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**Systematic Review of Adolescent Conceptions of Success: Implications for Wellbeing
and Positive Education**

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Abstract

Identifying different conceptions of success and how these relate to wellbeing is an important area of research. These insights would be especially beneficial for young people who can be guided through school education to reflect on core values, life goals, and indices of success to promote aspirations that will be conducive to wellbeing. Through a systematic review of the empirical and grey literature we identify and review 17 studies investigating secondary-school students (12-18 years) success conceptions and their association with various components of wellbeing. Results indicate that this area of research has received scant attention in the literature. Nevertheless, there is preliminary evidence to suggest that adolescents value intrinsic success such as self-actualisation, personal satisfaction, and connection and that particular patterns of success beliefs associated with personal development and goal striving relate positively to wellbeing. This is consistent with fulfilling the basic psychological needs of autonomy, relatedness and competency that are associated with internalised motivation and enhanced wellbeing. These insights can guide the content of education programs focused on identifying life values and aspirations while concurrently fostering wellbeing. In addition, gender and developmental stage should be taken into consideration when developing success and wellbeing educational initiatives.

Keywords: success conceptions, wellbeing, adolescent, positive psychology, education.

Systematic Review of Adolescent Conceptions of Success: Implications for Wellbeing and Positive Education

There is no doubt that success feels good. Although there is some debate as to whether it precedes, or follows happiness, success is consistently associated with positive emotions and life satisfaction (Lyubomirsky, King, & Diener, 2005). Conversely, striving to achieve desirable outcomes can also lead to anxiety or dissatisfaction as individuals contend with high, unrealistic, or unhealthy expectations, stressful situations, and the possibilities of failure (Walkerdine, Lucey, & Melody, 2001). Thus, the concept of success forms an important part of the discourse on wellbeing— the latter focusing on the constituents of psychological health and includes factors such as positive emotions, relationships, and accomplishment (Seligman, 2011). This is particularly pertinent within secondary-school settings where students are under constant pressure to succeed during a period of rapid development and turbulence which characterise the adolescent years (Kessler et al., 2007).

The purpose of this paper is to systematically review existing studies of adolescent conceptions of success and wellbeing to: a) gain insights into how adolescents define success; b) understand the role of gender in success conceptions; and, c) determine if there are perspectives of success that are more highly associated with wellbeing. These findings could inform school staff seeking to deliver wellbeing programs for adolescent students that address meaning and values through the consideration and identification of success indices.

Success is a multidimensional construct which can be perceived in different ways (Nagaoka et al., 2015) ranging from more objective examples of success, such as high grades or winning on the sports field, to more subjective examples of success involving self-development or meeting goals that are personally meaningful (Osei-Tutu et al., 2018). See Appendix A for definitions of key terms used throughout this review.

The importance that adolescents attach to these varied markers of success will be shaped by underlying cultural and personal values (Benson, McIntosh, Salazar, & Vaziri, 2020; Katz, 1964; Nagaoka et al., 2015). Values are guiding life principles, inherently linked with one's personal identity, that reflect desirable, broad goals, and influence attitudes, beliefs, and behaviour across situations (Sagiv, Roccas, Cieciuch, & Schwartz, 2017; Schwartz & Bardi, 2001). Success beliefs therefore, provide insights into peoples' value systems, including their motivational processes and identity formation (Chusmir & Parker, 1992; Katz, 1964). In addition, personal success criteria provide a measure of peoples' aspirational frame of reference which will influence the specific life goals that they decide to pursue (Katz, 1964; Sichling & Karamelic-Muratovic, 2020).

These personal constructions of success are rarely examined in the success and wellbeing literature. However, it is well established that certain values and goals may be more conducive to psychological health and wellbeing than others. Consistent with Goal Contents Theory (Ryan & Deci, 2017) attributing importance to extrinsically oriented life goals or materialistic values, which reflect a desire for wealth, image or fame, is associated with increased anxiety and depression, and diminished wellbeing such as lower levels of self-actualisation and vitality. In contrast, prioritising goals that are intrinsically oriented toward personal growth, relationships, and community contributions relate positively to wellbeing (increased self-actualisation and vitality, and decreased depression and physical symptoms). Although females show a higher preference for intrinsic orientations than males, these differential wellbeing effects have been found to be consistent across gender, culture and age, and occur for both desired and attained outcomes (Kasser & Ryan, 1993; Lekes, 2011; Lekes, Gingras, Philippe, Koestner, & Fang, 2010; Niemiec, Ryan, & Deci, 2009; Ryan & Deci, 2017).

