Hope, Future Values and Social Comparison as Predictors of Mental Health and Well-Being in Adolescents

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University College London
UCL Doctorate in Clinical Psychology

Thesis Declaration Form

I confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Signature:

Name: Samuel-Eliyahu Parker

Date: 28/07/2017
Overview

This thesis is concerned with an exploration of the impact of hope, future values and social comparison on the mental health and well-being in adolescents. Part One is a narrative literature review of studies that examine hope as a predictor of mental health and well-being in children ages 10-19 between 2006 and 2016. Part Two is a cross-sectional study which examines the predictive validity of hope, future values and social comparison on the mental health and well-being of school children aged 11-17. Part Three is a critical appraisal of the thesis, it reflexively considers the research, as well pays attention to various methodological and conceptual challenges of conducting research in both a young offender and normative school aged samples.
# Table of Contents

Overview.................................................................................................................. 3
Acknowledgments........................................................................................................ 7

## Part 1: Literature Review

* Hope does Hope influence on Adolescent Mental Health and Well-Being 8

Abstract................................................................................................................... 9
Introduction.............................................................................................................. 10
Methods................................................................................................................... 13
Results...................................................................................................................... 14
Narrative Synthesis................................................................................................. 26
Discussion................................................................................................................. 37
Clinical Application................................................................................................. 42
Limitations and Future Directions......................................................................... 42
Conclusion................................................................................................................. 44
References............................................................................................................... 45

## Part 2: Empirical Paper

* Hope, Future Values and Social Comparison as Predictors of Mental Health and Well-Being in Adolescents 51

Abstract................................................................................................................... 52
Introduction.............................................................................................................. 53
Method..................................................................................................................... 60
Results..................................................................................................................... 64
Discussion................................................................................................................ 72
References................................................................................................................. 78
# Part 3: Critical Appraisal

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>85</td>
</tr>
<tr>
<td>Reflectivity</td>
<td>85</td>
</tr>
<tr>
<td>Choosing a Project</td>
<td>86</td>
</tr>
<tr>
<td>Ethics</td>
<td>87</td>
</tr>
<tr>
<td>Access to Young Offenders</td>
<td>88</td>
</tr>
<tr>
<td>Change of Population</td>
<td>90</td>
</tr>
<tr>
<td>Data Collection</td>
<td>91</td>
</tr>
<tr>
<td>Final Reflections</td>
<td>93</td>
</tr>
<tr>
<td>References</td>
<td>94</td>
</tr>
</tbody>
</table>

## Appendices

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix 1: Literature Search Terms and Method</td>
<td>97</td>
</tr>
<tr>
<td>Appendix 2: Newcastle-Ottawa Scale adapted for cross-sectional studies</td>
<td>98</td>
</tr>
<tr>
<td>Appendix 3: UCL Ethical Approval and Amended Ethical Approval</td>
<td>99</td>
</tr>
<tr>
<td>Appendix 4: Parent Information Letter and Opt-Out Form</td>
<td>103</td>
</tr>
<tr>
<td>Appendix 5: Participant Information Sheet</td>
<td>105</td>
</tr>
<tr>
<td>Appendix 6: Participant Consent Form</td>
<td>107</td>
</tr>
<tr>
<td>Appendix 7: Questionnaire Pack</td>
<td>108</td>
</tr>
</tbody>
</table>
## Tables and Figures

### Part 1: Literature Review

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1: Literature Search Terms</td>
<td>14</td>
</tr>
<tr>
<td>Table 2: Characteristics, key findings and quality ratings of included studies</td>
<td>19</td>
</tr>
<tr>
<td>Figure 1: Study selection PRISMA flowchart</td>
<td>16</td>
</tr>
</tbody>
</table>

### Part 2: Empirical Paper

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>66</td>
</tr>
<tr>
<td>Table 2</td>
<td>68</td>
</tr>
<tr>
<td>Table 3</td>
<td>71</td>
</tr>
</tbody>
</table>
**Acknowledgements**

I would like to dedicate this body of work to the loving memory of my sister Jessica who sadly passed away at the end of last year. Throughout a very difficult and turbulent life she showed immense strength and resilience. Her fight for life only diminished when all hope of recovery was lost.

I am enormously grateful to Stephen Butler both for his support and kindness during some difficult times both personally and in the process of the research. I thoroughly enjoyed our many stimulating discussions. Furthermore, I would like to specially thank, Tony Roth for his immense support and kindness; as well as the numerous other course staff at UCL, who played a crucial part in my doctorate both academically, clinically and personally. I would also like to thank all the young people, their parents and the schools who agreed to take part in my research and gave me very useful feedback in the development of my questionnaire pack.

Finally, a massive thanks to all my friends and family, especially my partner Imogen for all their support, patience and understanding through this rollercoaster of a journey. They kept me going even when my motivation and hope waned.
Part 1: Literature Review

Hope does Hope Influence Adolescent Mental Health and Well-Being
Abstract

**Background:** With the emergent movement of positive psychology there has been a move to study psychological strengths and competencies. One of the constructs that has gained relevance in the recent past is hope and research has more recently tried to examine hope and its potential influences on an individual’s life.

**Aims:** The current review synthesises research which examined hope as a predictor of mental health and well-being in adolescents over the last decade.

**Method:** The literature was systematically searched utilising relevant search terms. Studies were then reviewed for inclusion. Studies were included if they examined hope as a predictor of internalising or externalising behaviour among children aged 10-19 years old.

**Results:** Eighteen articles met the inclusion criteria and were reviewed. Overall, the evidence suggests that hope is a predictor of internalising and externalising behaviour in adolescence. Higher hope adolescents reported more positive mental health and well-being outcomes and lower behavioural problems whereas lower hope adolescents reported higher scores on depression, emotional distress and behavioural problems.

**Conclusion:** Hope is a construct that is associated with many positive psychological outcomes. However, there is a need for further research that is longitudinal in nature. Furthermore, there is a need to investigate the impact of hope in clinical populations to ascertain how hope impacts on internalising and externalising behaviour and vice versa.
**Introduction**

Up until recently, the field of psychology has been dominated by a focus on understanding and preventing psychopathology (Valle, Huebner, & Suldo, 2006). However, this trend changed with the emerging movement of positive psychology, which examines psychological strengths and competencies, which can serve as a buffer from stressful life events (Valle et al., 2006). One concept that has recently gained relevance in the field of positive psychology is hope, a concept which has been described by numerous philosophers and authors over the centuries. More recently, psychologists have attempted to conceptualise and measure hope in order to understand its potential influence in an individual's life (Edwards & McClintock, 2013; Schrank, Stanghellini, & Slade, 2008).

The most well-known operationalisation of hope is given by Snyder, (1994) and has been used as a basis in many studies (Edwards & McClintock, 2013). According to Snyder's (1994) hope theory, hope is conceptualised as having three interrelated components; goals thinking, pathways thinking and agency thinking (Ashby, Dickinson, Gnilka, & Noble, 2011; Jiang & Huebner, 2013; Snyder, Feldman, Shorey, & Rand, 2002), which all begin to develop in early childhood. Goals serve as an anchor and function as a way of measuring hope, whereas pathways represent a person's perceived ability to develop specific strategies or routes to achieve a goal. Agency reflects the motivational component that ensures a person will be able to begin and sustain the effort required to follow a particular pathway towards a goal, even in the event of obstacles occurring in the pursuit of their goals (Ashby, et al., 2011; Edwards & McClintock, 2013; Snyder, 2002).
Hope is an important phenomenon for all people across their lifetimes (Esteves, Scoloveno, Mahat, Yarcheski, & Scoloveno, 2013) as it can function as a powerful protective factor (Hagen, Myers, & Mackintosh, 2005). Research over the last few decades has found links between hope; positive health and mental health outcomes in adults (Edwards & McClintock, 2013), and young people (Bernardo, 2015; Weis & Speridakos, 2011).

Although not as substantial a body of literature as in adults, studies of hope among adolescents support the importance of this construct in the lives of young people (Edwards & McClintock, 2013). Evidence suggests that hopeful thinking in young people tends to be associated with higher perceived competence, life satisfaction, more positive self-esteem (Bernardo, 2015), and better mental health and emotional well-being, (Yeung, Ho, & Mak, 2015). Furthermore, studies have concluded that how children think about their goals can make a difference in how they cope with life stressors (Snyder, Hoza, Pelham, Rapoff, Ware, et al., 1997).

There has been a limited amount of research on the relationship between hope and externalising behaviour problems, and the results of the studies that have been conducted have been mixed. Understanding the role of hope in the well-being and mental health of young people is especially important in the current climate. Young people face increased examination and pressure at school, as well as an uncertain economic outlook including higher university fees and high rents yet reduced incomes, and higher youth unemployment rates (Hagell, 2014). Therefore, it is important to look at factors that may promote positive mental health and well-being such as hope.
Aim of this review

Of the previous reviews that looked at hope in adolescent, Esteves, et al. (2013), undertook an integrative review on the data on all quantitative studies between 1990 and 2010 which examined the predictive properties of hope on both physical and mental health. The mental health variables they examined were hopelessness, depression and anxiety and how the reciprocal relationship with hope. The meta-analysis conducted by Yarcheski and Mahon (2014) aimed to identify predictors of hope and reviewed studies between 1990 and 2012. They found a variety of predictors of hope including, positive affect, optimism, self-esteem, social-support, depression and life satisfaction which were consistent with the predictors found by Esteves, et al, (2013). Although hope and optimism share important conceptual similarities, important differences exist between the two (Alarcon, Bowling, & Khazon, 2013 & Wong & Lim, 2009). In their meta-analysis Alarcon, et al. (2013) found that although hope and optimism were positively related they are distinct constructs which are empirically separate.

However, to the researcher’s knowledge, there has not been a review that only looks specifically at hope as a predictor of both internalising and externalising behaviour in adolescents. The aim of this review is to synthesise the research on hope in adolescents conducted in the last decade that examines hope as a predictor of mental health difficulties, namely internalizing and externalizing problems in adolescents. It will include studies that measure the relationship between hope and negative and positive affect as a broad indicator of internalising problems.
Review question:

What is the relationship between hope and emotional (i.e., internalizing) and behavioural (i.e., externalizing) adjustment in young people?

Method

Systematic search protocol

Studies were identified through an electronic database search, and a search of existing reviews into adolescent hope (Esteves, Scoloveno, Mahat, Yarcheski, & Scoloveno, 2013; Yarcheski & Mahon, 2014). The electronic databases PsycINFO, Web of Science and MEDLINE were searched. A combination of search terms used in previous reviews were identified (see Table 1), alongside further terms which encompassed externalising behaviours which were then used in the current search. The final searches are shown in Appendix A.

Once duplicates were removed, the remaining articles were screened by their titles and abstracts. This led to a list of potential eligible studies, of which the manuscripts were examined in full. Following this, all articles that met the inclusion criteria were selected for the review. Additional studies were identified following a grey search of the two previous reviews of adolescent hope (Esteves et al., 2013; Yarcheski & Mahon, 2014).
Keywords:

<table>
<thead>
<tr>
<th>Table 1: Search Terms</th>
<th>Hope</th>
<th>Mental Health Internalising</th>
<th>Mental Health Externalising</th>
<th>Young Person</th>
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<td>Hope</td>
<td>Anxiety</td>
<td>Anxiety Disorder</td>
<td>Delinquen*</td>
<td>Child*</td>
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<td>Anxiety</td>
<td>Anxiet*</td>
<td>Antisocial Behav*</td>
<td>Externalising Behave*</td>
<td>Teen*</td>
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<td>Major Depression</td>
<td>Depress*</td>
<td>Conduct Disorder</td>
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<td>Adolescen*</td>
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<td>Self-Injurious Behav*</td>
<td>“Self-Harm*”</td>
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<td>Self-Inflicted Wounds</td>
<td>Attempted Suicide</td>
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<td>Suicidal Ideation</td>
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Inclusion and Exclusion Criteria

Inclusion criteria were:

1. Papers that utilised child and adolescent participants.
2. Only papers that are published in peer reviewed journals.
3. Papers that used quantitative methodology.
4. Papers that looked at the relationship between hope and internalising and externalising behaviours.
5. Papers that were published between 2006 and 2016.

Exclusion criteria were:

1. Papers that examined physical health or illness.
2. Any systematic reviews.
3. Any narrative reviews and or meta-analyses.
4. Conference transcripts or doctoral or master thesis.

Results

Once duplicates had been removed the search identified 1724 papers for possible inclusion in the review. Following review of the papers, 18 papers were identified as having met the inclusion criteria and were included in the review. A full breakdown of the procedure and number of papers excluded and included at each stage.
of the search can be seen in Figure 1. Table 2 outlines participant’s details, study design, country, outcome measures used, quality rating and key findings for each study.

**Quality assessment and synthesis**

All papers included in the study were read to identify the key findings and any potential methodological issues. The Newcastle-Ottawa Scale adapted for cross-sectional studies, (Ana et al., 2014), was used to appraise the quality of all the included studies (see Appendix B). This tool was developed to provide a standardised way of assessing the quality of cross-sectional studies for systematic reviews. It is comprised of three sections, selection, comparability and outcome. Each section has various criterion scored from two to zero. The selection section can score a maximum of five points, the comparability section two points and outcome section three points. Thus, each study could score a potential maximum of 10 stars. As all longitudinal studies only examined single populations, it was decided to use the same quality assessment tool. Otherwise comparison of study quality using two different tools would have been very difficult. For example, the Newcastle-Ottawa Quality Assessment Scale for Cohort studies (Wells, et al, 2009) gives four out of nine stars for having a control group thus limiting the ability to quality rate the studies using this tool.
Study characteristics

Participants and samples

Participants ages ranged from 10 to 19 years old, with 16 studies reporting the mean age of participants. The overall mean for these studies was 14.76. Mean ages ranged from 10.2 (Cedeno, Elias, Kelly, & Chu, 2010) to 17.37 (Ciarrochi, Parker, Kashdan, Heaven, & Barkus, 2015). Seventeen of the papers used participant recruited within schools, and one used a subset from a larger clinical sample (Dew-Reeves, Athay, & Kelley, 2012). Sample sizes ranged from 98 participants (Lagace-Seguin &
d’Entremont, 2010) to 1688 participants (Ling, Huebner, Fu, Zeng, & He, 2016). Eight of the studies were carried out in the USA, four in Asia, three in Portugal, two in Australia and one each in Canada, South Africa and Slovakia.

**Design and outcome measures**

All the studies collected data using self-report measures for all independent and dependent variables and two collected data about the young people from their teachers. Specifically, Cedeno, et al, (2010) collected teacher rating for problem behaviour, social skills and academic functioning and Ciarrochi, et al, (2007) collected teacher ratings of emotional and behavioural adjustment. Eleven studies employed a cross-sectional design and seven a longitudinal design. The papers identified used a range of outcome measures to assess internalising and externalising behaviours.

