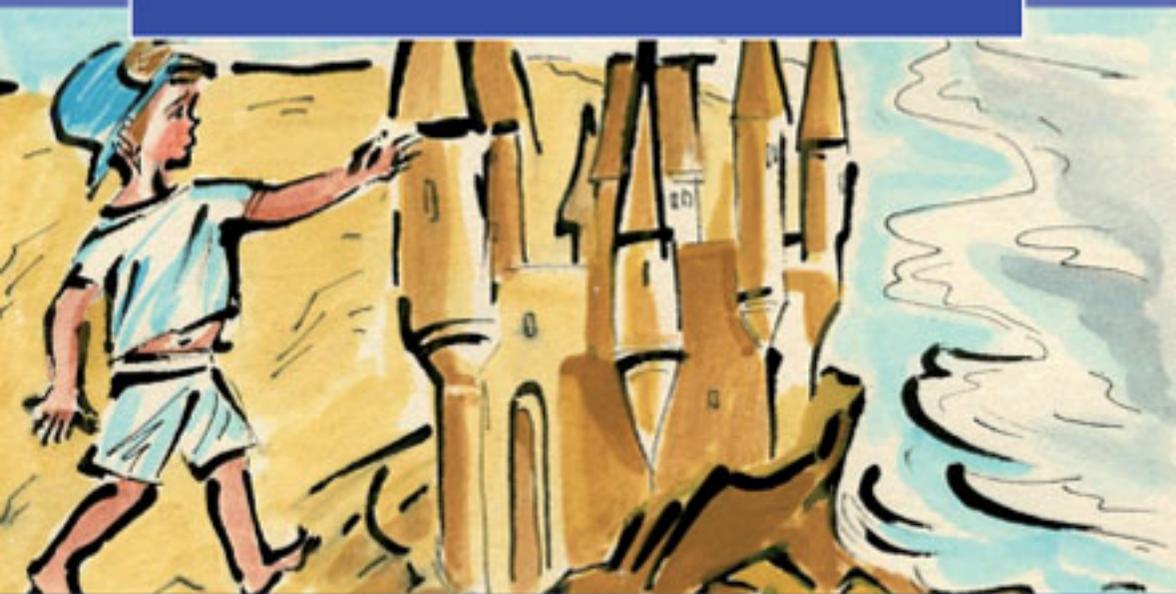


CAREER DEVELOPMENT SERIES

Career Development in Childhood and Adolescence

Vladimir B. Skorikov and Wendy Patton
(Eds.)



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CAREER DEVELOPMENT IN CHILDHOOD AND ADOLESCENCE

CAREER DEVELOPMENT SERIES

Connecting Theory and Practice

Volume 2

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Scope

Recent developments in the literature on career have begun to reflect a greater global reach and acknowledgement of an international/global understanding of career. These developments have demanded a more inclusive understanding of career as it is experienced by individuals around the world. Related issues within the career literature include the relationships within the career theory literature, or theory integration and convergence, and between theory and practice. The influence of constructivism is another influence which is receiving sustained attention within the field.

The series will be cutting edge in focusing on each of these areas, and will be truly global in its authorship and application. The primary focus of the series is the **theory-practice** nexus.

Career Development in Childhood and Adolescence

Edited by

Vladimir B. Skorikov
University of Hawaii at Hilo, USA

and

Wendy Patton
Queensland University of Technology, Australia



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ROTTERDAM / TAIPEI

A C.I.P. record for this book is available from the Library of Congress.

ISBN 978-90-8790-159-2 (paperback)

ISBN 978-90-8790-160-8 (hardback)

Published by: Sense Publishers,
P.O. Box 21858, 3001 AW Rotterdam, The Netherlands
<http://www.sensepublishers.com>

Printed on acid-free paper

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PREFACE

This book builds on a renewed impetus to understand career development in children and adolescents. Much work has begun toward integrating children's and adolescents' career development into more holistic theoretical conceptualisations and toward connecting this thinking to guide empirical work and practice. Thus the focus of the present book is to further develop theory-practice connections in understanding child and adolescent career behaviour. Each of the chapter authors was asked to prepare an original chapter which focused on either children or adolescents, or on both groups.