Intrinsic pursuits are believed to enhance wellbeing because they are inherently satisfying and enjoyable, and fulfil important psychological needs related to competence (feelings of mastery and effectiveness), autonomy (perceptions of having self-direction and control), and relatedness (meaningful social connections). They are also more easily attainable because they are volitional and within an individual's control (Kasser & Ryan, 1996; Ryan & Deci, 2017). In contrast, extrinsic goal-orientations are more likely to thwart psychological need satisfaction, particularly if they are experienced as controlled and non-volitional (Ryan & Deci, 2017).

Self Determination Theory (SDT) proposes that there are four types of extrinsic motivations that influence behaviour, with each reflecting varying levels of self-regulation and autonomy. *External regulation* refers to behaviour that is motivated by outside forces such as external rewards or punishment whereas *introjected regulation* is driven by a need to foster self-worth or to avoid guilt, anxiety, or shame (Ryan & Deci, 2020). Both of these are considered controlled forms of motivation and since they undermine autonomy provide a more nuanced explanation for the negative wellbeing associations with materialism and extrinsic goal-orientations. From a success perspective these more coercive orientations might be exemplified for instance, by those who conceive success as academic excellence, through a desire to achieve a certain grade or to please others.

Although intrinsic orientations represent the most autonomous form of motivation, extrinsic pursuits can also be autonomously enacted (Ryan & Deci, 2017). *Identified regulation* occurs when individuals willingly engage in and value an activity for the benefits it procures even when it is not experienced as interesting or enjoyable. At the highest end of the autonomous extrinsic motivation continuum is *integrated regulation* where extrinsic pursuits are both personally valued and align with core beliefs and interests. In these circumstances academic success-oriented individuals might pursue high grades in

uninteresting subjects because it would enable them to enter a worthwhile higher education course or profession or because they derive personal satisfaction from doing their best.

Each of these four extrinsic subtypes reflects consecutively higher degrees of *internalisation*, the process by which individuals assimilate and integrate socially influenced extrinsic motivations to be congruent with their core values and needs. Higher levels of internalised behavioural regulation are associated with greater levels of autonomy and self-regulation, and enhanced psychological health and wellbeing (Ryan & Deci, 2017, 2020). Thus, extrinsic goal-orientations may actually support basic needs and wellbeing depending upon the underlying motivation and degree of internalisation. This means that different psychological effects might be experienced when individuals equate success, for example, with wealth because it leads to power, status or the acquisition of luxury possessions compared with viewing it as a means of enabling philanthropic efforts or the ability to provide for significant others such as financing the education of children.

Although success beliefs, in and of themselves, do not represent the same level of intent or commitment to action implied by holding and pursuing specific goals, they do reflect individuals' value systems and will influence life goals. As such, qualitatively (intrinsic versus extrinsic) and motivationally (autonomous versus controlling) different perceptions of success may also show similar wellbeing associations. Understanding this relationship could benefit educational environments seeking to support success and wellbeing.

Success Beliefs in Educational Settings

Success is a pervasive construct, constantly sought and endorsed individually and collectively. Educational settings in particular, are highly focussed on achievement often promoting success through extrinsic rewards (Ryan & Deci, 2020). A strong focus on academic performance outcomes such as grades and test results creates an environment that is controlling, potentially contributing to a general decline in intrinsic motivation that occurs

during adolescence as extrinsic motivations become more prevalent due to greater external demands and social pressures (Gnambs & Hanfstingl, 2016; Ryan & Deci, 2017, 2020). In addition, educational success parameters, defined and conceptualised by school staff, policy-makers and significant others, may not align with how success is understood and sought by young people. Failure to acknowledge, understand or be sensitive to students' perspectives is also considered to be autonomy inhibitive negatively impacting wellbeing (Ryan & Deci, 2020). Thus, understanding adolescents' subjective success perceptions and developing autonomy supportive learning environments would enable educators to be more responsive to students perspectives and to tailor their success-based language in more meaningful, relevant, and psychologically healthy ways.