To measure hope, 16 studies used the Children’s Hope Scale, (Snyder et al, 1997); Gerard and Booth, (2015) used the hopefulness subscale from the child/adolescent measurement system and Stoddard et al, (2011) assessed hopefulness using four items from the EQ-I:YV

**Methodological quality**

The methodological quality was assessed using the Newcastle-Ottawa Scale adapted for cross-sectional studies tool. Total scores for each paper are included in Table 2. Generally, the quality of the studies was acceptable, however the scores ranged from four (Lagacé-Séguin & D’Entremont, 2010; Yeung, Ho, & Mak, 2015) to seven (Valle, Huebner, & Suldo, 2006). According to McPheeters, et al, (2007) a score of seven or more can be considered a “good”, five or more “fair” and four or less “poor” quality study.
Most papers included a satisfactory description of the participant’s characteristics, although there were a number which did not include full information on their participant’s ethnicity. Most papers used convenience sampling utilising community school samples apart from Dew-Reeves et al., (2012) who obtained their sample from a sample of young people involved in a larger study that evaluated youth outcomes from a national home based mental health service. Most studies tried to recruit samples representative of the respective schools’ population by gaining a cross section of each school and choosing a range of schools which represented the local population.

All papers were judged to have to have designs which were suitable for the analysis of the studies question/s. On the whole, the studies utilised regression and correlational analysis to evaluate their data.
### Table 2: Participant, sample, design, outcome measures, quality rating and key findings for all studies

<table>
<thead>
<tr>
<th>Author, (date)</th>
<th>Country</th>
<th>Sample</th>
<th>Participants age (years)</th>
<th>Ethnicity</th>
<th>Design</th>
<th>Outcome Measures</th>
<th>Result</th>
<th>Quality Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ashby et al, (2011)</td>
<td>USA</td>
<td>153</td>
<td>11-15 (M = 12.9)</td>
<td>68% White, 25% African American, 1% Asian American, 1% Latino/Latina, 5% did not specify</td>
<td>Cross-Sectional</td>
<td>CHS, APS-R, KDI</td>
<td>There is differing levels of hope in the different types of perfectionists. Hope mediated the relationship between maladaptive perfectionism and depression.</td>
<td>5</td>
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<tr>
<td>Cedeno et al, (2010)</td>
<td>USA</td>
<td>132</td>
<td>M = 10.2, SD = 0.6</td>
<td>African American</td>
<td>Cross-Sectional</td>
<td>Exposure to Violence, CHS, Problem Behaviors and Social Skills, Academic Competence, Self-Concept</td>
<td>Hope moderated the effects of personal victimisation and witnessing violence. Hope uniquely accounted for variance in externalising behaviour but not internalising behaviour.</td>
<td>5</td>
</tr>
<tr>
<td>Ciarrochi et al, (2007)</td>
<td>Australia</td>
<td>784</td>
<td>Time 1 (M = 12.3, SD = 0.49)</td>
<td>Not described</td>
<td>Longitudinal</td>
<td>CHS, RSES, CASQ, PANAS-X, Verbal &amp; Numerical Ability, Emotional and Behavioural Adjustments, End of year grades</td>
<td>Hope was the best predictor of grades, attributional style best predictor of decrease in hostility and self-esteem increase in sadness. Hope only variable to have predictive utility across all domains. Hope seemed particularly important in predicting activated positive affect.</td>
<td>6</td>
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<tr>
<td>Author</td>
<td>Country</td>
<td>Sample</td>
<td>Participants age (years)</td>
<td>Ethnicity</td>
<td>Design</td>
<td>Outcome Measures</td>
<td>Result</td>
<td>Quality Rating</td>
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<td>Ciarrochi et al, (2015)</td>
<td>Australia</td>
<td>975</td>
<td>Grade 7 (M = 12.41, SD = 0.53)</td>
<td>Not described</td>
<td>Longitudinal</td>
<td>CHS PANAS-X</td>
<td>Hope is an antecedent to positive affect and predicted change in positive affect. Hope and negative affect states reciprocally related, where hope predicted decreasing negative affect and negative affect predicted decreasing hope. Hope particularly important at transition points.</td>
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<td></td>
<td></td>
<td>499 Male</td>
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<td></td>
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<td>474 Female</td>
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<td>Grade 12 (M = 17.37, SD = 0.50)</td>
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<tr>
<td>Dew-Reeves et al, (2012)</td>
<td>USA</td>
<td>356</td>
<td>11-18</td>
<td>Not described</td>
<td>Longitudinal</td>
<td>CHS SFSS TOES BMSLSS-PTPB SWLS</td>
<td>Initial hope was significantly related to baseline symptom severity, where higher hope scores related to lower baseline symptoms. Initial hope not related to rate of symptom improvement.</td>
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<td>Gender not described</td>
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<td>Du et al, (2015)</td>
<td>Hong Kong</td>
<td>380</td>
<td>12-18</td>
<td>Not described</td>
<td>Cross-Sectional</td>
<td>CHS Social Support Scale RSES Relational Self-Esteem CES-D</td>
<td>Personal and relational self-esteem mediate link between hope, social support and depression. Hope had direct effect on depression.</td>
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<td>(M = 14, SD = 1.19)</td>
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<td>184 Female</td>
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<td></td>
<td></td>
<td>196 Male</td>
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<tr>
<td>Author (date)</td>
<td>Country</td>
<td>Sample</td>
<td>Participants age (years)</td>
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<td>Gerard &amp; Booth, (2015)</td>
<td>USA</td>
<td>675</td>
<td>Not described</td>
<td>6.5% African American</td>
<td>Longitudinal</td>
<td>Conduct problems</td>
<td>Adolescent hopefulness, parental academic aspirations and school connectedness were negatively associated with depression.</td>
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<td>10.8% Hispanic</td>
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<td>Depression</td>
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<td>19.4% Multi-racial</td>
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<td>Hopefulness Scale</td>
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<td>63.3% White</td>
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<td>Parental Academic Support</td>
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<td>Parental Academic Aspirations</td>
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<td>School Climate</td>
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<td>CHS</td>
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<td>Behavioral Assessment System for Children</td>
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<td>Structured Extracurricular Activities</td>
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<td>Grade Point Average</td>
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<tr>
<td>Gilman et al, (2006)</td>
<td>USA</td>
<td>341</td>
<td>M = 14.58 SD = 2.13</td>
<td>87% Caucasian</td>
<td>Cross-Sectional</td>
<td>Students with low hope reported significantly higher scores on maladaptive indicators and lower scores on all adaptive indicators compared with students with average or high hope.</td>
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<td>Grade Point Average</td>
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<td></td>
<td>Students with high levels of hope reported higher scores on personal adjustment and life satisfaction than students with average levels of hope.</td>
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<td>Author (date)</td>
<td>Country</td>
<td>Sample</td>
<td>Participants age (years)</td>
<td>Ethnicity</td>
<td>Design</td>
<td>Outcome Measures</td>
<td>Result</td>
<td>Quality Rating</td>
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<tr>
<td>Guse &amp; Vermaak (2011)</td>
<td>South Africa</td>
<td>1169</td>
<td>M = 15.1, SD = 1.08</td>
<td>46.2% White, 32.1% African, 15.3% “Coloured”, 5.9% Indian, 0.4% Asian</td>
<td>Cross-Sectional</td>
<td>CHS, MHC-SF</td>
<td>No ethnic difference in hope scores. Hope associated with adolescent well-being. Statistically significant relationships found between hope and well-being. Social economic status did not moderate effect of hope on well-being.</td>
<td>6</td>
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<tr>
<td>Lagace-Seguin &amp; D’Entremont, (2010)</td>
<td>Canada</td>
<td>98</td>
<td>10-14 (M = 12.51, SD = 0.95)</td>
<td>Not described</td>
<td>Cross-Sectional</td>
<td>My Classroom Inventory – Short Form, Youth Life Orientation Test, Children’s Depression Inventory, MSLSS, CHS</td>
<td>Hope represents a psychological buffer against difficulties specifically with peers and in relation to classroom environment. Students who reported low hope and low satisfaction with classroom were likely to report higher depression levels than those with high hope and low levels of satisfaction.</td>
<td>4</td>
</tr>
<tr>
<td>Ling et al, (2016)</td>
<td>China</td>
<td>1688</td>
<td>13-18 (M = 15.85, SD = 1.02)</td>
<td>96.2% from Han Ethnic Group, 3.8% various ethnic minority groups</td>
<td>Cross-Sectional</td>
<td>CHS, SWLS, RSES, LOT-R, CDI</td>
<td>Higher hope individuals have better psychological outcomes, adjustment, better self-esteem and fewer depressive symptoms.</td>
<td>6</td>
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<tr>
<td>Author (date)</td>
<td>Country</td>
<td>Sample</td>
<td>Participants age (years)</td>
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<td>Design</td>
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<tr>
<td>Marques et al, (2011)</td>
<td>Portugal</td>
<td>36</td>
<td>10-15</td>
<td>Not described</td>
<td>Longitudinal</td>
<td>CHS, SLSS</td>
<td>Reported levels of hope, life satisfaction and self-worth demonstrated moderate to strong correlation with mental health and academic achievement over time.</td>
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<td></td>
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<td>(M = 11.78, SD = 1.22)</td>
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<td></td>
<td>Self-Worth Scale, Mental Health Inventory-5</td>
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<tr>
<td>Marques et al, (2015)</td>
<td>Portugal</td>
<td>682</td>
<td>11-17</td>
<td>Not described</td>
<td>Cross-sectional</td>
<td>CHS, GSPE, SLSS, SWS, MHI-5, Academic Achievement</td>
<td>Students with highest hope reported highest mean scores on school measures and intrapersonal functioning. Students with average levels of hope reported significantly higher means on all measures compared with low hope students. High hope and average hope associated with adaptive psychological and school functioning.</td>
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<td></td>
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<td></td>
<td>(M = 13.67, SD = 1.74)</td>
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<td></td>
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<td></td>
<td>53% Female</td>
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<td>47% Male</td>
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<tr>
<td>Author</td>
<td>Country</td>
<td>Sample</td>
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<tr>
<td>Marques, (2016)</td>
<td>Portugal</td>
<td>367</td>
<td>Time 2 16-17</td>
<td>Not described</td>
<td>Longitudinal</td>
<td>CHS</td>
<td>Longitudinal evidence that high hope and life satisfaction protect against diminished levels of mental health and problems of school engagement.</td>
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<td></td>
<td></td>
<td>53.1% Female (M = 16.77, SD = 0.94)</td>
<td></td>
<td>SLSS</td>
<td>Hope and life satisfaction operate as protective psychological strengths.</td>
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</tr>
<tr>
<td>Stoddard et al, (2011)</td>
<td>USA</td>
<td>164</td>
<td>Mean = 12.1 SD = .54</td>
<td>42% African American 28% Asian 13% Hispanic 17% Mixed Race or Other</td>
<td>Cross-sectional</td>
<td>Violence Involvement Hopefulness Parent-Family Connectedness School Connectedness</td>
<td>Higher levels of social connectedness and hopefulness related to lower levels of violence involvement.</td>
<td>6</td>
</tr>
<tr>
<td>Valle et al, (2006)</td>
<td>USA</td>
<td>860</td>
<td>Time 1 10-18</td>
<td>58% African American 36% Caucasian 2% Asian American 1% Hispanic 3% Other</td>
<td>Longitudinal</td>
<td>SLSS Youth Self-Report form of the Child Behavior Checklist Life Events Checklist CHS</td>
<td>Hopeful thinking buffers against adverse effects of stressful events. High hope serves as psychological strength, where adolescents who report higher hope appear to be less at risk of internalising behaviour problems.</td>
<td>7</td>
</tr>
<tr>
<td>Author (date)</td>
<td>Country</td>
<td>Sample</td>
<td>Participants age (years)</td>
<td>Ethnicity</td>
<td>Design</td>
<td>Outcome Measures</td>
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<td>Wong &amp; Lim, (2009)</td>
<td>Singapore</td>
<td>334</td>
<td>Average age 15.6, SD = 0.59</td>
<td>99.7% Chinese, 0.3% Unidentified ethnic minority</td>
<td>Cross-sectional</td>
<td>LOT-R, CHS, SWLS</td>
<td>Hope and optimism show significant covariance. Both constructs contributed unique variance in depression and life satisfaction.</td>
<td>5</td>
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<tr>
<td>Yeung et al, (2015)</td>
<td>Hong Kong</td>
<td>712</td>
<td>M = 15.19, SD = 1.63</td>
<td>Not described</td>
<td>Cross-sectional</td>
<td>CHS, The Cognitive Reappraisal Subscale, Attention to Positive and Negative Attention Scale, Subjective happiness Scale, The Hospital and Anxiety Depression Scale, Interpersonal Relation Scale</td>
<td>Hope correlated with greater happiness and lower levels of depression and anxiety.</td>
<td>4</td>
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</tbody>
</table>

Note* APS-R = Almost Perfect Scale-Revised; BMSLSS-PTPB = Brief Multidimensional Students Life Satisfaction Scale-PTPB Version; CASQ = Children’s Attributional Style Questionnaire; CDI = Children’s Depression Inventory; CES-D = Centre for Epidemiological Studies Depression Scale; CHS = Children Hope Scale; GSPE = Gallup Student Poll on Engagement; KDI = Kandel Depression Inventory; LOT-R = The Life Orientation Test – Revised; MHC-SF = Mental Health Continuum – Short Form; MHI-5 = Mental Health Inventory-5; MSLSS = The Multidimensional Student’s Life Satisfaction Scale; MSPSS = Multidimensional Scale of Perceived Social Support; PANAS = Positive and Negative Affect Schedule; PANAS-X = Positive and Negative Affect; RSES = Rosenberg Self-Esteem Scale; SFSS = Symptom and Functioning Severity Scale; SLSS – Student’s Life Satisfaction Scale; SSLS = Student’s Satisfaction with Life Scale; SWLS = Satisfaction with Life Scale; TOES = Treatment Outcomes Expectation Scale; SWS = Self-Worth Scale
Narrative Synthesis

The papers that were included in the review presented a variety of findings concerning relationships between hope and emotional and behavioural adjustment in young people. All papers investigated whether hope predicted internalising behaviour, however only a few examined if it predicted externalising behaviour. Although some studies reported mixed findings, overall, studies in this area support the notion that hope is a significant predictor of positive emotional and behavioural adjustment and is an important variable for adolescent’s well-being. This literature review will examine the findings in two sections, according to whether they employed a longitudinal or cross-sectional designs, and within this framework will examine relationships between hope and internalising and externalising behaviour, respectively.

Longitudinal studies

In total seven studies utilised a longitudinal design, all of which found that hope had some predictive validity when examining internalising and or externalising behaviours.