We want to thank the twenty-six authors, our colleagues from eight countries, who agreed to contribute their knowledge and expertise to the book. It has been exciting to be part of a project which culminates in the first book dedicated to career development of children and adolescents.

We want to thank the support staff who have assisted us with manuscript preparation, especially Andrea McCrindle, whose consistency and attention to detail has considerably enhanced the final product.

We are particularly indebted to Galina Alexandrova, an artist who provided a wonderful drawing for the book cover. On a very short notice, she was able to come up with a picture, which was indeed worth a thousand words.

Finally we want to thank our families who supported the many hours of our absence in our offices.

Vladimir Skorikov and Wendy Patton

CHAPTER 1

WENDY PATTON AND VLADIMIR B. SKORIKOV

CAREER DEVELOPMENT IN CHILDHOOD AND ADOLESCENCE: INTRODUCTION

A number of recent reviews have highlighted the dearth of literature in the area of career development in childhood and adolescence, in particular the inadequacy in addressing children's career development (Hartung, Porfeli, & Vondracek, 2005; Turner & Lapan, 2005; Vondracek, 2001; Watson & McMahon, 2005). These authors' emphases are not new: calls for a greater focus on understanding the vocational development of children theoretically (Borow, 1964) and empirically (Vondracek & Kirchner, 1974) have been made repeatedly over previous decades. Nevertheless, our understanding of the early stages of career development and their relationships with adult careers is still extremely limited. Thus, Hartung, Porfeli, and Vondracek (2005) emphasised that "Linking knowledge of child vocational development with what is known about adolescent and adult vocational development and conducting research that embeds vocational development within the fabric of a life-span developmental framework could move the field of vocational psychology from a disjointed perspective on career as studied in isolated age groups and toward an integrated life-span conceptualization" (p. 385). Watson and McMahon (2005) brought attention to the methodological problems and fragmented nature of the work that has been conducted with this population. Additionally, there is a clear need for a more holistic, systemic approach to career development constructs and processes (Patton & McMahon, 2006).

Much work toward integrating children's and adolescents' career development into more holistic theoretical conceptualisations has begun. For example, Lerner, Theokas, and Jelicic (2005) have highlighted the value of embedding the study of adolescent development into developmental systems theories, Porfeli (in press) has drawn on the broader human exploration literature to emphasise the active nature of children's and adolescents' career exploration and the limited nature of "period of fantasy" based conceptualisations, and Watson and McMahon (2005) drew on learning theory to contextualise the research literature and highlight the need for process oriented research that examines "the what and how of children's development learning" (p. 119).

Building on this renewed twenty-first century impetus, the focus of the present book is to further develop theory-practice connections in understanding child and adolescent career behaviour. Each of the chapter authors was asked to prepare an original chapter which focused on either children or adolescents, or on both groups.

Authors were asked to review both the theoretical and empirical literature relevant to their topic, and to focus on what is current cutting edge thinking in that particular topic area. In keeping with the international focus of the Career Development Series, the book includes authors from eight countries. Authors were encouraged to apply their work as broadly as possible - if writing about a particular country/culture, authors attempted to ensure that it was done in a form that would ensure applicability to other contexts. Finally, suggestions on particular relevance of the chapter focus for future directions in the field are proffered.

IN THIS VOLUME

The book is loosely structured around three parts. The first part includes chapters that cover childhood and adolescence, chapters in part two focus on adolescent career development, and in part three chapters focus on specific contexts. A concluding chapter draws together the contents of the book and highlights future directions.

Overview of chapters

James Athanassou reviews the perspectives on assessment of two theoretical traditions of children's and adolescents' career development, person-environment fit and constructivism. He recommends that the approaches which emanate from both traditions are complementary and suggests that both are necessary. He provides a discussion of developmentally appropriate career assessment methods, highlighting the need for more age appropriate examples. Finally, he emphasises the importance of a counselling orientation in assessment.

Mark Watson and Mary McMahon extend their work in applying learning theory to career development in childhood by using the Systems Theory Framework (Patton & McMahon, 2006) as a broad theoretical perspective connecting theory and practice. These authors explore the potential for the unintentional and intentional learning that takes place to inform and therefore strengthen each other.