The focus on extrinsic outcomes within educational settings is unlikely to substantially change despite the recognition that these contingent incentives may not always provide the most optimal forms of motivation or be conducive to wellbeing (Ryan & Deci, 2019, 2020). Fortunately, there is an increasing emphasis on Positive Education within learning environments to promote flourishing, happiness, and psychological health (Chodkiewicz & Boyle, 2017). Positive Education integrates best practice in education and positive psychology to create an effective learning environment for promoting and developing wellbeing knowledge and skills in students, particularly in areas of students' strengths and interests (Huppert, 2009; Slemp et al., 2017). It can promote wellbeing and the psychological needs of relatedness, competency, and autonomy (Vella-Brodrick, Chin & Rickard, 2019) via a wide range of interventions delivered both implicitly and explicitly through a whole of school approach (Norrish, Williams, O'Connor, & Robinson, 2013). For example, high quality relationships and pro-social behaviour can be developed by counting acts of kindness or expressing gratitude as well as by building social and emotional skills. Competence and personal growth are fostered by identifying and using character strengths in

new ways, engaging in activities that trigger flow states or imagining your best possible self. Autonomy is heightened by providing a range of wellbeing options that promote authenticity and personal meaning that individuals can choose to engage in based on their particular needs, strengths, values, or interests. This is especially important as students have reported that they would prefer to have more choices about their educational content and experiences and want to be more active learners, that is, they want more autonomy (Vella-Brodrick et al., (2019).

If schools can provide autonomy supportive environments, where they empower students to make choices about what and how they learn then this will reinforce students' attainment of the psychological needs and enhance wellbeing. This is where a discussion in these formative years about definitions and examples of success, authenticity and wellbeing - and how these factors all interconnect - can be helpful in clarifying values and shaping adolescent goal aspirations.

Success narratives are a non-threatening and inherently appealing way for young people to engage in discussions around success which could then encourage deeper reflection of personal values and goals. Exploring success beliefs as part of Positive Education programs would encourage students to connect with their underlying value systems and current or future goals and provide an avenue for guiding young people towards developing more autonomously motivated and self-regulated orientations that are imperative for psychological health.

Method

Literature Search and Inclusion Criteria

A number of different search strategies were employed to obtain the relevant articles. Scoping searches were initially conducted to identify appropriate search terms. As a consequence, some search-terms were excluded because they resulted in too many irrelevant

studies (e.g. belief, achievement, and engagement). For instance, incorporating belief* within the second search string tended to return results related to self-efficacy beliefs and success rather than to success beliefs per se. The final search stream involved a free-text search of terms that paired conceptions of success with age and wellbeing: (success* OR “good life”) AND (meaning* OR perception* OR concept* OR idea* OR defin* OR association*) AND (youth OR young people* OR adolescen* OR pupil* OR “secondary school student*” OR “secondary student*” OR “middle school student*” OR “high school student*” OR “senior school student”) AND (“life satisf*” OR well-being OR wellbeing OR “well being” OR flourish* OR happ*).

Literature searches were conducted across eight online databases: Academic Search Complete, Education Research Complete, ERIC, Family & Society Studies Worldwide PsycINFO, Proquest Central, Socindex, and SPORTDiscus. These were supplemented by: an ancestry search that checked reference lists of relevant articles, papers and reports; a descendancy search that followed citations of key papers; and, a hand search of key journals and grey literature to locate any papers that were not captured by the final search criteria. Eleven additional papers were subsequently identified.

Databases were searched up until 20 January, 2020 and no limitations were applied to these preliminary findings. These searches resulted in 2,981 potentially relevant papers after 847 duplicates were removed (Figure 1). A multiphase screening process was then conducted using Covidence, an online reference screening program. The first two authors determined eligibility for inclusion through an independent examination of abstracts and titles. This led to a rejection of 2,813 studies. This was followed by a full-text assessment of the remaining articles resulting in 17 reports that met the inclusion criteria as determined by all three authors.

[Insert Figure 1 here]

Studies were considered eligible for review if they examined personal definitions of success of adolescents (defined as secondary-school students, 12 -18 years) from the general population. There were no limits on publication date and all types of research articles including grey literature, were examined.