Internalising: All the papers examined whether levels of hope predicted later scores of depressions and or anxiety using a variety of measures including the YSR, PANAS-X and MHI-5. All the included studies found that hope had predictive validity over time, varying from four months, Dew-Reeves, Athay, & Kelley, (2012) to six years Ciarrochi et al., (2015). In their longitudinal study of hope and depression over an 18-month period, Gerard and Booth (2015) report a significant association between hope and depression, where hope levels were negatively associated with depression over time. Thus, they suggested that hopefulness showed protective properties, particularly as a deterrent for depression. Similar findings were reported by Ciarrochi,
et al (2007) who measured positive and negative affect respectively using the PANAS-X (Watson & Clark, 1994). The PANAS-X assesses four affective states; fear, sadness, hostility and joviality and is a widely-used measure of subjective well-being (Ciarrochi, et al, 2015). Ciarrochi, et al. (2007), found hope was the only variable to have predictive validity across all the outcome domains. More specifically, it significantly predicted changes in activated positive affect in a large sample of Australian school children studied over a 12-month period with higher scores on hope correlating with an improvement in well-being over time.

Ciarrochi et al., (2015), found that higher levels of hope were predictive of a more positive mind-set or disposition as measured by the PANAS-X. Hope and negative affective states were reciprocally related, where hope predicted a decrease in negative affect and negative affect predicted a decrease in hope. Their data suggested that hope exerted a consistent effect over time, acting as an antecedent to positive affect but not a consequence of it. Additionally, it was interesting that hope reliably predicted all forms of well-being as assessed by the PANAS-X at two transition points, when the young people started high school and at the beginning of the final two years which culminates in exams which determine entrance to higher education. It is possible that young people with higher levels of hope at transition points could think more positively about the next stage of their school lives, which in turn reduced their potential stress levels leading to a decrease in negative affect. Finally, the study found that hope had a more robust influence on positive affect compared with negative affect, but was a predictor of both.

Furthermore, Marques, (2016), and Marques, Pais-Ribeiro, & Lopez, (2011) explored the relationship between hope and mental health outcomes utilising the Mental Health Inventory-5 (MHI-5). The MHI-5 consists of five questions about an
individual’s mood over the past month and measures anxiety, psychological well-being, loss of emotional or behavioural control and depression (Marques, 2016). They found that higher levels hope and life satisfaction played a role in the reduction in levels of mental health and the impact of stressful life events. Specifically, Marques, & Lopez, (2011) found that hope was related significantly to measures of mental health taken 12 and 24 months later, while Marques, (2016), reported that hope scores at time one were a significant predictor of later mental health scores up to five years later even when controlling for initial levels of mental health scores. Therefore, Marques, et al (2011) and Marques (2016) suggest that initial hope levels served as a buffer against the development of problems when the young people were faced with negative or stressful life events. They suggest that low levels of hope could be an important antecedent of mental health difficulties as people with lower hope reported lower levels of adjustment and well-being. Of note, is the fact that both Ciarocchi et al. (2007) and Marques, (2016) controlled for the baseline effects of all pre-existing levels of mental health as measured by their predictor variables and still found that hope is associated with a reduced chance of developing adverse outcomes later in life. This is important as it may suggest that hope is a strong protective factor in a person’s life even when existing levels of mental health difficulties are present.

Although a validated measure, the use of the MHI-5 is potentially one limitation as it combines both internalising and externalising behaviour into one score and does not offer any data on whether hope differentially predicts difficulties in one domain but not the other. Moreover, Marques, et al, (2016) did not look at hope specifically but combined the impact of hope and life satisfaction when predicting levels of mental health and well-being.
In the study by Valle et al., (2006), over a one-year period, hope was associated with a range of internalising mental health outcomes such as being withdrawn, somatic complaints and anxious or depressed as measured by the Youth Self-Report. Specifically, young people’s initial hope scores significantly predicted life satisfaction and levels of internalising behaviour over the period of one year, with those reporting higher hope more likely to report higher levels of life satisfaction. When looking at the predictors of internalising behaviour they found that stressful life events predicted an increase in the low hope group but not in the high hope group which the authors suggested provided evidence that hope acted as a buffer against stressful events and the likelihood of later internalising behaviours (Valle, et al, 2006).

In the only study evaluating the protective properties of hope on mental health in a clinical population, Dew-Reeves, et al, (2012) examined the prediction of treatment progress according to initial levels of hope in a selected sample of young people aged 11-18 from a larger study of home-based mental health services over 10 states in the USA. Initial hopes levels were measured within the first four weeks of treatment. Its relationship with treatment progress was evaluated every week until the last measures were taken when treatment was completed. They found that baseline levels of hope were significantly related to baseline symptom levels of conduct disorder, anxiety and depression, which were rated by all respondents, using the Symptom and Functioning Severity Scale.

The Symptom and Functioning Severity Scale is completed by the young person, as well as their carer and clinician, where they rate the perceived frequency of emotional and behavioural symptoms. Each rating, gives a score which rates the severity of symptoms which are independent of each other, however the severity levels indicated by scores can be compared across ratings. In general, adolescents who
reported higher levels of hope reported lower levels of baseline symptoms. This is consistent with existing research, demonstrating that higher level of behavioural and emotional symptoms, relate to lower levels of hope (Snyder, et al, 1997 & Valle, et al, 2004). An unexpected finding was that higher initial hope predicted slower symptom improvement as evaluated by the clinician. On closer inspection, the authors suggested this was due to the young people not acknowledging the presence of problems and may indicate a lack of recognition of their problems and thus they give positive responses to the items on the hope scale (Dew-Reeves, et al, 2012). Another possible explanation for the slower symptom improvement is that there is a floor effect in the symptom reduction measure and thus there is less space for improvement to be noted.

**Externalising:** Of the available longitudinal studies, only two specifically looked at whether hope scores predicted behavioural problems at a later point (Ciarrochi, Heaven & Davies, 2007; & Valle et al., 2006). Ciarrochi, Heaven, & Davies, (2007), discovered that low levels of hope predicted higher rates of teacher rated behavioural problems (e.g., hyperactivity, inattention and aggressiveness). Whereas, higher hope predicted lower ratings of these behavioural problems in a large sample of Australian school children over a one year period. The authors suggest this may be because people who have high hope appear to be better at attaining their goals, and successful attainment of goals may be a critical cause of positive affect (Ciarrochi, et al, 2007). However, these findings contradict with those reported by Valle, et al., (2006), who found that initial hope scores did not predict subsequent levels of externalising behaviour a year later even after controlling for initial externalising scores at time one. The differences may be accounted for by the different measures used by each study. In the study by Valle, et al, (2006), measures of both hope and externalising behaviour were rated by the young people themselves and thus subject
to shared-method variance which may have had an impact on any relationship there may have been. Whilst, Ciarrochi, et al, (2007) used young people’s ratings of hope and teacher ratings of externalising behaviour, mitigating the issue of shared-method variance and possibly providing a more ‘objective’ measure of externalizing behaviour.

Although most studies do not report on gender differences, Ciarrochi et al., (2015), found that, in comparison to boys, girls started with higher levels of hope in grade seven, mean age 12.4, but subsequently showed a marked reduction in their hope to levels well-below those of males by grade 10. Despite this reduction, girls seemed to rebound with an increase in their hope levels from grade 10 (ages 15-16) until their completion of high school. Furthermore, they found that girls reported higher levels of sadness and fear across the years, and suggest this may be due to females may experiencing emotions more intensely than males especially during stressful time periods and transitions points as they progress through school.

Cross-sectional studies

11 studies employed a cross-sectional design. Overall, the findings suggest that a young person’s hope score was associated with more positive outcomes for both internalising and externalising behaviour. However, there were some mixed findings and the studies employed a variety of outcome measures which makes comparisons across studies more complicated.

Internalising: In the study by Ashby et al, (2011), the authors examined the relationship between adaptive and maladaptive perfectionism, hope and depression. Results indicated that adaptive perfectionists reported significantly higher hope levels and lower levels of depression when compared to maladaptive perfectionists and non-
perfectionists. They found a significant inverse relationship between hope and depression, when hope increased, depression decreased. Furthermore, hope had a significant indirect effect on the relationship between maladaptive perfectionism and depression. The authors suggest hope levels in adaptive perfectionists provides one explanation why they do not experience the “destructive effects of perfectionism” in comparison to maladaptive perfectionists. They suggest this may be because maladaptive perfectionists may focus on failure rather than success, which contrasts with adaptive perfectionists who focus on success as they have higher hope and may frame failure at a task as a learning experience. Thus, they suggest it is important to be aware of the type of perfectionism a young person has and their levels of hope (Ashby, et al, 2011).

Studies by Gilman and Dooley, (2006), Ling et al, (2016) and Marques, Lopez, Fontaine, Coimbra, & Mitchell (2015) all placed the young people into three hope groups: high, average and low hope and studied these groups in relation to levels of internalising behaviours. In all these studies, the ‘high hope’ group were significantly different from both the average and low hope groups on measures of mental health and psychological well-being. Specifically, in the studies by Gilman and Dooley, (2006) and Ling, et al, (2016) young people who reported low hope in comparison to their peers also reported significantly higher scores on maladaptive indicators such as emotional distress and depression and lower scores on adaptive indicators such as global life satisfaction and personal adjustment. Marques et al, (2015) suggest that due to participant’s scores on the MHI-5, clinical rates of mental health problems may exist in the lowest hope group but not in the other hope groups. Overall, this group of studies indicate that having high hope is linked to multiple psychological benefits, including lower levels of emotional distress and depression, in comparison to average or low
hope individuals (Gilman & Dooley, 2006 & Ling, et al, 2016). These results are comparable to findings in adults who reported high levels of hope (Snyder, 2003) where high hope individuals reported greater life satisfaction and less psychological distress than their lower hope counterparts, and consistent with the predictions of hope theory that hope is a strength that may help prevent psychological distress and promotes well-being (Ling, et al, 2016).

Cedeno, et al, (2010) investigated the prevalence and impact of exposure to violence in a sample of African American school children. They found that an individual’s hope score did not predict levels of internalising behaviour for either boys or girls. However, when doing simple correlational analysis, a significant relationship between hope and internalising behaviour did appear for girls. These findings are generally inconsistent with hope theory which suggests that there should be an inverse relationship between hope and internalising behaviour. One suggestion for this inconsistent finding may be that internalising behaviour was rated by the teachers, rather than self-reported by the adolescents, and the difficulty of a person inferring internal states to the other (Cedeno, et al, 2010).

Du, King, and Chu, (2016) examined whether personal and or relational self-esteem, would mediate the relationship between hope and depression. They found that both types of self-esteem only partially mediated the link between hope, and depression. Furthermore, hope was noted to have a marginally significant direct effect on depression $p = .51$. They propose that their findings suggest that having a positive outlook could mean a person is less likely to become depressed (Du, et al, 2016). In contrast, Guse and Vermaak, (2011), explored positive mental health and hope in a group of South African adolescents from a diverse range of ethnic and socioeconomic backgrounds. They employed the Mental Health Continuum - Short Form (MHC-SF)
which measures positive mental health with scales of emotional, social and psychological well-being. Their analysis revealed a moderate to strong correlation between hope and overall psychosocial well-being, and that hope accounted for a significant amount of variance in well-being which they suggest furthers supports a relationship between hope and positive psychological functioning. Both the emotional well-being and psychological well-being subscales were found to have significant relationships with hope, which may provide provisional support that hope is a predictor of levels of internalising behaviour in adolescents. Lastly, they found that there were no significant differences in hope between the different ethnicities studied.

In the research by Wong and Lim, (2009) they explored the relationship between hope and depression in a sample of Singaporean adolescents. Their results indicated that a young person’s hope scores significantly predicted depression. When looking more closely at the results they found that the agency component but not the pathways contributed significant variance in depression scores. They suggest this may be due to the population being studied and that in this population, pathway thinking is more influenced at the collectivist level rather than a more western individual level, where the government plays a more significant role in determining a person’s pathway to important goals, such as the number of children in each family (Wong & Lim, 2009).

Lagace-Seguin and D’Entremont, (2010) examined classroom satisfaction, depression and optimism and pessimism in adolescents and found hope to be a psychological strength. In relation to depression, students who reported low hope and low classroom satisfaction levels were more likely to report higher depression levels than those with higher hope and low classroom satisfaction. The authors speculated that hope acted as a protective factor against perceptions of unfriendliness in the classroom. In addition, pessimism and depression were significantly related, with a
positive association for students who reported low hope. Interestingly the relationship between pessimism and depression was similar for adolescents who reported high hope. Thus, adolescents with lower hope and who were pessimistic reported higher depression than those adolescents who reported higher hope and were pessimistic.

Finally, Yeung et al., (2015) found that Hong Kong adolescents who were hopeful showed a greater tendency to focus on positive information, and were able to develop a greater ability to alter the interpretation of events than those with lower hope. This in turn contributed to their psychosocial well-being, as higher hope individuals focussed on the more positive aspects of events, which helped them to continue to be positive even when faced with difficulties.

**Externalising:** Out of the 11 cross-sectional papers, only two examined whether hope scores predicted externalising behaviour (Cedeno, et al, 2010; & Stoddard, McMorriss, and Sieving, 2011). However, it should be noted that the variables they measured were not all the same, and thus comparison between studies is limited. Cedeno, et al, (2010) examined hope, problem behaviours and social skills, academic competence and self-concept. Whereas, Stoddard, et al (2011) explored violence involvement, hopefulness, parent-family connectedness and school connectedness.

Cedeno, et al (2010), examined whether hope, as reported by the adolescents was a potential resilience factor in the context of school violence. They found that hope uniquely accounted for variance in externalising behaviour with hope being inversely related to externalizing behaviour for boys, consistent with much of the literature reviewed here evaluating hope and internalizing behaviour. In the only study to exclusively look at the hope and externalising behaviour Stoddard, et al, (2011) found that higher levels of hope and social connectedness were related to lower levels of
violence involvement. In addition, they found that hopefulness and parent-family connectedness were protective against violence involvement, and in a separate analysis they found that the relationship between social connectedness and violence was mediated by hopefulness (Stoddard, et al, 2011). They suggest that young people who have better levels of connectedness are more likely to report higher hope which acts as a protective factor against violence. This study also draws attention to the importance of researching hope within the ecological context of risks and protective factors that are related to externalizing behaviours.

**Gender differences:** Out of the 11 cross-sectional studies four reported on gender differences. Cedeno, et al, (2010) found that hope positively related to externalising behaviour for boys and internalising for girls, and was positively related to self-concept for both boys and girls. Interestingly, in the study by Wong and Lim, (2009), males obtained higher scores on both the total scale and hope subscales than females. These findings are contrary to the findings of Ciarrochi, et al, (2015) who found that females had higher hope scores than males. This discrepancy may be due in part to the longitudinal design of Ciarrochi, et al (2015) where they found that female hope drops in the middle school years then picks up again towards the end of high school. The study by Wong and Lim (2009) was cross-sectional and had a mean age of 15.6 which is in line with the time females had lower hope in the study by Ciarrochi, et al, (2015).

However, Vacek, et al, (2010) reported no significant differences in hope scores between genders. In fact, the only significant gender differences between variables they found was that females scored significantly higher on stress and negative affect than males. Likewise, Ling, et al, (2016) reported no significant gender differences in each of the hope groups in their sample. From this array of findings, no
firm conclusion can be reached regarding whether gender differences exist in relation to hope. More studies are needed to clarify these mixed findings. A longitudinal study that replicates the method by Ciarrochi, et al, (2015) would be of interest to see if the gender differences found could be replicated.