Wendy Patton and Erik Porfeli focus on career exploration for children and adolescents and review both the theoretical and empirical literature. The authors then investigate major contexts for intentional career exploration, the family and the school, and critique interventions currently used to facilitate the career exploration of children and adolescents.

Sandro Sodano and Terence Tracey discuss how interests and related competency perceptions arise over time in children and adolescents within the context of Holland's (1997) model of interests. Noting the emphasis in existing literature on older adolescents and adults, these authors structure their review

around elementary, middle, and high school years and offer suggestions about applications in research and in school interventions.

Occupational and educational aspirations and expectations are the focus of Jay Rojewski's chapter. He reviews definitions, theoretical explanations, and empirical work and measurement issues. He explores various influences on the development and attainment of aspirations, and given their formation in early childhood and relative stability throughout adolescence, emphasises the need for comprehensive career interventions from a young age.

Erik Porfeli and Fred Vondracek propose a theoretical model of work value system development grounded in developmental contextual theory, living system theory, and developmental systems theory. These authors note that this model proffers an explanation about how value system development is linked to behaviour and behaviour change across time and demonstrate the applicability of the systems theory approach to the relationships between work values and adolescent work experience.

Elke Schroder and Eva Schmitt-Rodermund highlight the importance of entrepreneurship as a competence to effectively deal with a changing and complex work world. They present theoretical models and empirical evidence to support the notion that an entrepreneurial personality profile as well as a stimulating environment relate to entrepreneurial interests, attitudes and behaviour later in life. They further provide recommendations regarding school interventions that promote enterprising attitudes and behaviour.

The chapter by Vladimir Skorikov and Fred Vondracek emphasises the importance of an adaptive, flexible and self-focused vocational identity as a contributor to career success and satisfaction. These authors provide an overview of the theory and research on vocational identity in childhood and adolescence within the framework of the developmental contextual approach to career development and outline implications for practice and future research.

Donna Schultheiss focuses on the relational context of children's and adolescents' career development. She reviews relevant theoretical and empirical work which suggests that close, supportive, reliable relationships are associated with positive, adaptive vocational behaviours such as career exploration and decision-making. Practice recommendations are also proffered.

Noa Saka and Itamar Gati focus on the application of decision theory to understanding and facilitating adolescent career choices. Following an in-depth discussion of the career decision-making process and adolescents as decision makers, the authors present models of decision making before describing in detail the PIC (Pre-screening, In-depth exploration, Choice) decision-making model.

Vladimir Skorikov discusses theory and research on the relationships between adolescent career development and adjustment. He provides a review of empirical findings on the relations between career development processes and affective health, delinquency, and disability and offers a theoretical model of the dynamic, reciprocal relationships between career exploration and commitment and affective health during the transition to adulthood.

Career maturity is a central construct in theorising adolescent career development. The current empirical work on adolescent career maturity is reviewed by Wendy Patton and Peter Creed before the authors discuss current theorising and reconceptualising of the construct toward career adaptability. Research and practice implications are discussed.

Educational choices of late adolescence are examined in the chapter by Veerle Germeijs and Karen Verscheuren. They discuss choosing a college major as a career decision-making process and provide an overview of research on the mechanisms of this choice and some of its outcomes.

Sociological, social psychological and developmental theories are drawn on in Jeylan Mortimer and Melanie Zimmer-Gembeck's chapter exploring the relationship between adolescent paid work and career development. The authors discuss the socialisation experiences of paid work contexts, as well as the opportunities these experiences proffer to optimise educational attainment and career establishment. Limitations of what we know about this area and directions for future research are discussed.

The co-construction of career through joint projects engaged in by parents and adolescents is the focus of the chapter by Richard Young, Ladislav Valach and Sheila Marshall. The theorising and research work which has been the focus of these authors for many years is described, and specific implications for practice are proffered.

Kaori Okano explores the potential of the career adaptability construct to analyse the career development of work-bound adolescents in Japan. She emphasises the need for career adaptability theory to include the social aspects of adaptability, particularly in cultures where there is a collective and regulated approach to school to work transition.

Kobus Maree and Leisel Ebersohn have proposed a merging of career development's career construction theory and positive psychology's asset-based approach. The authors describe this theoretical merge and, with a particular focus on a deep rural South African community, suggest the value of career development interventions based on these approaches. Generalising possibilities of this work to the career development of other culturally diverse adolescent populations is discussed.