There were numerous papers that focussed on concepts that are closely related to or might indirectly reflect perceptions of success. These included values, ideals, goals, achievement motivation, the good life, and the American Dream. As they did not directly examine personal definitions of success these were deemed ineligible. For example, one body of literature that was reviewed, *The State of Our Nation's Youth*, is a series of 12 reports from the Horatio Alger Association. These span 19 years (1997– 2016) and systematically study the views and aspirations of American youth. From 1998 through to 2003 these annual reports consistently inquired about subjective definitions of success using the following question: *People today define success in lots of ways. For each of the following, please tell me how important the item is in your personal definition of success in life.* From 2012 this section of the report rephrased the question to: *Thinking about your educational, career, and life goals please rate how important each of the following is to you.* Consequently, the more recent reports were not included in this review. In addition, two reports could not be accessed (1997 and 2005) and those covering 2004 and 2008 did not provide details of success perceptions.

Papers were also excluded if they investigated; (1) discrete population groups (e.g. immigrants or delinquent youths), students facing adverse circumstances (e.g. serious illness), or young people from a clinical population; (2) the success or effectiveness of an educational program, intervention or therapy; and, (3) views on 'why' or 'how' people

achieve success (as opposed to ‘what’ is success). Non- English papers that could not be adequately translated through a web-based translation service were also excluded.

There was a notable body of research that was of Russian origin. Although only two of these papers was published with a full English translation, all of these references were included as they represented an important output in this area and adequate translations of the original text were available through an online translation service. In addition, three of these papers examined the association between subjective success conceptions and constructs related to wellbeing such as self-esteem and life meaning. These seemed worthy of attention as there were no English studies that quantitatively investigated notions of success and wellbeing in the general adolescent population.

Quality Appraisal

As both quantitative and qualitative papers were included in this review two different appraisal tools were employed to assess the methodological strengths and limitations of each study. The qualitative studies were analysed using the CASP qualitative checklist (Critical Appraisal Skills Programme, 2018). This checklist consists of 10 questions relating to the aims, methodology, findings, and value of the research. The quantitative studies were assessed using the Quality of Survey Studies in Psychology checklist (Q-SSP; Protogerou & Hagger, 2020), a 20-item checklist that evaluates survey quality across four domains: introduction, participants, data, and ethical review. For both of the appraisal tools each item was marked *yes* (met criteria), *no* (did not meet criteria), *not stated clearly* or *not applicable*. Summary scores were then generated representing the percentage of applicable items that met the criteria. Studies scoring 70% or above were considered to be of high quality. Two reviewers (authors 1 and 3) independently appraised each study. There was 92.25% percent agreement between the reviewers’ ratings. Any discrepancies were resolved through discussion and mutual consensus.

Results

In all, 17 papers met the inclusion criteria for this review. These consisted of 10 published journal papers, nine of which were subjected to a double-blind peer review while the review status of the remaining paper could not be ascertained (Karabanova & Bukhalenkova, 2016). The other papers were unpublished (one thesis) or sourced from the grey literature (six reports).

Ten studies investigated subjective success definitions through fixed-response surveys in which participants rated the extent of their agreement to each item (Table 1). Of these, six represented a series of comparative annual reports, *The State of Our Nation's Youth*, published by the Horatio Alger Association that track the development of American youth from 1998-2003. The remaining four quantitative studies were of Russian origin and employed the same success measure (Adolescent Perceptions of Success) across each investigation. In contrast, seven diverse studies explored success perceptions using various qualitative research techniques or unstructured response options such as interviews, focus groups, and open-ended questions (Table 2). Only two papers used a mixed-method design (Table 1).

The methodological quality of all of the qualitative studies was high (range: 70 – 100%) while the six quantitative reports were of moderate quality satisfactorily meeting around half of the assessment criteria (range: 50 – 61.11%). The Russian papers obtained the lowest quality ratings (range: 25 – 35%). Although the analysis of the reports revealed that the main areas of weakness related to lack of information about data analysis, study variables, and the validity of the survey measure we believe that the information extracted from these reports for this review is likely to be at low risk of bias for the following reasons: 1) This review incorporates data from only one table in each of these reports. The table depicts the percentage of participants who rated each success item as very important/important to their

definition of success and thus the data has not been subjected to subsequent statistical analysis; 2) The success items included in the survey reflect traditional and standard notions of success such as wealth, fame, relationships, career, and personal satisfaction which align with popular ideas of success and are largely congruent with the success themes revealed in the high-quality, peer-reviewed qualitative papers; 3) In addition, Adams et al. (2016) suggests that risk of bias depends upon the research question. Studies that seek to investigate the outcome of intervention or treatment are more likely to be at risk than those that have a descriptive purpose. As these surveys were reporting on teenagers opinions, thoughts, and aspirations and did not make recommendations, there seems little reason for the results to be misreported.

