0.14	0.18
PHQ_T	1.05**	0.30	0.45*	0.30

Note. CSE-T= Coping Self-efficacy Scale, Total, SFF=Support from Family and Friends, SUE=Stops Unpleasant Emotions and Thoughts; HS_T Children's Hope Scale, Total, A= Agency Thinking, P= Pathways Thinking; MHC_SF_T=Mental Health Continuum-Short Form, Total, EWB=Emotional Well-being, SWB=Social Well-being, and PWB=Psychological Well-being; PR= Positive Relations with Others; SSE= Social Self-efficacy Scale; PHQ_T =Patient Health Questionnaire: Depression Symptoms, Total

* $d \approx 0.50$: medium effect size

** $d \approx 0.8$: large effect size

Table 4: Comparison between experimental- and control groups after conduction of controlling for depression

Scale	Pre-test					Post-test					Follow-up test				
	Effect					Effect					Effect				
	Mean A	Mean B	MSE	P	Size	Mean A	Mean B	MSE	P	Size	Mean A	Mean B	MSE	P	Size
CSE_T	78.75	83.65	279.10	0.33	0.29	86.87	79.63	147.80	0.08	0.60	85.19	85.30	138.47	0.98	0.01
HS_T	21.70	23.00	20.35	0.34	0.29	24.38	21.99	20.51	0.12	0.53*	23.77	23.64	27.16	0.94	0.02
HS_A	10.91	11.74	6.84	0.29	0.32	12.09	11.28	7.17	0.38	0.30	11.77	12.54	6.99	0.40	0.29
HS_P	10.79	11.26	5.62	0.51	0.20	12.26	10.74	6.21	0.08	0.61*	11.96	11.14	8.02	0.41	0.29
MHC_SF_T	40.29	44.32	123.42	0.23	3.99**	40.76	41.53	65.14	0.78	0.10	45.68	42.75	81.59	0.36	0.32
MHC_SF_EWB	10.20	10.92	4.84	0.28	4.96**	9.78	10.49	5.33	0.36	0.31	10.36	11.05	9.55	0.54	0.22
MHC_SF_SWB	10.09	10.76	34.39	0.70	1.83**	11.02	11.35	14.05	0.79	0.09	12.64	11.08	17.61	0.28	0.37*
MHC_SF_PWB	20.00	22.64	23.78	0.08	4.64**	19.97	19.71	17.55	0.86	0.06	22.28	21.03	17.97	0.42	0.29
PR_T	62.19	61.67	88.19	0.85	0.06	57.31	60.54	59.79	0.22	0.42*	62.21	63.20	73.45	0.74	0.12
SSE	90.40	94.07	128.70	0.28	0.32	93.80	91.80	118.93	0.59	0.18	95.59	95.38	62.44	0.94	0.03

Note. CSE_T= Coping Self-efficacy Scale Total; HS_T Children's Hope Scale, Total, A= Agency thinking, and P= Pathways thinking; MHC_SF_T=Mental Health Continuum-Short Form, Total, EWB= Emotional Well-being, SWB=Social Well-being, and PWB=Psychological Well-being; PR= Positive Relations with Others; SSE_T= Social Self-efficacy Scale, Total

MSE= The mean square error of analysis
P=statistical significance

* d ≈ 0.5: Medium effect size
**d ≈ 0.8: Large effect size

Section 5

Conclusion

Conclusion

The current study focused on the facilitation of the development of the youth in a more positive trajectory. In order to accomplish this, an understanding of the processes underlying developmental change was necessary. Because of the lack of theory regarding positive developmental change – even though empirical data are well represented in the PYD field – it was necessary to devise a model elucidating developmental change. The first step entailed the formulation of a theoretical model expounding developmental change in the youth. The next step was to determine possible ways in which the positive developmental change, as described by this model, could be facilitated by means of a programme. The final step was to evaluate this programme, with a view to determining the efficacy thereof in a scientific manner, in order to contribute to the scientific knowledge regarding positive youth development interventions. Against this background, the main aims of the current study were: a) to compile a theoretical model of developmental change in the youth; b) to operationalize this model for intervention purposes; and c) to evaluate the intervention.