**Discussion**

This review examined both longitudinal and cross-sectional studies, which were mainly of fair to good quality. The aim was to explore whether there was a relationship between hope and emotional (i.e., internalizing) and behavioural (i.e., externalizing) adjustment in young people. Overall, findings suggest that there is a relationship between hope and emotional and behavioural adjustment in young people. Those with higher hope individuals reported more positive mental health and well-being outcomes whereas young people who reported lower levels of hope reported reduced well-being outcomes and higher levels of depressive symptoms.

In relation to the longitudinal studies, all the papers that examined emotional well-being in a normative population found that hope served as a protective factor especially in relation to depression (Gerard & Booth, 2015 & Valle, et al, 2006). Of specific interest is the study by Ciarrochi, et al, (2015), as they examined hope over a six-year period, and found that hope exerted a consistent effect over time and was an antecedent of positive affect. Moreover, they found that hope and negative affect were reciprocally related, with higher hope levels predicting a decrease in negative effect and negative affect predicting a decrease in hope. These findings, given they were over six-year period, strongly suggest that hope is indeed an important construct in the understanding of emotional health and well-being in adolescents. These results suggest that having low levels of hope may be an important precursor of mental health difficulties (Marques, 2016).
However, the range of measures used in the study were different and in the studies by Marques, et al (2011) and Marques, (2016), they used the MHI-5 which is a short form that uses five item that explores internalising and externalising behaviour. Although, a validated and reliable measure and a good start it may limit the scope of understanding of the impact of hope on mental health and well-being. This is because it uses single items to measure internalising and externalising problems which are complex constructs. Measures such as the YSR as used by Valle, et al, (2006), may allow a greater examination of hope as it examines both internalising and externalising behaviour in greater depth. It assesses both internalising and externalising behaviour using 61 items and each domain has further sub domains which allows further exploration of different types of internalising (anxious/depressed & withdrawn/depressed) and externalising behaviour (rule breaking & aggressive behaviour).

When examining relationships between hope and behavioural adjustment in adolescence, findings from longitudinal studies were mixed. Ciarrochi et al, (2007), reported that lower hope levels were related to higher levels of teacher rated behavioural problems. However, Valle, et al, (2006), reported that initial hope levels did not predict later levels of behavioural problems. The differences in these findings may be due to the different perception of behavioural problems, where young people may have underreported their levels of externalising behaviour in Valle et al (2006). Whereas, teacher ratings were based on observed behaviour at school in Ciarrochi et al. (2007) and so may provide a more accurate estimate of externalising problems in this setting.

Previous research also reports mixed findings concerning the relationship between hope and externalizing behaviours. For example, studying a sample of high
risk children whose mothers were in prison, Hagen et al (2005) found that higher hope levels were linked to less externalising and internalising problems even after stress and social support were accounted for. In contrast, Valle, Huebner, and Suldo, (2004) found in a sample of school children that hope was inversely correlated with both externalising and internalising behaviours. What is clear from the array of findings, from various samples, is the area would benefit from further research which examined externalising behaviour from both self and observer reported data over time so results can be more easily compared.

Finally, in the only study to examine hope in a clinical population, Dew-Reeves, et al (2012), found that adolescents who reported higher levels of hope reported lower levels of baseline symptoms. This finding is in line with existing research that higher levels of emotional and behaviour symptoms correspond to lower levels of hope in both adults and children (e.g, Valle, et al 2004 & Snyder, et al, 1997). In addition, initial hope levels were not related to the rate of improvement in symptoms over the course treatment. However, there is very limited research into hope in a clinical sample of adolescence and further research is required to replicate these findings and would benefit from exploring the effect of hope on treatment progress and vice versa.

In relation to the cross-sectional studies in this review the focus of the studies was varied and employed a wide range of measures and constructs in relation to hope. Of interest are the studies that placed adolescents into different hope groups (Gilman & Dooley, 2006, Ling, et al, 2016 & Marques, et al 2015). It was found that all young people placed in the high hope groups scored significantly different from either of the other hope groups on all measures of mental health and well-being and that low hope youth reported significantly higher scores on maladaptive measures such as depression

Another finding of this review is that higher hope levels seemed to improve outcomes across a variety of psychological measures and outcomes. Specifically, higher hope allowed adolescents to focus on positive information rather than negative information which contributed to their improved psychosocial well-being (Yeung, et al, 2015). It was suggested by Marques et al, (2015) that clinical rates of mental health problems such as depression may exist in low hope groups due to this groups mean responses on measures of anxiety and depression. Most studies that looked at hope and depression found that hope was a significant predictor of positive affect and well-being (Guse & Vermaak, 2001 & Vacek, et al, 2010) and predicted depression (Ashby, et al, 2011, Lagace-Seguin & D’Entremont, 2010, & Wong & Lim, 2009).

Most studies in the review, further support that hope is a psychological strength, that can protect from internalising behaviours and promote psychological well-being. However, it is important to note that there were mixed findings in relation to hope and internalising behaviour. Cedeno, et al, (2010), found that hope levels did not predict levels of internalising behaviour, which is inconsistent with most the findings of the review. However, levels of internalising behaviour were rated by the adolescent’s teachers which may account for the differential findings.

Of the cross-sectional studies only two examined whether hope predicted levels of externalising behaviour in adolescence, both of which found that hope was a predictor of various externalising behaviour. Stoddard, et al. (2011) found that hope was protective factor, with adolescents who reported higher hope, reporting lower levels of violence. Cedeno, et al, (2010) found that hope was inversely related to
externalising behaviour and buffered against the effects of witnessing violence and being victimised. However, despite the variables they examined being very different, which makes comparison between studies limited, their findings lend support to hope being an important variable to consider when examining externalising behaviour in adolescent behaviour.

Many studies did not report whether there were gender differences in their sample and those that did reported mixed findings. Out of the cross-sectional studies five reported gender findings. Cedeno, et al, (2010) found that hope scores were related to externalising behaviour for boys and internalising behaviour for girls. In contrast, Vacek, et al, (2010) and Ling, et al, (2016) did not report gender differences in their sample, whereas Wong and Lim, (2009) reported that males reported higher hope scores than females. In the only longitudinal study to report gender findings Ciarrochi, et al (2015) reported that females started out with higher hope in grade seven and by the time they were in grade ten they had lower hope than boys. However, by the end of school in grade twelve their hope levels had increased again. These mixed findings could be explained as the data from Ciarrochi, et al (2015) was longitudinal and showed that girls hope levels fluctuated over time and in the cross-sectional studies they only captured hope at one time point. Additionally, based on these findings it may be that hope scores are more stable in boys than girls during adolescents. However, further studies are needed to explore this further.

Another potential limitation of the literature is the lack of control for baseline scores on the outcome variables. However, two studies included in the review Ciarocchi, et al. (2007) and Marques, (2016) did control for baseline scores over several years found that hope showed protective factors even when controlling for these scores. Further research would benefit from further longitudinal studies which
replicate these methods. A strength of the literature thus far could be the fact there was a large range of countries and sample types across the studies. This could potentially make the findings easier to generalise across populations, more longitudinal studies are required to make firm conclusions.

**Clinical application**

Developing a greater understanding of the influence and mechanisms of hope on mental health and well-being could help us understand how to help improve the mental health and well-being of adolescents. The review indicated that increasing levels of hope are linked to better psychological adjustment across many domains. Interventions that target hope may help an individual develop ways of dealing with stressful and negative events by allowing them to focus on ways to move towards their goals and helping them believe they are attainable. An increase in positive thinking in turn could lead to adolescents displaying less internalising and externalising problems. However, only one study (Dew-Reeves, et al, 2012) looked at hope in a clinical sample. Although they found that those with higher initial hope levels reported lower internalising symptoms, further research is needed in this area to develop a fuller understanding of the impact of hope in children and adolescents who have clinical levels of mental health difficulties including ways of increasing hope and well-being in these samples.

**Limitations of this review and direction for future research**

Despite the systematic nature of the review, several limitations should be taken into consideration. Using broad search terms, several databases were searched with the aim of identifying all the papers that were relevant to the review topic. However, it is possible that not all papers that would have met the inclusion criteria were identified. The whole process of this review was carried out by a single researcher, including the
quality assessment and extraction of pertinent data. Having a second independent quality assessor would have allowed an objective assessment of the reliability of the process. However due to the time constraints and availability of resources this was not feasible within the capacity of this review.

Moreover, much of data collected was self-report in nature, and therefore could be susceptible to socially desirable responding and shared-method variance. Thus, findings should be considered carefully. Future studies that collect data from multiple informants would be of benefit as they would address this issue and potentially allow greater understanding of the impact of hope. Another limitation is that the studies identified looked at a large variety of measures which makes comparisons of the results difficult. Having a wide range of measures which may tap into different elements of mental health and well-being may mean that each study is comparing differing elements of the same construct. In addition, some studies are unique in what they examine in comparison to the rest such as Ashby, et al, (2011) who look at perfectionism.

Furthermore, many of the studies employed a cross-sectional design and all employed a correlational analysis methodology which makes it difficult to make causal inferences when interpreting the data. This is true when examining gender differences and the mixed findings reported. More longitudinal studies that specifically examined gender difference would allow for a more concrete understanding of whether gender differences existed and in which direction.

An important point to note is all but one of the studies focussed on a community sample which limit the extent of generalisability of the findings to clinical samples. Although the number of studies into hope are increasing, there is still a dearth of
studies that examined clinical populations. There is a possibility that the search may have unintentionally missed papers that examined a clinical sample. Even if this was the case the proportion of studies would still have been heavily tilted towards a normative population. Future research would benefit from examining clinical population to explore whether hope is related to symptoms and improvement in mental health difficulties. Moreover, more longitudinal studies which examine internalising behaviour such as that by Ciarrochi, et al, (2015) would be of benefit to see if these findings are replicable. Lastly, the studies that focus on internalising behaviour generally focus on the influence of hope on depression but do not report or measure its influence on anxiety. This is an area that requires further attention and studies that look at both depression and anxiety would be of benefit.

Conclusions

In summary, the review found hope is predictive of the mental health and well-being in adolescents. This highlights the importance of the movement of positive psychology and the need to explore strengths based approaches to improving adolescents’ lives. However, there is a need for further research in clinical populations due to the limited amount of research in this area and for studies to use similar measures to make comparison simpler. Furthermore, there is a distinct absence of studies that provide rigorous and robust assessments of hope and both internalising and externalising problems across home and school. In addition, there is limited amount of longitudinal research that examines hope and externalising behaviour. Future research conducted over a longer time frame that examined both internalising and externalising behaviour would allow a better understanding of the protective role played by hope.
References


Part 2: Empirical Paper

Hope, Future Values and Social Comparison as Predictors of Mental Health and Well-Being in Adolescents
Abstract

**Background:** There is an ever-increasing emphasis on identifying psychological strengths that help promote healthy development. Hope is one construct that may be considered a protective factor for adolescents and research has suggested that it has a positive effect on the adjustment and well-being in adolescents. Moreover, how a person sees their future and how they evaluate themselves in relation to their peers has also been shown to impact on their mental health.

**Aims:** The goal of this study was to evaluate the impact of hope, future values and social comparison on the adjustment and well-being of adolescents.

**Method:** Three hundred and eleven students from Greater London schools, completed self-report measures on their levels of hope, future values, social comparison and their level of mental health and well-being.

**Results:** Results indicated that adolescent levels of hope, their future values, and how they evaluate themselves in comparison with their peers were independently related to their mental health and well-being. No evidence was found for social comparison as a moderator of these relationships.

**Conclusion:** This study suggests that hope, future values and how an adolescent compares themselves socially are important factors related to adjustment and well-being in English school students. Future research within clinical populations is required to replicate these results and thus determine whether these are also important factors within these populations.
Introduction

Positive psychology is a movement which studies psychological competencies and strengths that can help buffer an individual from stressful life events (Valle, Huebner, & Suldo, 2006). This movement could be important to adolescence as it is a period marked by rapid growth and psychosocial change. In addition to the dramatic physical alterations of puberty, adolescents develop abstract thinking skills, explore possibilities in pursuit of identity, realign relationships with parents as their need for autonomy increases, and navigate significant school transitions. These transformations present opportunities for enhanced development; however, they also present challenges that can trigger vulnerabilities. Although most teenagers traverse these changes successfully without undue stress, this developmental stage is marked by increases in behavioural and emotional problems (Monahan & Hawkins, 2009, & Gerard & Booth, 2015).

The following study will explore the potential impact of young people’s hope, future values and how they socially compare themselves to others on their mental health. Having hope in your ability to achieve your goals is important in helping a person strive towards their goals. It has been found that lower levels of hope can adversely impact on a person’s mental health and well-being (Valle, Huebner, & Suldo, 2006). Furthermore, how an adolescent sees their future and what values are important to them is central to how they strive towards their goals. In a large UK adolescent sample, future values were related to both adaptive and maladaptive behaviours manifested in early adulthood (Finlay et al., 2014). Finally, how a person socially compares themselves has been found to impact on their psychological well-being. For example, in their meta-analysis of 156 studies, Myers and Crowther (2009) found that social comparison processes were related to high levels of body
dissatisfaction in adolescents and adults. Moreover, in relation to current adolescent socialisation processes, social comparison processes are operative via social media on sites such as Facebook and MySpace (de Vries & Kühne, 2015; Lee, 2014; Manago, Graham, Greenfield, & Salimkhan, 2008) and for some individuals they may increase the likelihood of negative rather than positive mental health benefits (de Vries & Kühne, 2015; Manago, et al, 2008). As will be seen below, each of these variables have been studied independently in relation to young people’s emotional and behavioural problems, yet to date, no research has looked at their impact together.

**Hope**

Over the centuries numerous authors and philosophers have described hope, and descriptions of adolescents’ hope may exist across all cultural contexts (Yarcheski & Mahon, 2014). In more recent years the field of psychology has attempted to conceptualise and measure hope (Edwards & McClintock, 2013). In this respect, the concept of hope is an area that has gained relevance in the field of positive psychology (Schrank, Stanghellini, & Slade, 2008), and is important to all people across the lifespan (Esteves, Scoloveno, Mahat, Yarcheski, & Scoloveno, 2013). Although the body of literature into children’s hope is not as large as the research into adults, studies nonetheless identify the importance of hope in the lives of adolescents (Edwards & McClintock, 2013).

The most well-known theoretical model of hope is provided by Snyder, (1994), who conceptualises hope as a primarily cognitive construct which reflects a person’s motivation and ability to strive towards personally relevant goals (Snyder, 1994; & Weis & Speridakos, 2011). Central to Snyder’s theory of hope is that there are two components of hope that are interrelated and essential (Magaletta & Oliver, 1999), namely pathways thinking and agency thinking (Bernado, 2010; Snyder, 1994).
Pathways thinking relates to a person’s perceived ability to generate ways to meet a desired goal and allows the individual to discover routes around any obstacles to these. Agency thinking relates to the individual’s perceived capacity to use one's pathway to attain the desired goal and allows them to remain determined to move around any obstacles that may arise when trying to achieve their goals (Snyder, 2002).