Table 1

Summary of Quantitative and Mixed Method Studies Investigating Subjective Success Perceptions and Wellbeing

Study, Publication Type and Country (% Quality Rating)	Sample Characteristics and Study Design	Success Measure ^a	Findings
Bukhalenkova & Karabanova (2018a) ^b Conference Paper Russia (35%)	<i>N</i> = 500 58.2% female Age range: 15-17yrs Mixed method design	Adolescent Perception of Success.	Success most strongly associated with attaining goals, personal growth, self-actualisation, overcoming obstacles, and positive emotions <i>Gender</i> : Females identified ‘personal growth and self-development’ and ‘overcoming obstacles’ as significantly more important than males.
		Participants also identified five successful people and explained the reason for each choice.	Most likely to identify significant others and famous figures in show business and politics as successful people Oriented towards successful people of their own gender. <i>Gender</i> : Males preferred to identify figures from politics, business and sports; females preferred to give examples from show business and significant others (family and friends).
Bukhalenkova & Karabanova (2018b) ^b Journal Article Russia (30%)	<i>N</i> = 500 58.2% female Age range: 15-17yrs	Adolescent Perception of Success. Subjective Perceptions of Success. Self-Esteem.	Overall, success most strongly connected with goal achievement Three models of adolescents’ success perceptions: • <i>Social recognition</i> (34.8%), placed value on achieving social status amongst their peers. Associated with higher levels of self-evaluated success and self-esteem. • <i>Fulfilment of external social requirements</i> (13.3%), linked success primarily with goal achievement or results and overcoming obstacles, rather than personal effort, meaning or happiness. Displayed lower levels of self-esteem and self-evaluated success.

Study, Publication Type and Country (% Quality Rating)	Sample Characteristics and Study Design	Success Measure ^a	Findings
			• <i>Self-development and self-actualisation</i> (51.9%), conceptualised success as self-development and self-actualisation. Associated with higher levels of self-esteem, self-evaluated success, general levels of psychological wellbeing and desire to seek or recognise success in friendships. <i>Gender:</i> Males most likely to be categorised within fulfilment of external social requirements model (58.5%); Females most likely to be categorised within self-development and self-actualisation model (62.8%).
Karabanova & Bukhalenkova (2016) ^b Journal Article Russia (25%)	<i>N</i> = 399 56.89% female Age range: 15-17yrs	Adolescent Perception of Success. Meaningful Life Orientations.	Overall, success most strongly connected with goal achievement. Three types of adolescent success perceptions: • <i>Social recognition and achievement</i> (35%), personal growth important but most focussed on significant others' assessments of their endeavours. • <i>Self-development and self-actualisation</i> (52%), focus on internal rather than external success criteria. Linked with best meaningful life outcomes; greater life satisfaction, goal-orientation, and confidence. • <i>Diffused awareness</i> (13%), success perceptions attributed equally across many characteristics indicating success understanding is unclear or lacks personal meaning. Linked with the poorest meaningful life outcomes; reluctance to set goals or plan for the future, low levels of satisfaction and confidence, and lacking meaning in life. <i>Gender:</i> Males more likely to have diffused notion of success (58.5%); females more likely to view success as self-development (62.8%).

Study, Publication Type and Country (% Quality Rating)	Sample Characteristics and Study Design	Success Measure ^a	Findings	
Bukhalenkova (2013) ^b Journal Article Russia (25%)	<i>N</i> = 94 62.77% female Age range: 15-17yrs Pilot study: Mixed method design	Adolescent Perception of Success. Meaning in life. Participants also identified five successful people and explained the reason for each choice.	Success most strongly connected with goal achievement; also understood as self-realisation, satisfaction with effort (job well done), and a feeling of well-deserved happiness. Popularity or fame were less important. Participants who indicated low levels of life meaning did not strive for success believing it to be difficult to obtain, outside of their control, and tenuous. Participants with high levels of life meaning, felt confident in their achievements, expected future success, and had a strong belief in their ability to achieve their goals. Most likely to identify male successful people (78%) who were significant others (family members, friends 22%) or well-known figures in show business (21.5%), the corporate sector (20.5%), and politics (16%).	
Hart (2003) Report: State of Our Nation’s Youth 2003- 2004 USA (61.11%)	<i>N</i> = 1,003 Age range: 13-19 years (98% 14-18 years)	Investigated definition of success in life.	Very important for success ^c : Feeling personally satisfied ^d 90% Having close family relationships 81% Having a close group of friends 69% Having an active spiritual life 50% Making a contribution to society 48% Making a lot of money 32% Being famous or respected 23% Being attractive and popular 8%	
Hart (2002) Report: State of Our Nation’s Youth 2002- 2003 USA	<i>N</i> = 1,003 Age range: 13-19 years (95% 14-18 years)	Investigated definition of success in life	Very important for success: Having close family relationships 78% Having a close group of friends 56% Making a contribution to society 51% Making a lot of money 44%	