In the final chapter, Vladimir Skorikov and Wendy Patton discuss the current state of theory and research on children's and adolescents' career development and outline directions for future work in the field. They also analyse methodological shortcomings of the existing studies and propose some approaches to improving the quality of ongoing research and practice.

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AFFILIATIONS

Wendy Patton
Queensland University of Technology, Australia

Vladimir B. Skorikov
University of Hawaii at Hilo, USA

CHAPTER 2

JAMES A. ATHANASOU

ASSESSMENT OF CHILDREN'S AND ADOLESCENTS' CAREER DEVELOPMENT

ABSTRACT

This chapter reviews the person-environment fit and constructivist traditions of children's and adolescent's career development. The background and key issues associated with these perspectives on assessment are outlined and critiqued. Three case studies are used as a central focus for discussion and used to highlight the quantitative versus qualitative nature of the assessment processes. Both the analytical and descriptive perspectives are seen as complementary. Neither is considered adequate as a complete basis for career exploration and decision-making. Some recommended aspects of career development assessment are provided for both approaches and these are incorporated within a holistic career counselling framework. The emphasis is on how the results of an assessment might be used. The overwhelmingly adult orientation of career development assessment is noted and a case is made for a more extensive career development assessment process throughout childhood and adolescence. The chapter concludes with a discussion of developmentally appropriate methods, the meaningfulness of scores, ethical issues and the importance of a counselling orientation in assessment.

Any assessment of career development will of necessity be set against the theoretical perspective and ideology of the career development researcher or the career counsellor. One's concept of career, let alone of human development or the person, together with the relevance of individual, psychological or societal influences in career development, the acceptance of the subjectivity versus objectivity of the world and of how career guidance should be undertaken are all material considerations for assessment. They are instrumental to (a) the approaches that will or will not be used; (b) whether assessment will or will not be important; as well as (c) by whom and how any results will be utilised. The purpose of this chapter is to explore issues relating to the assessment of children's and adolescents' career development through the perspectives of the person-environment fit approach and the newer constructivist approaches.

Assessment in career development involves the process of collating information from a standardised observation(s) into a meaningful whole. The information is compared against an implicit benchmark or explicit criterion in order to enable a judgment to be made. This information may be quantitative or descriptive *cum* qualitative (see Athanasou & Lamprianou, 2002). Assessment can be associated with diagnosis, prediction, placement, evaluation, selection, grading, guidance or administration. The assessment of career development might be linked to some or all of these objectives but this chapter is restricted by limitations of space to the function of career guidance or counselling, while still recognising that these other purposes are still worthy of a separate analysis.

THE ASSESSMENT IMPLICATIONS OF PERSON-ENVIRONMENT FIT THEORIES

Current approaches to career assessment developed largely from a trait-factor tradition of vocational guidance (Parsons, 1909; Patterson & Darley, 1936; Super, 1949; Williamson, 1939, 1965). It may help to describe a classical trait-factor approach with an example.

Case study 1

In the early 1960s a State government vocational guidance report, prepared for a 15-year-old male student who was in Year 9, was typical of this situation:-

- In the vocational tests you revealed superior general intellectual ability, superior spelling and very superior clerical speed and accuracy. Practical aptitudes were average. A test of colour discrimination revealed no defect.
- These results and your school record indicate that you are capable of success in Leaving Certificate Examination studies and in tertiary studies at degree level. Your own choice of a degree in Arts, leading to secondary teaching, a position as a psychologist, or social work, is recommended.
- A position as an executive trainee with a large commercial organisation would also be suitable and could follow a degree in Arts or in Economics or Commerce.
- A further discussion about your future training and employment should be arranged after publication of your Leaving Certificate Examination results. (Department of Labour and Industry New South Wales, Division of Vocational Guidance Services, copy, 3.1.68)

The world of career assessment has changed since the 1960s when this vocational guidance report was written and when guidance was later described in jest as "three interviews and a cloud of dust" (Crites, 1981, pp. 49-52). This trait-factor approach dominated much of what was the field of vocational guidance practice in its popular and formative years. It focused on matching people with occupations and educational or psychological testing was used as the available technology for undertaking this role. At that time, it was thought that tests provided accurate information for planning a career (Patton & McMahon, 1999, pp. 14-17).