Much of the research on the psychology of hope in children and adolescents is derived from the assumptions of Snyder’s hope theory (Bernardo, 2015). Studies have linked hope to a variety of important outcomes such as academic attainment, physical health outcomes and to positive psychological adjustment (Edwards & McClintock, 2013). Hope is also recognised as an important part of psychological growth and change (Weis & Speridakos, 2011) and an important predictor of emotional wellbeing in young people (Bernardo, 2015). Specifically, Valle, et al, (2006) found that hope scores significantly predicted a young person’s levels of internalising behaviour such as being withdrawn, anxious and or depressed over a one year period. Additional longitudinal studies have found that higher levels of hope contributed to reductions in symptoms of depression and anxiety as measured by the Mental Health Inventory-5 (MHI-5) (Marques, et al, 2011 & Marques, 2016) and greater psychological and academic adjustment (Gilman, Dooley, & Florell, 2006). Moreover, people who have lower levels of hope are at greater risk of becoming involved in illegal behaviour (Esteves et al., 2013; & Martin & Stermac, 2010). In a six-year longitudinal study by Ciarrochi et al., (2015), hope reliably predicted emotional well-being in adolescents, as well predicting a decrease in negative affect whereas negative affect predicted a decrease in hope.

There have been mixed results when studying the relationship between hope and externalising behaviour. For example, Valle, Huebner, & Suldo, (2004) found that
hope was inversely correlated with internalizing and externalizing behaviours, however, Valle, Huebner, & Suldo, (2006) found that hope scores predicted subsequent levels of internalising behaviour but not later externalising behaviours. In contrast, Hagen, et al (2005), found that children who were hopeful exhibited better adjustment and reported fewer externalising and internalising problems even after accounting for stress and social support. Those children that were less hopeful were placed at risk of developing behavioural problems. Furthermore, in a study of children who had suffered from burn injuries, Barnum, et al (1998), found that hope was the only unique significant predictor of externalising behaviour scores and having higher hope predicted lower externalising behaviour scores.

**Future Values**

Previous research has identified long term links between adolescents’ future thinking; for example, goals, expectancies and aspirations, and their behaviour in adulthood (Beal and Crockett, 2010). It is being increasingly recognised that thinking about the future is central to structuring adolescent's goals and motivating actions towards these (Finlay et al., 2014) and that adolescence is a time when people start to develop their values and world beliefs (Wray-Lake, & Syverstseb, 2011). Utilising data from a national longitudinal British survey, Finlay, et al (2014) found that adolescent’s future values and beliefs predicted adult behaviour. In their study, future values in six domains, family values, full-time job, personal responsibility, autonomy, civic responsibility and hedonistic privilege positively predicted behaviours within these same domains measured 18 years later.

Esteves et al, (2013) found that having a future orientation was positively associated with self-reported levels of hope in young people. Moreover, researchers have identified that a key component of resilience is having a future orientated
perspective, including expressing future goals in areas such as education and self-belief to realise these future goals (Adelabu, 2008; Esteves et al., 2013 & McCoy & Bowen, 2015). More broadly speaking, future orientation is identified as a primary predictor of overcoming adversity, where an adolescents’ future orientation is often used to predict behaviour and planning (Beal, 2012).

Numerous studies have found associations between future orientation and deviant behaviour amongst both the institutionalised and the general youth population (Chen, 2009). In a study of gang members in El Salvador low levels of future orientation, delinquent peers and low levels of social support were significant risk factors for delinquency and violence (Olate, Salas-Wright, & Vaughn, 2012). Whereas, being able to hold positive self-beliefs about the future were related to processes of change in young people receiving help for their antisocial behaviour (Nurmi, 1991; Tighe, Pistrang, Casdagli, Baruch, & Butler, 2012).

Social Comparison

How we socially compare ourselves to others was highlighted as a key variable in how people socially relate to others by Festinger, (1954), who developed the first comprehensive theory of social comparison (Allan & Gilbert, 1995). In this theory, Festinger (1954), proposed that people have a need to determine how they are progressing in life and because of this they often search out standards to which they can compare themselves with. Within the theory, it differentiates between two different ways in which individuals compare themselves. Specifically, individuals will either compare themselves socially upwards or downwards (Myers & Crowther, 2009). Upwards social comparison happens when a person compares themselves to someone who they believe are better off then themselves, which is likely to produce a negative consequence such as diminished self-esteem. Whereas, downward social
comparison happens when a person compares themselves to people who they believe are worse off than they are which is likely to produce a positive consequence such as improved self-esteem (Myers & Crowther, 2009).

It was suggested by Stevenson, (2000) that today’s Western culture is based upon a mind-set of hierarchy, where concerns with and awareness of one’s social standing and rank are increasingly highlighted, leading to pressures to strive and compete to avoid feeling inferior (Williams, Gilbert, & McEwan, 2009). Furthermore, research has highlighted that thinking others look down on you, beliefs of being inferior, compared to others, and behaving in a submissive way, is highly associated with depression in both adult clinical and non-clinical populations (Gilbert, McEwan, Bellew, Mills, & Gale, 2009). Additionally, individuals who are sensitive to the competitive dynamic of comparison and being looked down upon have been shown to be more vulnerable to mood disorders (Williams et al., 2009).

Of interest, is that rates of mental ill health and crime levels are higher in competitive societies in comparison to collectivist societies (Williams et al., 2009). It has been suggested that the increasing rate of psychopathology in these societies may be linked to the ever-increasing amount of competitive behaviour (James 1998). With individuals facing increasing pressure to compete in areas such as physical appearance, social relationships and educational attainment (Bellew, Gilbert, Mills, McEwan, & Gale, 2006), and the consequences of being unable to reach the desired competitive standard include feelings of inferiority and psychological distress (Williams et al., 2009). Irons and Gilbert, (2005), found that social comparison mediated the relationship between insecure attachment and anxiety symptoms and avoidant and ambivalent attachment styles on depression in an adolescent sample.
It was suggested by Stevenson, (2000) that people’s concerns with social rank are increasingly being emphasised which leads to a pressure to compete to avoid feelings of inferiority. When people’s mind-sets are focussed on social comparison and potentially their vulnerability to rejection and inferiority there is an increased proneness to depression (Williams, Gilbert, & McEwan, 2009). Furthermore, it has been found that rates of mental illness are higher in more competitive societies in comparison to caring ones (Williams, et al, 2009). As the levels of competitiveness and comparison ever increases, western popular culture has become a powerful source of values and ideals for others to copy and live up to and are highly influential (Arrindel, Steptoe & Wardle, 2003). Therefore, how a person may see their future could be different to previous generations and their perceived ability of attainting these goals may be reduced thus potentially leading to greater distress and overall problems.

Due to this moderating effect and the increasing amount of social comparison and its known impact on adjustment, this study proposes to explore whether how a person compares themselves act as a moderator between the relationship of hope and adjustment in adolescents. Specifically, when social comparison increases in a negative direction, and a person compares themselves less favourably, hope will no longer have its protective effects, especially in relation to internalising behaviour. In terms of a moderating effect of social comparison on externalising behaviour, while we expect the same type of interaction this hypothesis is exploratory, given the lack of literature investigating relationships between social comparisons and externalizing problems. Thus, this study will explore the relationship between social comparison and externalising behaviour, and specifically whether social comparison processes moderate the impact of hope and future values on young person’s internalizing and externalizing behaviours.
Currently we are aware of no studies that have looked at the concurrent impact of hope, future values, and social comparison processes on internalising and externalising behaviour. Additionally, we are not aware of any studies that incorporate social comparison into a broader model of the impact of hope on mental health adjustment. This study attempts to investigate the relationship between hope, future values and social comparison processes in relation to youth adjustment. Although hope and future values are beginning to be studied in adolescents, much of the work is with adults and little examines more broadly their emotional and behavioural adjustment. Specifically, the study hypothesises that:

1. Low levels of hope and an adolescent’s future values, and comparing oneself more unfavourably to peers, will be associated with higher levels of internalizing (emotional) problems.

2. Low levels of hope and an adolescent’s future values, and comparing oneself more favourably compared to one’s peers, will be associated with higher levels of externalizing (antisocial behaviour) problems.

3. Social comparison will operate as a moderator variable in relation to hopes impact on adjustment, with increasingly negative comparisons associated with reduced impact of hope’s protective effect on adjustment.

**Method**

**Participants**

Participants were school aged children recruited within schools in Greater London and were aged between 11 and 17, (mean age $M = 14.1$, $SD = 1.81$). In total 311 students, 179 males (58%) and 132 females (42%), participated in the study. 53 participants had substantial missing data meaning one or more scales could not be
scored and were therefore removed. In addition, 57 participants refused consent by ticking no on their consent form, therefore, their forms were removed from the study. Inclusion criteria for the study was students aged 11-17. Exclusion criteria was any young person with a severe learning difficulty and or mental health condition. A power analysis was conducted, to detect a small effect set at 0.1, assuming a power of 0.8 and an alpha of <.05, a minimum sample of 114 participants was required.

**Ethical Considerations**

The study received ethical approval from the UCL Research Ethics Committee, ethics number 9/058101 (see appendix 3).

**Setting and procedure**

A convenience sample of London based secondary schools that broadly reflected the ethnic and socio-economic diversity of the city were contacted to take part in the study. The schools were contacted by email to see if they were willing to participate which led to four schools taking part in the research. Once the school agreed to take part, all parents were sent a letter (Appendix 4) describing the study and requesting permission for their child’s participation in the study. Those parents who did not wish for their child to take part returned the opt-out form (n = 14) otherwise consent was assumed. On the day of data collection at each site, children whose parents did not opt out were then approached in their tutor groups and were given information on the study both verbally and in written form (Appendix 5). Informed consent (Appendix 6) was sought and those who consented completed the questionnaire pack (Appendix 7). Participants were reminded that all their responses would remain confidential and to answer each question as honestly as possible. They were instructed to read the instruction for each measure carefully and to ask the researcher any
questions they may have. They were asked to fill the questionnaires in, in silence, and not to confer with one another,

*Design*

This study employed a cross-sectional correlational design to investigate whether hope, future value and social comparison are predictors of mental health symptoms as measured by the Youth Self Report.

*Measures*

**Children’s Hope Scale**

The Children’s Hope scale, Snyder et al., (1997) is a six item, self-report measure of youth hopefulness. Three pathway items (2, 4 and 6) assess the child’s capacity to develop pathways to attain a goal and three agency items (1, 3 and 5) assess a young person’s ability to use those pathways to accomplish their goals. Each item has a response option rated on a six point Likert Scale, ranging from one (*None of the time*) to six (*All of the time*). The total score of the CHS represents the mean of the responses across all the items. To be able to compute the total score 85% of the items need to be completed. The CHS has good internal consistency with Cronbach’s alpha 0.84 (Bickman et al., 2010). Higher scores on the CHS reflect higher levels of hope.

**Adolescent Future Values**

Adolescent future values (FV) for adulthood are assessed by responses to 12 items based on the following prompts: "How much do you think the following will matter to you when you are an adult?" The items are measured on a three-point scale coded as 1 = *doesn't matter*, 2 = *matters somewhat*, and 3 = *matters very much*. Six dimensions are captured: *Family responsibility* ("getting married" and "having children of my own"), "having a full time job", *Individual responsibility* ("taking more
responsibility for myself"), autonomy ("being able to decide what I want"), civic responsibility ("being able to vote", "taking an active part in politics" and "being involved in the local community") and hedonistic privilege ("having more fun", "being able to go to nightclubs", "being legally able to drink" and "going to x-rated films"). The FV internal reliability of the scales had a range of Cronbach’s alphas from .58 - .75 (Finlay et al, 2015).

**Social Comparison Scale**

The Social Comparison Scale (SCS) Allan & Gilbert, (1995), measures peoples’ self-perceptions of how they compare with others. Participants are asked to rate themselves on 11 bipolar constructs using a 10-point scale. Each question has the proceeding statement of “In relationship to others I feel..”. For example: Different 1 2 3 4 5 6 7 8 9 10 Same.

The items cover judgements concerned with rank, attractiveness and how well the person thinks they ‘fit in’ with others in society. A low score indicates feelings of inferiority and general low rank self-perceptions. The SCS has good reliability, with Cronbach’s alphas of between .90 and .91 in a student population (Allan & Gilbert, 1997).

**The Youth Self-Report Scale**

The Youth Self-Report Scale (YSR), Achenbach (1991), is a self-report questionnaire composed of two parts: Competencies and Problems. In the current study, only the Problems scale was used. It consists of 112 items, covering different behaviours and symptoms which are rated on a three-point scale. (0 indicates the absence of symptom or problem behaviour, 1 indicates that the symptom is present some of the time or applies to some extent, and 2 indicates that the symptom is present most of the time or applies well). All ratings refer to symptoms or problems that were
experienced during the previous six months. The problem scale gives an overall score as well as overall scores for internalising and externalising behaviour. Furthermore, both the internalising and externalising domains are made up of subsections. For internalising these are, withdrawn, somatic complaints and anxious/depressed. The externalising domain consists of delinquent behaviour and aggressive behaviour. The YSR has been shown to be a valid and reliable measures with a test-retest coefficient of .79 (Valle, et al, 2006). Furthermore, the YSR has good reliability with a Cronbach alpha of .95, with the subscales internalising and externalising both having Cronbach alphas of .9 (Achenbach & Rescorla, 2001).

Data analysis

To test the studies hypotheses that hope, social comparison and future values would acts as predictors of mental health and well-being as measured by the Youth Self Report three linear regressions will be carried out. To test the hypothesis that social comparison would act as a moderator between the relationship between hope and mental health and well-being three hierarchical multiple regressions will be carried out.

Results

Data preparation.

Tests were conducted to examine the distribution of the data. When examining the CHS, SC and FV scales visually, the histograms were essentially normally distributed with a few outliers. Using the Skewness and Kurtosis test the CHS and FV scales were not significant, however the SC scale was significant. However, due to the large sample size the test may be considered unreliable (Kim, 2013) and therefore no data transformation was conducted on the SC scale. The youth self-report was scored
on the ASEBA YSR computer scoring package and then the t-scores were entered onto SPSS. The remaining questionnaires responses were continually entered onto SPSS.

Preliminarily analysis

Gender, but not age and ethnicity were significantly related with the dependent measures YSR total, YSR internalising and YSR externalising scores. Consequently, gender was entered into the regression analyses as a covariate.