Study, Publication Type and Country (% Quality Rating)	Sample Characteristics and Study Design	Success Measure ^a	Findings
(61.11%)			Having an active spiritual life 43% Being famous or respected 8% Being attractive and popular 9%
Peter D. Hart Research Associates (2001) Report: State of Our Nation's Youth 2001-2002 USA (61.11%)	<i>N</i> = 1,014 Age range: 13-19 years (93% 14-18 years)	Investigated definition of success in life	Very important for success: Having close family relationships 84% Having a close group of friends 60% Making a contribution to society 49% Having an active spiritual life 44% Making a lot of money 35% Being famous or respected 27% Being attractive and popular 8%
Park (2000) Report: State of Our Nation's Youth 2000-2001 USA (55.56%)	<i>N</i> = 1,327 Age range: 14-18 years	Investigated factors important to personal success.	Agree/strongly agree important for success: Work and career 99% Personal development and satisfaction 97% Friendships 95% Immediate family 92% Extended family 80% Make a contribution to society 77% Religious/spiritual activities 74% <i>Gender:</i> Females viewed personal development and satisfaction, extended family, making a contribution to society, and religious/spiritual activities as more important than males.
Park (1999) Report: State of Our Nation's Youth 1999-2000 USA (55.56%)	<i>N</i> = 1,327 Age range: 14-18 years	Investigated factors important to personal success	Agree/strongly agree important for success: Work and career 99% Personal development and satisfaction 97% Friendships 95% Immediate family 94% Extended family 79% Make a contribution to society 76% Religious/spiritual activities 68%

Study, Publication Type and Country (% Quality Rating)	Sample Characteristics and Study Design	Success Measure ^a	Findings
Park (1998) Report: State of Our Nation's Youth 1998- 1999 USA (50%)	<i>N</i> = 1,195 Age range: 14-18 years	Investigated factors important to personal success.	Agree/strongly agree important for success: Work and career 98% Personal development and satisfaction 97% Friendships 94% Immediate family 92% Make a contribution to society 76% Extended family 75% Religious/spiritual activities 68%

Note. ^aThe survey items and questionnaire details can be found in Appendix B. ^bSome detail and context may have been lost in translation. ^cPercentages indicate highest strength of agreement only (i.e. 'very important' to success) whereas previous years' results listed reflect average of the top two scale points (i.e. agree/strongly agree).

^dAdditional item added this year.

Table 2*Summary of Qualitative Studies Investigating Subjective Success Perceptions and Wellbeing*

Study and Publication Type (% Quality Rating)	Sample Characteristics and Study Design	Data Source	Findings
Trask-Kerr, Chin & Vella-Broderick (2019) Journal Article Australia (100%)	Positive Education group <i>n</i> = 146 Two comparison groups: Group A, <i>n</i> = 35 Group B, <i>n</i> = 24 Age range: 15-16yrs	Participants tasked with designing a research project about success and national prosperity. Guiding questions designed to elicit subjective views on success and prosperity, (e.g. <i>How do you define success [prosperity]</i>)?	All participants associated success with happiness, good health, achievement and goal accomplishment. Positive Education group more likely to define success in terms of relationships with significant others and within the community and less likely to reference money or wealth than those in comparison groups. <i>Wellbeing</i> : Success associated with feeling good or wellbeing. Around 20-25% of responses were coded within a 'positive emotions' category incorporating references to life satisfaction, joy pleasure, happiness, and a sense of purpose.
Wilhsson, Svedberg, Carlsson, Hogdin & Nygrin (2017) Journal Article Sweden (100%)	Focus Groups: <i>N</i> = 42 47.62% female Age range: 14-15yrs eight gender specific groups, one mixed gender group; two consecutive focus group sessions Workshops: <i>N</i> = 75 Age range: 15-16yrs	Grounded theory approach integrated data analysis with data collection. Focus group 1. <i>Tell me about your everyday life and how you manage it?</i> Focus group 2. Participants chose photos from their everyday life describing: <i>What makes me feel good and how I handle demands in my everyday life.</i> Workshops. Participants chose and collectively discussed one or more pictures depicting their everyday life, how they managed it and what made them feel	Core category identified: 'striving to be successful and succeed'. Felt pressure from significant others, school, and self to succeed in present and future. Success viewed as: • Being popular, having numerous friends and projecting a certain image that is, being fashionable (females) or physically fit (males). • Achieving status through wealth or socially recognised achievement. <i>Gender</i> : Females believed social success achieved through image (having right clothes or hairstyle) whereas males identified sporting talent or physical fitness as key to popularity; males more likely perceive