Over time the trait-factor approach has evolved into a person-environment fit theory that assessed both individuals and occupations in terms of the same characteristics (Dawis & Lofquist, 1984; Holland, 1997; Rounds & Tracey, 1990). To a large extent the assessment of career development within person-environment fit theory has centred on factors such as achievement, aptitude, interest or values (see the summary in Table 1). This prevailing view still emanated from differential psychology. It was dominated by a psychometric focus on latent traits and the norm-referenced reporting of such characteristics.

Aptitudes, interests and values dominated vocational guidance and the scope of any counselling within this framework. These constructs – in conjunction with some personal information – provided the major basis for decision-making. The person's aptitudes and interests were related to the demands of occupations. Therefore the major role of the assessment of career development was essentially as a foundation for matching. The focus, however, was adult-oriented and both children and adolescents were expected to step into line.

Table 1. Some recommended aspects of career development assessment for person-environment fit

<i>General area</i>	<i>Focus</i>	<i>Some typical assessment approaches and specific examples</i>
Educational achievement	Educational qualifications, school achievements, literacy, numeracy	Interview, records, educational achievement tests, occupational knowledge - Wide-Range Achievement Test 4
Aptitudes	Verbal, numerical, spatial, perceptual, sensory and manual abilities	Interview, card sorts, self-evaluations, standardised criterion and norm-referenced tests - Wechsler Intelligence Scales - O*NET - manual dexterity, strength, sensory tests, speed-accuracy, memory
Interests	Preferences – occupational, educational, leisure	Interview, expressed, tested, inventoried, manifest, self-evaluation approaches - Strong Interest Inventory - Occupational Card Sort - O*NET
Values		Interview - Card sorts - O*NET

Case study 2

In 2001, almost some 40 years later, the 16-year old son of the same Year 9 vocational guidance client from the 1960s undertook self-directed career exploration consistent with a person-environment fit approach. Befitting the changing times, this was an interest assessment using the computer-assisted *Kuder Careers Search*TM. The interest questionnaire was used to find occupations that might be suitable for the individual and the key results from the interpretive report are summarised in Figure 1. The transformation from test scores to information was:

- I. Results were used to provide information about the extent of career development or the future direction of career development;
- II. This was related to career options that are meaningful and reasonable for the person;
- III. The options were evaluated; and
- IV. The decisions formed the basis for future actions.

In this example the emphasis was only on career interests and the process was overseen by a parent. The results were used to a large extent to select high school subjects in the senior years with a view to entering a trade. These initial decisions were further confirmed by a voluntary work experience placement with a local employer (an automotive electrician) and culminated in obtaining a position as an apprentice on leaving school. Underlying this process was the dynamic search for a congruent environment (Rounds & Tracey, 1990). Of course, it is recognised that this does not represent the ideal application of career assessment or counselling within a person-environment fit approach.

Content

In the person-environment fit approach a battery of aptitude and interest measures may be used typically to describe the talents of a person in order to determine the types of occupations that might be suitable (see Table 1). This is founded on the idea that “occupations differ on a wide range of work-relevant abilities” (Prediger, 2004, p. 203). Aptitude measures might include: sensory tests, paper-and-pencil verbal and numerical reasoning tests, tests of abstract or non-verbal reasoning, mechanical reasoning tests, spatial reasoning tests, spelling tests, test of clerical speed and accuracy as well as measures of interest and work values. In special cases (e.g., developmental disability) individualised assessments (e.g., *Wechsler Intelligence Scale for Children*, see Wechsler, 2003) may be used for those cases where paper-and-pencil tests were not appropriate. The main emphasis, however, has been on aptitudes, interests and related career constructs. It is not clear that full

consideration has been given to children and adolescents within and across these formal assessments.

Note that the use of tests is not essential for the person-environment fit approach and there are many instances (see below) where testing is not recommended. Despite the rampant overemphasis on testing it is really an oversimplification to equate the person-environment fit approach with such pseudo-quantification. Testing is neither necessary nor sufficient for person-environment fit. Due to limitations of space, the following paragraphs consider only the two aspects of abilities and interests as aspects of person-environment fit.