All descriptive statistics for the variables are presented in table 1. Cronbach’s alpha was calculated for the CHS, SC and FV scales. The CHS and SC scales showed good internal consistency, however the FV scale had the lowest alpha and although not the alpha level is not deemed unacceptable it seemed to have low internal consistency. To investigate possible predictors of overall adolescent problems and internalising and externalising behaviour linear regression analysis were conducted.
Table 1. Correlations between Total YSR, YSR Internalising, YSR Externalising, Hope, Future Values, Social Comparison and demographics

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<td>-.027</td>
<td>-.010</td>
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<td>4. YSR Total</td>
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<td></td>
<td></td>
<td>-.880***</td>
<td>.764***</td>
<td>-.392***</td>
<td>.014</td>
<td>-.415***</td>
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<td>5. YSR Internal</td>
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<td>-.464***</td>
<td>-.404***</td>
<td>-.036</td>
<td>-.527***</td>
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<td>6. YSR External</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.230***</td>
<td>.113*</td>
<td>-.068</td>
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<td>7. Hope</td>
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<td></td>
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<td>.224***</td>
<td>.507***</td>
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</tr>
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<td>8. Future Values</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.266***</td>
</tr>
<tr>
<td>9. Social Comparison</td>
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<td></td>
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<td></td>
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</tbody>
</table>

Mean
- 14.01  2.22  55.71  55.54  52.87  3.95  2.20  6.36
Standard Deviation
- 1.81  1.37  10.94  12.10  10.33  .98  .28  1.63
\[\alpha\]
- .83  .66  .90

***p<0.000; **p<0.01; *p<0.05
Hypothesis 1

To test the hypotheses that low levels of hope and an adolescent’s future values, in relation to adolescents’ view of themselves as having diminished social status, will be associated with higher levels of problems overall and internalizing (emotional) problems two linear regressions were carried out. The predictors entered to the regressions were based on the study hypotheses. As seen in table 2 the independent effect as of gender, hope, future values and social comparison were significant in predicting total YSR score. Overall, the model accounted for 25% of the variance of the total YSR score and was significant, $R^2 = .26$ $F(5,300)=20.77 \ p<.000$ ($R^2_{\text{Adjusted}} = .25$). In addition, the independent effects of hope, future values and social comparison were significant in predicting total internalising scores. Overall the model accounted for 32% of the variance of the total internalising score and was significant, $R^2 = .33$ $F(5,300)=29.65 \ p<.000$ ($R^2_{\text{Adjusted}} = .32$). Therefore, those with lower levels of hope, and who compared themselves less favourably to others were more at risk from having clinical or borderline clinical scores as measured by the YSR.

Hypothesis 2

To test the hypothesis that low levels of hope and an adolescent’s future values, in relation to adolescent’s views of themselves as having elevated social status, will be associated with higher levels of externalizing (antisocial behaviour) problems, a linear regression was carried out. (see regression 3, table 2) As seen in table 2 the independent effects of gender, hope and future values were significant in predicting total externalising scores. The overall model accounted for 8% of the variance of the total externalising score and was significant, $R^2 = .10$ $F(5,300)=6.41 \ p<.000$ ($R^2_{\text{Adjusted}} = .08$). With those with lower levels of hope, and less future values at risk from having clinical or borderline clinical externalising scores as measured by the YSR.
Table 2 Linear regression analysis for total YSR, total internalising and total externalising scores.

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Predictor Variable</th>
<th>β</th>
<th>t</th>
<th>95% Confidence interval</th>
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<td></td>
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<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>Regression 1</td>
<td>Gender</td>
<td>-.110</td>
<td>-2.135*</td>
<td>-4.686</td>
</tr>
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<td>-.022</td>
<td>-.623</td>
</tr>
<tr>
<td></td>
<td>Hope</td>
<td>-.257</td>
<td>-4.354***</td>
<td>-4.194</td>
</tr>
<tr>
<td></td>
<td>Future Values</td>
<td>.117</td>
<td>3.377**</td>
<td>2.907</td>
</tr>
<tr>
<td></td>
<td>Social Comparison</td>
<td>-.312</td>
<td>-5.277***</td>
<td>-2.868</td>
</tr>
<tr>
<td>Regression 2</td>
<td>Gender</td>
<td>-.092</td>
<td>-1.891</td>
<td>-4.619</td>
</tr>
<tr>
<td>YSR Internalising</td>
<td>Age</td>
<td>.008</td>
<td>.163</td>
<td>-.592</td>
</tr>
<tr>
<td></td>
<td>Hope</td>
<td>-.190</td>
<td>-3.380**</td>
<td>-3.718</td>
</tr>
<tr>
<td></td>
<td>Future Values</td>
<td>.144</td>
<td>2.897**</td>
<td>2.010</td>
</tr>
<tr>
<td></td>
<td>Social Comparison</td>
<td>-.452</td>
<td>-8.066***</td>
<td>-4.163</td>
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<tr>
<td>Regression 3</td>
<td>Gender</td>
<td>-.118</td>
<td>-2.082*</td>
<td>-4.814</td>
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<td>.024</td>
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<tr>
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<td>Hope</td>
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<tr>
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<td>Future Values</td>
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<td>Social Comparison</td>
<td>.048</td>
<td>.739</td>
<td>-.506</td>
</tr>
</tbody>
</table>

***p<0.000; **p<0.01; *p<0.05
Moderator Analysis

Finally, to test whether an adolescents’ level of social comparison moderated the impact of hope on total problems, as well as internalising and externalising problems three linear regressions were carried out. As seen in table 3, when social comparison is added to the model in step 2, as a moderator variable only the independent effects of gender and future values significantly predicted the total YSR score. The overall model accounted for 24% of the variance of the total YSR score and was significant. $R^2 = .26$ $F(6,299)=17.25$ $p<.000$ ($R^2_{Adjusted} = .24$). When adding the social comparison moderator to the model there was no $R^2$ change ($R^2_{Change} = .000$).

When adding social comparison as a moderator to the model in step 2, for total internalising, only the independent effects of future values and social comparison significantly predicted total internalising scores, the variable of gender was approaching significance. The overall model accounted for 32% of the variance of the total internalising score and was significant. $R^2 = .33$ $F(6,299)=24.66$ $p<.000$ ($R^2_{Adjusted} = .32$). When adding the social comparison moderator to the model there was no $R^2$ change ($R^2_{change} = .000$).

Finally, when adding social comparison as a moderator to the model in step 2, for total externalising only the independent effects of gender and future values significantly predicted total internalising scores. The overall model accounting for 8% of the variance of the total Externalising score and was significant, $R^2 = .10$ $F(6,299)=5.50$ $p<.000$ ($R^2_{Adjusted} = .08$). In all the regressions, social comparison as a
moderator variable was non-significant. When adding the social comparison moderator to the model there was only a nominal $R^2$ change ($R^2$ Change = .003).
Table 3: Linear regression analysis with moderator variable.

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Predictor Variable</th>
<th>β</th>
<th>t</th>
<th>95% Confidence interval</th>
</tr>
</thead>
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<td></td>
<td></td>
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<td>Lower Bound</td>
</tr>
<tr>
<td>Regression 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total YSR Step 1</td>
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<td>-4.686</td>
</tr>
<tr>
<td></td>
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<td>-.022</td>
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<tr>
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<td>Hope</td>
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<td>Future Values</td>
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<td>3.377**</td>
<td>2.907</td>
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</tr>
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<td>-.986</td>
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***p<0.000; **p<0.01; *p<0.05
Discussion

The current study explored the relationship between hope, future values and social comparison processes and their relationship to adolescent mental health and well-being. Furthermore, it examined whether how a person socially compares themselves to others moderated the impact of hope and future values on mental health and well-being. Results showed that the hypothesis that low levels of hope, and adolescent’s future values and perceiving themselves as less socially favourable than others will be associated with higher levels of internalising problems was supported. In contrast the hypothesis that low levels of hope and an adolescent’s future values, in relation to adolescents viewing themselves more favourably in comparison to their peers will be associated with higher levels of externalising problems was only partially supported.

When examining social comparison as a moderator variable, results showed that social comparison did not act as a moderator variable as hypothesised when looking at the impact of hope, on an adolescent’s mental health and well-being. Overall, then, the results of this study lend support to the hypothesis that a young person’s hope, future values and the way they compare themselves to others can impact on their mental health and well-being.

Hope

Specifically, for hope, the findings of this study in a sample of English school students are in line with the current literature, specifically that an adolescent’s levels of hope, appears to be a protective factor (Hagen, Myers, & Mackintosh, 2005), and may operate as a psychological strength (e.g. Marques, Lopez, Fontaine, Coimbra, & Mitchell, 2015 & Snyder, 1997). In the current study, there was an inverse relationship between hope scores and outcomes on the YSR. That is, adolescents who scored lower
in levels of hope were more likely to have higher scores (borderline or clinical range) on the total YSR as well as total internalising and externalising scale scores. The present results are in line with Hagen, et al (2005), who found that at risk children who were more hopeful, displayed better adjustment and reported less internalising and externalising scores as measured by the YSR, and partly in line with Valle et al. (2006) who found that hope only predicted internalising but not externalizing behaviour a year later. Finally, in terms of the cross-sectional links between hope and externalizing and internalizing symptoms found in the present study, they are broadly consistent with those of with Marques (2016) who found that an adolescent’s hope scores were predictive of mental health difficulties up to five years later.

**Future Values**

In the current study the future values score of an adolescent was predictive of both internalising and externalising behaviour and the overall score on the YSR. Furthermore, future values remained the only significant predictor across the analyses when social comparison was added as a moderator variable. Considering adolescents’ future thinking is central to structuring their goals and motivations (Finlay et al., 2014) it is not surprising that how and what they value in the future can impact on their mental health and well-being. In relation to internalising behaviour, Hamilton, et al (2014), similarly found that how an adolescent thinks about their future can ultimately impact on depressive symptoms and induce hopelessness. Moreover, having belief in one’s future is related to well-being in adolescents. (Sun & Shek, 2012)

In terms of externalising behaviour findings in adolescents and their future orientations is limited (Nurmi, 1991). However, the findings of this study are comparable to Chen, (2009) who found that low adolescent future orientations are associated with delinquent behaviour among both the general population and gang
members. Moreover, low future orientation was found to be one significant risk factor for delinquency and violence (Olate, et al, 2012). Furthermore, holding positive beliefs about the future has been found to be related to change in adolescents who display antisocial behaviour (Nurmi, 1991 & Tighe, et al, 2012). It may be those that do not hold specific values for the future, may not have positive outlook which then impacts on their behaviour and emotions both internally and externally. Some research has suggested that adolescents who engage in antisocial behaviour do not, in fact, ignore the future consequences of their actions but instead are less optimistic overall about their futures, thus are less concerned by these consequences (Nurmi, 1991). This study, not only seems to support this idea, but also supports the notion that the way an adolescent views their future impacts on both their internalising and externalising behaviour.

Overall, an adolescent’s future values are important and can impact on their mental health and well-being. It may be that seeing their future differently to their peers’ impacts on their mood and behaviour however the direction in which this occurs cannot be inferred. Essentially, it may be that having unpleasant emotions lead to the limiting of future thinking (Seginer, 2008) rather than reduced future orientation leading to reduced mental health and well-being. Future longitudinal studies are needed to help determine which hypothesis are most accurate.

**Social Comparison**

When assessing the relationship between how an adolescent socially compares themselves with internalising and externalising behaviour this study found a significant negative relationship between social comparison and both total YSR score and internalising behaviour. Thus, the more inferior the adolescent feels compared to their peers, the higher the score on the YSR total and internalising subscale. This is in
line with previous research by Irons and Gilbert (2005) who found a significant negative relationship between social comparison and anxiety and depression scores in adolescents. Similarly, Lee (2014) also found a positive relationship between social comparison frequency on Facebook and the frequency of negative feelings that arose from such comparisons. Moreover, in the studies by Allan and Gilbert, (1995) and Gilbert (2000) how a person socially compares themselves correlated significantly with measures of depression and anxiety.

Of interest is the study by Williams et al., (2009), that suggests that environments which place a large emphasis on competing and achieving could impact negatively on one’s mental health. They found that social comparison was predictive of depression, self-harm, anxiety and stress. As such, schools are environments that can place a large emphasis on competing and achievement, and combined with ever-increasing social media use, it is perhaps not surprising there was a significant association between how participants compare themselves to others and their scores on internalising behaviour.

However, in this study no relationship was found between how adolescents compare themselves socially and externalising behaviour. Intuitively, this makes sense and could be, due to the fact, that social comparison is an intrapersonal process. When a person socially compares themselves unfavourably this may impact on their internal world only and makes them want to withdraw rather than display aggressive or rule-breaking behaviour. Of interest, Yip and Kelly, (2013) found that both upward and downward comparison can decrease prosocial behaviour. They suggested that this may be due to a reduction in empathy and although lack of empathy is a risk factor for antisocial behaviour it is not a determinant. One could postulate that in terms of externalising behaviour it may be that social comparison may not play a part and it is
a different mechanism at work, and social comparison is only a predictor of depression and anxiety.

To test whether social comparison would moderate the effect of hope on adjustment and well-being in adolescent an exploratory moderator analysis was conducted. The analysis showed that there was no significant moderating effect on the relationship between hope and youth adjustment as measured by total YSR scores, as well as scores on the YSR internalising and externalising subscales. In terms of externalising behaviour, it may be that the measure is less sensitive to comparisons that would translate into aggression rather than depressive symptoms, or it may be that social comparison processes in antisocial behaviour may be part of a broader ecology of risk in the peer domain.

However, although the hypothesis was exploratory, the finding that social comparison does not moderate the impact of hope on internalizing symptoms is perhaps more unexpected. As one compares themselves more and more less favourably with others, it would be expected this would impact further on the levels of depression and anxiety seen in a person and thus the impact of hope would be less powerful or predictive. This result may suggest that an adolescents’ level hope is a stronger predictor of levels of adjustment and well-being which is not impacted by how they compare themselves to others. When considering this results in comparison to the moderating effect of social comparison on attachment style to depression and anxiety (Irons & Gilbert, 2005) it could be how a person socially compares themselves is more closely linked to attachment style. Studies that explore this as well as hope may shed further light onto the differences into these relationships.
Strengths and Limitations

To the researcher’s knowledge, this is the first study that examines the concurrent impact of hope, future values and social comparison on externalising behaviour. Furthermore, as far as the researcher is aware this is the first study of hope conducted on UK school children. Another strength of the study is its large sample size. At the same time, there are several limitations to the current research.

In terms of the current sample, many students declined consent on the day and this may have impacted or biased the results. Although ethnicity did not correlate with any of the other variables or constructs, it must be noted that 50 participants did not state their ethnicity and therefore it is difficult to state conclusively that ethnicity did not influence the nature of the relationships found between the independent variables and outcomes. Future studies would benefit from a more complete set of demographic data to see if a relationship exists between ethnicity, hope and youth adjustment and well-being. Furthermore, as the study employed a correlational design, this prevents statements regarding causality and therefore further longitudinal research is needed to help understand the impact of hope, future values and social comparison on youth adjustment.

Conclusion

The current study provides some further support that hope is a protective factor that plays a role in the maintenance of an adolescents’ well-being. Furthermore, it found that the way adolescents’ compare themselves to others and the values they hold for the future impacts on their well-being. Helping young people believe their goals are attainable and to have pro-social goals for the future, as well as believe themselves not inferior to others, should allow them to move towards their goals and may be a protective factor from reduced mental health and well-being.
References


https://doi.org/10.1177/0193945914559545

Part 3: Critical Appraisal
Introduction

The following critical appraisal will reflect on the process of planning, undertaking and making sense of my research and some of the specific issues that arose during the process. Firstly, it will address theoretical ideas regarding reflexivity and its place within quantitative research and will include the importance of self-reflection by the researcher. It will then consider the issues and challenges associated with research in the young offender population and a normative school population, giving special consideration to the recruitment of participants.