Article 1 centred on the formulation of a theoretical model, describing developmental change in adolescence. This study was conducted within the parameters of the PYD paradigm, in order to participate in a larger, more coordinated scientific process of expanding on current knowledge, thereby constituting a stepping stone for future research efforts. Bearing in mind that development is a complex process which cannot be comprehensively described by a single model, a model describing certain aspects of development – namely, development within the contexts of: a) the formulation and pursuit of relevant personal goals, and b) the navigation of stressors – was compiled. The latter process entailed: a) the formulation of a meta-theoretical matrix, which included developmental systems theory – the meta-theory to PYD (King et al., 2005); b) the configuration of a theoretical foundation, based on the limited amount of theory that features in the PYD paradigm; and c) the expansion of this foundation through the

incorporation of theory from other paradigms that are compatible with the strength-based focus of PYD, namely positive psychology, developmental psychology and applied developmental psychology. In view of the fact that the meta-theory to PYD, namely developmental systems theory, is a process-related theory (Lerner, 1998), the challenge lay in devising a process-related model compatible with this meta-theory. In order to accomplish this, the meta-theory was augmented by two other compatible meta-theories, namely ecosystems theory and “a general systems perspective on personal growth and development” (Amerikaner, 1981), which aided in directing the focus of the model. Even though the basic framework of the model was configured by two process-related models, these had to be reconciled with more content-oriented theory, e.g. developmental theory, which indicates the developmental challenges of adolescence. The resultant Positive Youth Development Intervention (PYDI) model successfully provided a process-related description of developmental change. The PYD literature does not explicitly refer to developmental psychology. The fact that developmental psychology is taken into account in the PYDI model is an advantage, especially regarding application by means of a programme based on this model. Developmental psychology not only elucidates the kind of skills to be developed by means of a programme, but also provides guidelines regarding the development of a programme that is specifically attuned to the developmental level of the target group. In spite of the fact that Larson (2000) accords a central role to the aspect of motivation or “initiative” in the development of the youth, this aspect has not been thoroughly explicated on a theoretical level. A further contribution of the PYDI model is that it addresses the aspect of motivation theoretically, albeit not comprehensively.

Article 2 focused on the operationalization of the PYDI model. Even though research by Zimmerman, Phelps and Lerner (2008) indicates a positive relation between self-regulation and positive development in the youth, and although Gettsdottir and Lerner (2008) propose the selection, optimalization and compensation (SOC) model as a description of self-regulation, PYD was still characterized by a lack of understanding in respect of exactly how these operate,

because the SOC model takes a longer-term perspective. The unique contribution of the PYDI programme lies in its adaptation of a model that was originally designed to describe self-regulation in an educational context (Heckhausen & Gollwitzer, 1987 (as cited in Boekaerts & Niemivirta, 2005)). This adapted model is used in order to describe the regular self-regulatory processes between the youth and their primary life contexts, which constitute the longer-term bi-directional interactions as described by the SOC model, *inter alia*. A further unique contribution of the PYDI programme is that the aspect of the presentation of the programme content, which is indicated as a definite need in the PYD literature regarding interventions (Bartko, 2005; Larson, 2006; Roth and Brooks-Gunn, 2003), is addressed. The manner of presentation is important to the aspect of developmental validity (Bronfenbrenner, 1980). The latter refers to the internalization of the skills and knowledge, as presented in the programme, to such an extent that these skills and knowledge are generalized to everyday life contexts. This generalization of the acquired skills and knowledge is a prerequisite for the facilitation of developmental change by means of an intervention.

Article 3 describes the implementation of the PYDI programme and the evaluation thereof. Even though Catalano *et al.* (2002) call for more experimental and quasi-experimental studies, this study applied a mixed-methods design. This design ultimately rendered much richer information than in the case of a quantitative study alone: the quantitative data in this study did not show many positive results; but some explanation for this factor was provided by the qualitative results. On the basis of the qualitative results obtained during the second follow-up data-collection, conducted seventeen months after the intervention, it transpired that some of the skills facilitated in the programme had only become internalized by that time – indicating that the evaluation of a programme should be extended over a longer time-frame. Furthermore, the qualitative results indicated that certain aspects of the PYDI programme might have been successfully facilitated. Unfortunately, the presentation aspects of the PYDI programme were not highlighted, because of the fact that programmes were presented to both the experimental and the

control groups; and the presentation aspects of both programmes were rated by the participants as “above average”.