Abilities

Achievements, abilities and aptitude (i.e., potential) have always been recognised as important for employment and career guidance. L. S. Gottfredson (2003) advocated the assessment of abilities for career choice and development and conceptualised these in terms of hierarchically organised abilities. These placed general abilities at the apex (Stratum III), with broad factors such as verbal reasoning, spatial reasoning or memory and learning (Stratum II) comprising the middle layer; and specific abilities, such as reading, listening, verbal comprehension, visualisation, visual memory, memory span, associative memory, maintaining/judging rhythm, quantitative reasoning or expressional fluency making up the lowest level of the hierarchy. The reader is referred to Gottfredson (2003, p. 118) for a complete listing. She did not emphasise testing and stated:

“I see no need to automatically administer tests of cognitive abilities. The broad Strata II and III abilities are used and tested so frequently during the high school and college years that students have generally accumulated a large set of rough indicators for them...” (p. 131).

Moreover, testing is not always available to cover the full range of occupational or work relevant abilities and Prediger (2004) has recommended that ability self-estimates can offer benefits for career planning. He listed 15 work-related abilities, of which there were tests available for seven: Reading, Numerical, Language usage, Spatial perception, Clerical perception, Mechanical reasoning, Scientific. There were eight abilities for which test estimates were considered seldom available: Creative-literary, Creative artistic, Manual dexterity, Meeting people, Helping others, Sales, Leadership, and Organization (p. 204). Self-estimates are used within assessments such as the *Self-Directed Search* or the O*NET web-site and G. D. Gottfredson (2002) indicated that self-estimates and self-ratings may be interpreted as a type of self-efficacy: “Self-beliefs about one’s competencies or skills are not equivalent to measured ability or skill... self-estimates measure something more stable other than actual abilities. These stable self-beliefs are important in their own right, not just as proxies for measured abilities.” (p. 203).

Interests

Interests are considered important because they indicate sources of personal reinforcement, satisfaction and task motivation; they embody the ideal of freedom of career expression for one's talents in life. As far back as 1949, Super categorised four different approaches to vocational interest assessment (see also Super and Crites, 1962) and these have dominated our thinking in this field. Vocational interests may be assessed through a manifest involvement in activities, through tested knowledge about a topic, through inventoried interests or questionnaires as well as through expressed interests which are statements of interest. Again one need not rely only upon interest questionnaires or inventories for information about interests (see Athanasou & Cooksey, 1993).

The assessment of interests can begin as early as the third grade. Students are able to state strong interests (Miller, 1977) and to discard some occupations on the basis of interest (Nelson, 1963). It was not until the advent of developmental theories such as Ginzberg, Ginsburg, Axelrad and Herma (1951), Super (1990) and Gottfredson (1981) that attention was focused on these earlier years. Trice, Hughes, Odom, Woods and McClellan (1995) studied the career aspirations of 949 elementary school students and used structured interviews rather than inventories. Children were asked for their first choice of occupation and the reasons for that choice; and the second occupational choice if the first was not available. Recently, Athanasou and Lamprianou (2005) analysed the interests of primary school pupils who responded to the *Inventory of Children's Activities*, a 30-item general interest questionnaire based on the hexagonal interest and personality typology of Holland. It was considered that children's interests did not conform to an adult typology and an alternative hypothesis of a general interest dimension comprising all items was proposed. They concluded that interests may be idiosyncratic and that standardised questionnaires may not cover the interests of some pupils appropriately.

Using the results

The results from career assessments of interests and abilities were once thought to be unequivocal predictors of achievement in a specific occupation or contentment with a field of work (see Prediger, 1995). The validity coefficients are helpful but they are never perfect. This is because of measurement problems and because there are so many other potential influences (other than interests or abilities) on satisfaction, satisfactoriness and tenure (see Dawis & Lofquist, 1984; Holland, 1997). Furthermore there is limited aptitude and interest findings for the 8 major groups, 43 sub-major groups, 97 minor groups, 358 unit groups and 998 occupations which comprise collections such as the *Australian and New Zealand Standard Classification of Occupations*. Another restriction on the predictive use of assessment results arises from limitations in generalisability. Predictive validity coefficients are based on group data and these results may not generalise to a specific client.