Reflexivity

There are many challenges that may inhibit a researcher’s ability to carry out a study to its full potential. These challenges may be ethical, physical or socio-cultural and will be influenced by the gender, ethnicity, age and social class of both the researcher and participant. The concept of reflexivity has been discussed by social scientists for many years and is primarily used in relation to the collection of qualitative data (Ryan & Golden, 2006). It involves being open and honest about by whom, how and where the data was collected. Although many qualitative researchers have discussed the complexities of completing research, most quantitative researchers avoid any overt forms of reflexivity. This has led to criticism, as quantitative research rarely acknowledges the researchers hidden and unexplained assumptions (Ryan & Golden, 2006). Reflexivity may be relevant when considering all stages of the research process, so the following appraisal will examine my own ideas and choices taken throughout the process, including choosing a project, recruitment, data analysis and concluding with some general comments.
Choosing a project

One of the first major challenges I faced was deciding what project to undertake. An idea which has influenced me through both personal and professional experience is the notion that a person has to see a future they believe they can achieve in order to have the motivation to strive towards their goals. Moreover, not only do they have to believe they have the ability, they need to believe they have the means and support in order to achieve their goals. I believe that this influenced my choice of project on every level from the desire to initially conduct research with a population of ‘young offenders’ as this population has an overrepresentation from minority ethnic groups and people who are impacted the most from social inequalities (White & Cunneen, 2015) and adolescents more generally, to the constructs I chose to investigate and the measures that I selected to operationalise these constructs. Hope can be a crucial resource when working with young people who are disadvantaged or marginalised as it can encourage the development of creative solutions to seemingly persistent difficulties (Te Riele, 2010).

Although not explicitly at the time, I realised over the research process that this thinking, especially around how much hope a person has, was in line with a positive psychology stance, with its focus on helping people fulfil their potential (Schueller, 2009). In fact, the study of positive traits is one of the pillars in the Positive Psychology framework (Datu, 2012). Seligman and Peterson (2004) identified ‘hope’ as one of the 24 strengths in their classification handbook of strengths and virtues which is akin to the DSM-IV but from a positive psychology perspective (Schueller, 2009).
Ethics

An integral area that needs careful consideration when developing and carrying out research are ethical issues (Sieber & Stanley, 1988). Having chosen to carry out research drawing on a ‘young offender’ population I faced the challenge of where to apply for ethical approval. Although it was not necessary to apply for NHS ethics as recruitment was being carried out outside of the NHS, it was unclear as to where I should submit my ethics application. It became apparent from reading the small print on the national offender management services (NOMS) website that all research besides that in young offender institutions or services was applied through and approved by NOMS. However, it did not state where to apply for ethical approval for ‘young offender’ research. I then contacted the Youth Justice Board, however they did not take ethics applications either and were not certain as to where I should apply.

After further discussions, I was put in touch with an academic whose main research was in the same population. They informed me that each team have their own policies regarding research and while some would accept university ethics, some would require the local authority to approve the research. Although it took some time to get to this point I was pleased firstly, to have finally got an answer, and secondly that university ethics were much quicker to be granted once a good proposal had been submitted. The reason this process is important to be aware of is that ‘young offenders’ are deemed a difficult group to research and it comes with much complexity, some of which I will outline below. However, if the process for applying for ethics was made easier, for example by the NOMS website saying how to gain approval, rather than just saying they do not consider ethical applications for this population, then it may allow more time and possibility for research to take place. As research informs clinical practice, research that looks at a positive psychology constructs may allow a better
understanding of the strengths and resilience of this population which will then hopefully improve practice.

**Access to and recruitment of young offenders**

The next crucial step in the project was to gain access to ‘young offender’ teams from where I could recruit participants. In terms of recruitment an important point to note is the fact that ‘young offenders’ constitute two of the most marginalised and criticised groups in society: ‘offenders’ and ‘young people’ which may mean research is focussed on deficits rather than strengths and resilience (Holt & Pamment, 2011). As such, they can be a difficult population to recruit from for many reasons, such as access to the teams they are held under, and the need to build relationships with both the ‘gatekeepers’ of the teams and the young people in the first instance (Hassan, 2016). Moreover, certain groups are more likely to be excluded from school and this can lead to further exclusion and a person’s race, gender, class and learning needs can also impact on those who come to have a criminal record (Rosich, 2007). Furthermore, ‘young offenders’ often have unmet needs such as higher levels of substance use, experiences of mental health difficulties and learning disabilities. They may also experience impairment of social skills and language ability independent of their IQ (Chitsabesan et al., 2006; & Holt & Pamment, 2011) due to reason such as race, gender, social class and social exclusions (White & Cunneen, 2015), which may influence their ability to take part in research. When the topic under investigation is more sensitive in nature, such as enquiring about the risk of re-offending as was initially planned in my initial proposed project, the recruitment of participants is likely to be much more difficult due to a potential mistrust of the researcher and concerns as to where this information might be used (Lee & Renzetti, 1990).
An additional challenge was to gain access to young offender services (YOS) to be able to recruit participants. Due to the complex nature of their work and the ever rapidly changing context of the criminal justice system (Chitsabesan et al., 2006), finding teams who had the time and resources to be involved proved extremely difficult. However, despite these challenges, I managed to recruit two teams. Although they had agreed to take part, the teams raised a concern about the length of the process. As mentioned previously this concern could be due to unmet needs highlighted above. Moreover, this may say something both about the assumptions and narratives about young people and ‘young offenders’ in particular which can make participation in the research more difficult.

Over the next five months only a few potential participants were identified by the teams, of which only one decided to meet with me but then declined to take part. Perhaps I should have given more thought to how the young offenders may have perceived being approached and invited to take part in the research. Low response rates in research with socially disadvantaged groups are not uncommon, and one reason for this could be mistrust in research and researcher (Bonevski et al., 2014). These are young people who experience unequal power relations and much of their lives is controlled and limited due to this (Hassan, 2016). By the very nature of being a ‘young offender’ they would have experienced being interviewed by various agencies such as the police, YOT workers and social workers on many occasions and thus could perceive the process as threatening (Hassan, 2016; & Holt & Pamment, 2011). Therefore, the interview could be viewed with suspicion and a way of being further monitored, even if reassured it is confidential and not part of the criminal justice system (Holt & Pamment, 2011; & Lee & Renzetti, 1990).
Overall, I realise now that although I was aware that recruitment and research with a ‘young offender’ population would be difficult, I hugely underestimated how challenging it would prove to be. What is important when designing research in this population is to take into consideration the many factors noted above at the start of the research to make sure they can be thought about and overcome.

**Change of population**

Due to the difficulties in recruitment within the ‘young offender’ population the decision was taken to instead recruit from a different population which would hopefully prove easier to access. I was extremely disappointed by this change, because as previously stated ‘young offenders’ have many things seemingly stacked against them which is why understanding what helps them positively could be of great benefit and not being able to pursue this avenue was difficult to accept. I was aware, however, that this change was essential if I was to complete my research within the allocated time-frame.

The first challenge was to decide which population to focus on. As much research in the literature is conducted with school children it was decided to choose this as the population of interest. The second reason for this is that school children are an easier population to access, which may be one reason why much of the previous research focuses on them. Moreover, this type of research could expand our knowledge into the area and comparison between this study and previous research would be simpler to make using the same population. In addition, I noted during the literature review that there had been no research into hope in the UK, or any studies that addressed the impact of hope and future values in a school aged population. Hence, although the population of study had changed my desire was still to look at the impact of hope and future values on young people’s adjustment. These are important
variables in a school children’s lives and can impact on their ability to navigate their adolescent years (Finlay et al., 2014). As someone who attended numerous schools and felt unable to contemplate my future during that time, which led me to leaving school with only two low grade GCSEs, I am acutely aware of how important it is to have a sense of hope and values to work towards in one’s future.

As with much of the previous literature it was decided to explore the impact of hope and future values on mental health and well-being as at least 20% of children and adolescents will experience mental health difficulties and the number is ever increasing (Bor, Dean, Najman, & Hayatbakhsh, 2014). In addition, with the rise of social media especially amongst young people, and the link between social comparison and psychological well-being (Lee, 2014), gaining an insight into how young people socially compare themselves and the impact this has on their sense of hope and well-being seemed to be of particular relevance to the research.

**Data Collection**

One area which needs to be considered carefully with research based in school is informed consent and data collection. Research in school settings is characterised by the involvement of multiple stakeholders including the researcher, parents and children, as well as the head teachers, teachers and the children’s peer group (Felzmann, 2009). The involvement of this complex array of individuals has implications on many levels including in relation to the issue of informed consent.

In terms of consent there are many factors which may play a role. One area intrinsically linked to the school setting is that children in schools are generally approached within the classroom, so the consent is given and the participation occurs in this group context. Research has demonstrated that the presence of others can influence the decision-making process and students could feel uncomfortable with
taking part but feel pressure to participate with their peers (Felzmann, 2009). Furthermore, students can assume that the research activities are part of their ordinary educational activities and that participation is expected in the same way as participation in other school activities is, hence participation may not be, seen as, voluntary (Denscombe & Aubrook, 1992). They may doubt that although they are told participation is ‘voluntary’ it may not necessarily seem 'completely voluntary'.

In published papers, reports of pupils refusing to participate are relatively rare and when they do report this there is no further information given as to why. Out of all the schools I collected data in, only three pupils openly expressed to me that they did not wish to consent, and double checked with me if they really could refuse to take part. I reassured them they could refuse; however, they were made to sit in the room whilst the others completed the forms. The impact of the decision in hindsight needs to be explored as although on the one hand they could exercise their rights to not consent, on the other by doing so they not only stood out from the rest of the group but also in the eyes of the teachers which may or may not have an impact later.

I had not thought about this prior to conducting the research but the issue of power and consent need to be considered more carefully in school research and how consent is sought should therefore be examined in detail before data collection occurs. The main ways that young people expressed their desire not to take part was to select ‘no’ on the consent form, or by not filling out the form completely. Perhaps they did not feel they could say no or put no on the consent form, however by not completing the questionnaires they exercised their right to not participate. This shows that despite the fact they potentially felt coerced or that they had little choice in participating they found their own way to resist (Wade, 1997). This is another concern about the consent
process and the potential for conflicts between what a student wishes to do and what they feel they can.

**Final Reflections**

Having given thought to the issues of power, consent and the ability to research within populations that are deemed difficult, I have been left with a few thoughts both for research and clinical practice. It is important that research within young offenders and clinical population continues, but how the research is approached must be given careful consideration. If some of the themes above are not addressed then these populations will be continued to be called ‘hard to reach’ which is a disservice to them and continues to propagate the inequalities that they experience every day. Perhaps when setting up future research it would be beneficial to have them involved from the start and seeing what is important for them to be understood about their situations.

Secondly, the idea of consent and how power can affect this both for ‘young offenders’ and school children has highlighted what an important area this is to consider both in research and clinical practice. A lot of talk is given to consent but in real life situations perhaps more consideration needs to be given to how much the context and situation a person finds themselves in can impact on free will and their ability to consent or not to treatment and or research. I believe that highlighting this issue especially in research of ‘young offenders’ and school children is a start but there is a long way to go before it is commonly spoken about and addressed.
References


https://doi.org/10.1080/13676260903173496

https://doi.org/10.1023/A:1026154215299

Appendices

Appendix 1: Search Terms and Method

**Web of Science** - Searched 01/02/2017
1. anxiet* OR depress* OR self-injurious or self harm or attempted suicide or suicidal ideation
2. delinquent* or “antisocial behavi*r” or “externa?ing behavi*r” or “conduct disorder”
3. #2 OR #1
4. hope
5. child* or teen* or adolescen*
6. #5 AND #4 AND #3

**PsychInfo and Medline Searches** - Searched on 01/02/2017
1. delinquen*.mp.
2. “antisocial behavi*r”.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
3. “externa?ing behavi*r”.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
4. exp Conduct Disorder/
5. “conduct disorder”.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
6. 1 or 2 or 3 or 4 or 5
7. exp ANXIETY/
8. exp Anxiety Disorders/
9. anxiet*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
10. exp Major Depression/
11. depress*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
12. (“self injurious behavi*r” or “self inflicted wounds”).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
13. “self harm”.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
14. (attempted suicide or suicidal ideation).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
15. 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14
16. exp HOPE/
17. hope.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
18. 16 or 17
19. (adolescen* or teen* or child*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures]
20. 6 or 15
21. 18 and 19 and 20
Appendix 2: Newcastle-Ottawa Scale adapted for cross-sectional studies

Selection: (Maximum 5 stars)
1. Representativeness of the sample:
   a) Truly representative of the average in the target population. * (all subjects or random sampling)
   b) Somewhat representative of the average in the target population. * (non-random sampling)
   c) Selected group of users.
   d) No description of the sampling strategy.
2. Sample size:
   a) Justified and satisfactory. *
   b) Not justified.
3. Non-respondents:
   a) Comparability between respondents and non-respondents characteristics is established, and the response rate is satisfactory. *
   b) The response rate is unsatisfactory, or the comparability between respondents and non-respondents is unsatisfactory.
   c) No description of the response rate or the characteristics of the responders and the non-responders.
4. Ascertainment of the exposure (risk factor):
   a) Validated measurement tool. **
   b) Non-validated measurement tool, but the tool is available or described.*
   c) No description of the measurement tool.

Comparability: (Maximum 2 stars)
1. The subjects in different outcome groups are comparable, based on the study design or analysis. Confounding factors are controlled.
   a) The study controls for the most important factor (select one). *
   b) The study control for any additional factor. *

Outcome: (Maximum 3 stars)
1. Assessment of the outcome:
   a) No Independent blind assessment. **
   b) Record linkage. **
   c) Self report. *
   d) description.
2. Statistical test:
   a) The statistical test used to analyze the data is clearly described and appropriate, and the measurement of the association is presented, including confidence intervals and the probability level (p value). *
   b) The statistical test is not appropriate, not described or incomplete.
18th October 2016

Dr Stephen Butler  Research Department of Clinical, Educational and Health Psychology UCL

Dear Dr Butler

Notification of Ethical Approval  Re: Ethics Application 9/058101: Future values, hope and anti-social beliefs and attitudes in relation to the risk of re-offending

I am pleased to confirm in my capacity as Chair of the UCL Research Ethics Committee (REC) that your study has been ethically approved by the REC until 18th October 2017.

Approval is subject to the following conditions.