Different stages are involved in the development of a new field of knowledge (Sternberg, 1989). PYD is a relatively new paradigm, which came into existence more or less two decades ago (King *et al.* 2005). In view of the fact that it is still developing (as reflected by, *inter alia*, the lack of generally accepted terminology, as pointed out by King *et al.* (2005)), current scientific endeavours may not provide final, clear-cut answers; but they may nevertheless contribute to the progression of the paradigm. The contributions of the present study will thus be interpreted against this background of a developing paradigm. It can be concluded that the PYDI model is a sound theoretical model, in which the meta-theoretical matrix and the propositions are integrated coherently. Although the efficacy of the PYDI model and programme was not unequivocally proved by the results of the evaluation, this study did contribute to the progression of the PYD paradigm. On a theoretical level, a contribution was made by the analysis of existing literature within the PYD approach or paradigm. This analysis indicated lacunae, especially with regard to theory. A further contribution was made by the integration and synthesis of existing compatible models, with a view to forming a new model that could be used as a theoretical backdrop for the development and evaluation of interventions to promote youth development within a PYD approach. The compilation of this model has shown that theory in compatible sub-disciplinary paradigms could be used in order to devise workable models for PYD.

Zimmerman, Phelps and Lerner (2008, p. 163) indicate that programmes should not follow a “one-size-fits-all” approach. This principle is especially relevant to the South African context, which is characterized by great diversity. Process-related models may comprise an appropriate solution in this regard, since such models could be adapted to the specific needs of the target group. In this study, one of the first process-related models describing positive development in the youth, was successfully formulated. Furthermore, this study comprises one of the first attempts, within the PYD paradigm, to effectuate the operationalization of self-

regulation, as a pivotal process by means of which developmental change is constituted. The superiority of a mixed-methods design, as opposed to experimental and quasi-experimental designs, has been highlighted in the study.

A limitation of this study is the fact that it addressed complex processes and skills to be facilitated in the youth, and that too little time was allocated for this purpose. The PYDI programme should ideally be presented over a much longer period of time. More time would allow for greater scope regarding the facilitation of the relevant skills, e.g. more opportunities to learn to apply the concerned skills in contexts other than that of the intervention. The results of the evaluation were obscured by the fact that the participants were not assigned to the experimental and control groups on a completely random basis. Moreover, the initial mental health of the control group was significantly higher. The presentation of programmes to both the experimental and the control groups likewise limited the results, *inter alia* because the presentation aspects of the experimental programme were not clearly reflected – and also because, with hindsight, it became clear that the study guidance programme (which was presented to the control group) included a few aspects of self-regulation too. The study was also limited by the small number of participants, and the fact that they were not representative of the cultural diversity of the country.

There is a great need for the facilitation of the development of the South African youth. The South African government is currently addressing this need on the socio-cultural level of the multiple systems (Ford & Lerner, 1992, Hartup, 1978, Homans, 1961 (as cited in Lerner & Castellino, 2002)). Future researchers could use the PYDI model, *inter alia*, as a foundation for their interventions. However, it is recommended that such programmes should accord further attention to the facilitation of self-regulation and the different aspects thereof. In view of the complexity of self-regulation and the meta-cognitive maturity needed to execute this process effectively (Moilanen, 2007), the PYDI model may be more appropriate for older adolescents. Interventions based on the PYDI model should be implemented over a much longer time-frame;

and specific attention should be paid to the presentation aspects of such a programme. The number of participants in the research should also be increased, in order to refine the evaluation results. In addition, the concept of involving the youth in community projects as a way to provide opportunities for the acquisition of relevant skills, as applied by the PYDI programme, could be implemented and expanded by future PYD endeavours. The latter notion of the youth contributing to the well-being of others is in keeping with the viewpoint of the South African Government, in terms of which the youth are regarded as a resource related to the future of the country (National Youth Commission website).

Although the qualitative results of a mixed-methods design will render information regarding the intervention, the battery of quantitative indicators of thriving could be expanded. Regarding the evaluation of such interventions, it is recommended that the evaluation be expanded over a longer time-frame. In view of the paucity of South African research regarding the facilitation of the positive development of the youth in accredited South African journals, the publication of such research in South African psychology journals is recommended, in order to facilitate the communication of the results, with a view to achieving more coordinated, and thus more effective efforts aimed at the development of the South African youth from a psychological perspective.

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