1. You must seek Chair’s approval for proposed amendments (to include extensions to the duration of the project) to the research for which this approval has been given. Ethical approval is specific to this project and must not be treated as applicable to research of a similar nature. Each research project is reviewed separately and if there are significant changes to the research protocol you should seek confirmation of continued ethical approval by completing the ‘Amendment Approval Request Form’: http://ethics.grad.ucl.ac.uk/responsibilities.php

2. It is your responsibility to report to the Committee any unanticipated problems or adverse events involving risks to participants or others. The Ethics Committee should be notified of all serious adverse events via the Ethics Committee Administrator (ethics@ucl.ac.uk) immediately the incident occurs. Where the adverse incident is unexpected and serious, the Chair or Vice-Chair will decide whether the study should be terminated pending the opinion of an independent expert. The adverse event will be considered at the next Committee meeting and a decision will be made on the need to change the information leaflet and/or study protocol.
3. For non-serious adverse events the Chair or Vice-Chair of the Ethics Committee should again be notified via the Ethics Committee Administrator (ethics@ucl.ac.uk) within ten days of an adverse incident occurring and provide a full written report that should include any amendments to the participant information sheet and study protocol. The Chair or Vice-Chair will confirm that the incident is non-serious and report to the Committee at the next meeting. The final view of the Committee will be communicated to you.

Yours sincerely

Professor John Foreman  Chair, UCL Research Ethics Committee

Cc: Samuel Parker

Academic Services, 1-19 Torrington Place (9th Floor), University College London  Tel: +44 (0)20 3108 8216  Email: ethics@ucl.ac.uk

http://ethics.grad.ucl.ac.uk/
Amendment Approval Request Form

<table>
<thead>
<tr>
<th></th>
<th>Project ID Number:</th>
<th>Name and Address of Principal Investigator:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9581/001</td>
<td>Dr Stephen Butler Research Department of Clinical, Educational and Health Psychology UCL</td>
</tr>
</tbody>
</table>

2 Project Title:
Future values, hope and anti-social beliefs and attitudes in relation to the risk of re-offending

Project title will change to - The impact of hope, future values and social comparison on the mental health and well-being of adolescents

3 Type of Amendment(s) (tick as appropriate)
- Research procedure/protocol (including research instruments) ☑
- Participant group ☑
- Sponsorship/collaborators ☐
- Extension to approval needed (extensions are given for one year) ☐
- Information Sheets ☑
- Consent form/s ☑
- Other recruitment documents ☐
- Principal researcher/medical supervisor* ☐
- Other ☐

*Additions to the research team other than the principal researcher, student supervisor and medical supervisor do not need to be submitted as amendments but a complete list should be available upon request.

4 Justification (give the reasons why the amendment/s are needed)
Due to the complex nature of recruitment within the youth justice system, it has proved near impossible to gain access to young offender teams. Out of the teams I have managed to gain access too, I have only met 1 young person over 4 months and he did not wish to participate in the study. Therefore, there is a need to amend the study to be able to complete my thesis. I now wish to look at a community sample, of students in schools and change some of measure which will be used to reflect the change in population and study question.

5 Details of Amendments (provide full details of each amendment requested, state where the changes have been made and attach all amended and new documentation)
Firstly, the participants will no longer be young offenders rather young people aged 11-17 collected from community samples via London inner city secondary schools.

Although the study will continue to look at the impact of hope and future orientation on youth adjustment, in line with the changes to a normative rather than a clinical sample, it will no longer use the risk of re-offending semi-structured interview or anti-social attitudes of beliefs scale, which focus on youth offending. The study will instead evaluate the interaction between hope, future aspirations and social comparison in a normative sample in relation to their mental health adjustment.
Thus, we will now collect data on how the young people socially rank and compare themselves to others, via the social comparison scale, and use the youth self-report scale to provide a broad measure of mental health adjustment. The Children’s Hope Scale and Future Orientation Scale will continue to be used.

1. We hypothesize that low levels of hope and poor future orientation, in relation to adolescent’s views of themselves as having elevated social status, will be associated with higher levels of externalizing (antisocial behaviour) problems.

2. We hypothesize that low levels of hope and poor future orientation, in relation to adolescents view of themselves as having diminished social status, will be associated with higher levels of internalizing (emotional) problems.

**Ethical Considerations** (insert details of any ethical issues raised by the proposed amendment/s)

The study will collect data from community samples within schools. It will use questionnaires to collect the data. The main issues will be gaining consent from parents of children under the age of 16. Children over the age of 16 can consent to do the study of their own volition. Issue of consent for children under the age of 16, will be covered by each school taking part in the study. They will inform parents of the study, by writing to them and sending them an information sheet and opt out form. The study will operate an opt out clause, which means parental consent will be assumed unless parents indicate they do not wish their child to take part.

Following this all children will then have to decide if they wish to take part and will be given their own information and consent forms.

**Other Information** (provide any other information which you believe should be taken into account during ethical review of the proposed changes)

**Declaration** (to be signed by the Principal Researcher)

- I confirm that the information in this form is accurate to the best of my knowledge and I take full responsibility for it.
- I consider that it would be reasonable for the proposed amendments to be implemented.
- For student projects I confirm that my supervisor has approved my proposed modifications.

Signature: Stephen Butler
Date: 14/03/2017

FOR OFFICE USE ONLY:

Amendments to the proposed protocol have been approved by the Research Ethics Committee.

Signature of the REC Chair: [signature]
Date: 27/5/2017
Appendix 4: Information Sheet for Parent or Carers

The impact of Hope, Future Value and social comparison on the mental health and well-being of adolescents

**What this information sheet tells you**
This information sheet tells you about a study we are doing which is interested in examining the links between young people’s hope and future orientations and their well-being and behaviours. This information sheet explains why we would like your help and tells you what will happen if you and your child agree to take part in the study.
This is an early study which aims to help inform us how to develop different ways to help young people to a more positive way of being and enable them to have a brighter future.

**Who can take part?**
Any young person between the ages of 11-17.

**What happen if I agree for my child to take part?**
If you agree to let your child take part, you do not have to do anything further and it is up to them if they wish to take part. If you do not wish them to be part of the study, then please return this form to the school. This will let us know you do not give your consent and wish to opt them out of the study.

You and your child are completely free to decide whether you want to take part in the study and it will not affect you or them in any way.

**What are the questionnaires we would like your child to fill in about?**
The questionnaires that we would like your child to fill in should not take longer than 15-20 minutes to complete. The questionnaires will be looking at the following concepts and areas
- How your child sees their future.
- How hopeful they are.
- How they see themselves in relation to their peers
- How they perceive their emotional well-being
- A variety of demographic data.

**What happens to the information your child give in the questionnaire?**
The information that is given during the study is completely confidential and will not be shown to anyone else. Your child will not be identifiable from the data given or when the study is written up.

**Consent or agreeing to take part in the study**
- You do not have to agree to your child taking part in the study if you do not wish to. As said earlier, you are completely free to decide whether they part in the study.
- If you DO NOT agree for them to take part, it will not affect you or them in any way. Please send the opt-out form in to school, so we are aware you do not wish for them to take part.
• If you DO agree to take part, you can change your mind and withdraw your consent at any time. Nothing will happen to your child as the study is separate from what is required from them at school.

Confidentiality
You should know the records of the questionnaires and will kept secure and will not be shown to anyone without you and your child’s consent and signed agreement. The questionnaires will not have identifiable information on and will be destroyed once they are no longer required as part of the study.

Reporting of the findings of the study
You should know that a report will be written about the results of the study. In the report, the results will be presented in such a way that no one can find out that it is your child that took part. In other words, we guarantee that information about them will be held in the strictest confidence and because we talk about general findings not individuals. We do this mainly by using percentages. For example, we might say that 90% of young people in the study had average levels of hope.

Conclusion
There are no risks associated with taking part in this study and what we learn in this study may be used to help other young people in the future.

Your questions and concerns
Samuel Parker, Trainee Clinical Psychologist will be available if you have any questions or concerns. You can contact them at:

Research Department of Clinical, Educational and Health Psychology,
1-19 Torrington Place,
London, WC1E 6BT
Email: samuel-eliyahu.parker.14@ucl.ac.uk
Email: stephen.butler@ucl.ac.uk
Thank you for taking the time to read this information sheet and considering taking part in this research.

Please sign below and send in this form if you DO not wish your child to take part in the research.

Name: .............................................................................................................

Signature: .........................................................................................................

Date: ..............................................................................................................
Appendix 5: Participants Information Sheet

The impact of Hope, Future Value and social comparison on the mental health and well-being of adolescents

What this information sheet tells you
This is a study where we are interested in how your outlook in life may affect how you feel. Specifically, it is interested in how young people’s feelings of hope and plans for their future, influence how they feel about themselves.

This information sheet tells you about the study and all you need to know about participating in it.

Who can take part?
Any young person between the ages of 11-17 can take part.

What happen if I agree to take part?
You are completely free to decide whether you want to take part in the study. If you agree you will be asked to sign some forms that show you have agreed to take part. You will then fill in some short questionnaires.

What does signing the consent form mean?
The form shows you agree to take part in the study, however you are free to withdraw at any time now or in the future.

What are the questionnaires about?
The questionnaire should not take longer than 30 minutes in total to complete and you will receive these after you have signed the forms agreeing to take part in the study. The questions will explore areas such as:

- How you see your future and how much hope you have
- How you see yourself in relation to your peers
- Demographic details about yourself such as age, gender, ethnicity and the type of school you may attend.

If you have any difficulties reading or understanding any of the questions, we will be pleased to help you.

What happens to the information I give in the questionnaire?
The information you give is private and will not be shown to anyone else.

Consent or agreeing to take part in the study
- You do not have to agree to take part if you do not want to. As said earlier, you are completely free to decide whether you want to take part in the study.
- If you DO NOT agree to take part, it will not affect you in any way or impact on your life.
- If you DO agree to take part, you can change your mind and stop at any time. Withdrawing from the study at any time you wish, is your right and will not affect you in any way.
Confidentiality
You should know that everything you tell us is in private. Records of the questionnaires will be locked up and will not be shown to anyone without your signed agreement.

Reporting of the findings of the study
You should know that a report will be written about the results of the study. In the report, the results will be presented in such a way that no one can find out that it is you that took part. In other words, we guarantee that information about you will be secret and private because we talk about general findings not individuals. We do this mainly by using percentages. For example, we might say that 60% of young people in the study had average levels of hope.

Conclusion
There are no risks associated with taking part in this study and what we learn in this study may be used to help inform our ideas of how young people think.

Your questions and concerns
Samuel Parker, Trainee Clinical Psychologist will be available if you have any questions or concerns. You can contact them at:

Research Department of Clinical, Educational and Health Psychology,
1-19 Torrington Place,
London, WC1E 6BT
Email: samuel-eliyahu.parker.14@ucl.ac.uk
Email: stephen.butler@ucl.ac.uk

Thank you for taking the time to read this information sheet and considering taking part in this research.
Appendix 6: Participant Consent Form

The impact of Hope, Future Value and social comparison on the mental health and well-being of adolescents

Consent Form Young Person

Researcher: Samuel Parker – Trainee Clinical Psychologist
Academic Supervisor: Stephen Butler – Senior Lecturer

Please complete the following:

Delete as necessary

1. I have read the information that describes the study.
   Yes/No

2. I have received sufficient information about this study.
   Yes/No

3. I understand I do not have to take part.
   Yes/No

4. I understand I am free to withdraw at any time without giving any reason.
   Yes/No

5. I understand that my answers will be recorded and kept as a record whilst the study is being conducted.
   Yes/No

6. Do you agree to take part?
   Yes/No

Signed: ...........................................................................................................

Date: ............................................

Name in Block Letters: .................................................................
Appendix 7: Questionnaire pack

UCL Research Study

Participation in this research is entirely voluntary. However, we hope that you taking part in this research will benefit children in the future and help us to understand what is important for them and their lives.

If you do wish to participate, please make sure you have signed the consent form before starting.

Please answer all parts of the questionnaire and each item carefully. If you have any questions or do not understand a particular item, please put your hand up and someone will come and assist you.

No one will be identifiable from the questionnaires. It is completely anonymous. Please do not put any information on this form that may be able to identify you:

Demographic Information

Participant Number: 

Age: 

Gender (please circle): Male Female

Ethnicity: 

What type of school do you attend? (e.g., private, state, grammar, academy)

...........................................................................................................................................
Questions About Your Goals

The six sentences below describe how young people think about themselves and how they do things in general. For each sentence, please think about how you are in most situations and place a check inside the box that describes YOU the best.

<table>
<thead>
<tr>
<th></th>
<th>None of the time</th>
<th>A little of the time</th>
<th>Some of the time</th>
<th>A lot of the time</th>
<th>Most of the time</th>
<th>All of the time</th>
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<tbody>
<tr>
<td>I think I am doing pretty well</td>
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<td>I can think of many ways to get the things in life that are most important to me.</td>
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<td>I am doing just as well as other kids my age.</td>
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<td>When I have a problem, I can come up with lots of ways to solve it.</td>
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<tr>
<td>I think the things I have done in the past will help me in the future</td>
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</tr>
<tr>
<td>Even when others want to quit, I know that I can find ways to solve the problem.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Future Values

Please answer every question by putting a check in one of the boxes. There are no right or wrong answers.

“How much do you think the following will matter to you when you are an adult?”

<table>
<thead>
<tr>
<th></th>
<th>Doesn’t matter</th>
<th>Matters somewhat</th>
<th>Matters very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting married</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Having children of my own</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Having a full-time job</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taking responsibility for myself</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being able to decide what I want</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being able to vote</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taking an active part in politics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being involved in the local community</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Having more fun</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being able to go to nightclubs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being legally able to drink</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watching X-rated films</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Social Comparison Scale

Please circle a number at a point which best describes the way in which you see yourself in comparison to others.

For example:

<table>
<thead>
<tr>
<th>Short</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Tall</th>
</tr>
</thead>
</table>

If you put a mark at 1 this means you see yourself as the shortest in comparison to others.
If you put a mark at 3 this means you see yourself as shorter in comparison to others.
If you put a mark at 5 (middle) you see yourself as about average in comparison to others.
If you put a mark at 7 this means you see yourself somewhat taller in comparison to others.
If you put a mark at 10 this means you see yourself as the tallest in comparison to others.

If you understand the above instructions please proceed. Circle one number on each line according to how you see yourself in relationship to others.

**In relationship to others I feel:**

<table>
<thead>
<tr>
<th>Inferior/Less Important</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Superior/more important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incompetent/Less able</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>More competent/more able</td>
</tr>
<tr>
<td>Not liked</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>More liked</td>
</tr>
<tr>
<td>Left out</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>Accepted</td>
</tr>
<tr>
<td>Different</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>Same</td>
</tr>
<tr>
<td>Less talented</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>More talented</td>
</tr>
<tr>
<td>Weaker</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>Stronger</td>
</tr>
<tr>
<td>Less confident</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>More confident</td>
</tr>
<tr>
<td>Less desirable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>More desirable</td>
</tr>
<tr>
<td>Less attractive</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>More attractive</td>
</tr>
<tr>
<td>An outsider/not part of the group</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>An insider/an important part of the group</td>
</tr>
</tbody>
</table>
Youth Self Report

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Many thanks for filling out the questionnaire. Please check that you have answered every question as it is very important all are filled out.

If you have any questions about this pack or any items you did not understand please put your hand up and your questions will be answered.