Study and Publication Type (% Quality Rating)	Sample Characteristics and Study Design	Data Source	Findings
	five groups; five consecutive workshops	good from a set of 100 pictures showing objects, events or feelings.	future success as being attained through sporting achievements. <i>Wellbeing</i> : Striving for success in current and future life perceived to cause stress, cognitive and somatic symptoms, and dissatisfaction with achievements. More problematic for females who had greater concerns about failure and attributed lack of success to personal rather than external factors.
Hoskins & Barker (2016) Journal article United Kingdom (80%)	Participants ($n = 32$) selected from a larger cohort taking part in a study comparing future aspirations of high performing students (A or A+ grade students) with those achieving across the spectrum of academic grades (grades A-E). Age range: 15-18 yrs.	Semi-structured paired interviews designed to invoke detailed descriptions of aspirations, and expectations for the future, (e.g. <i>What constitutes your future success?</i>).	Five success themes: • Personal and professional happiness, achieved through financial security and/or work success and satisfaction. • Personal satisfaction, mostly related to future employment, job satisfaction. • Making a difference, related to having a positive impact in work environment or wider community. • Status, associated with power, autonomy and upward social mobility. • Wealth. <i>Gender</i> : 'Making a difference' or 'status' gendered aspirations. Females more likely to be concerned with effecting positive change at work or in the community whilst males sought power and prestige.
Hershberg, DeSouza, Warren, Lerner & Lerner (2014) Journal Article USA (80%)	Participants ($n = 56$) selected from larger 4-H qualitative study. Longitudinal study followed participants at: Grade 6 (11.98yrs) Grade 9 (15.07yrs)	Two open-ended questions about thriving and doing well. One related to future success: <i>If you imagine yourself doing really well in all areas of your life, what would you be like? What sorts of things would you do?</i>	Doing really well most commonly aligned with connecting with others (friends and family) followed by contribution (defined as <i>effecting positive changes to self, others, and community</i>), career aspirations, being happy and successful, and making money. Connection, career aspirations, and being happy were endorsed by more participants in later adolescence

Study and Publication Type (% Quality Rating)	Sample Characteristics and Study Design	Data Source	Findings
	Grade 12 (18.31yrs)		whilst the importance of sports participation and academic competence declined. <i>Gender:</i> Males self-oriented; females self- and other-oriented.
Andrelchik & Schmitt (2014) Journal Article USA (70%)	High school students participating in ceramics art class (<i>n</i> = 11, seven female)	Interviews investigating perceptions of success in art, education and life, (e.g. <i>What does success mean to you? What is your definition of success? What does success in art, education and life mean to you?</i>),	Three success themes: • Goal achievement. • Feeling of accomplishment once goals achieved. • Overcoming challenges. Subjective measures of success may conflict with others' expectations or perceptions.
Joos (2003) PhD Dissertation USA (90%)	<i>N</i> = 70 68% female Age range: 14-18 yrs. Upper-middle class, high school students.	Interviews investigating what it means to be a success, (e.g. <i>What does 'be a success' mean to you? In what ways do you personally hope to be successful? Please describe someone (real or made up) who you consider to be an extremely successful individual.</i>)	Five success themes: • Self-realisation, defined as personal fulfilment and satisfaction, achieving goals, being happy with oneself. • Money, ranged from having enough to be financially secure (rather than 'wealthy') to not being important. • Philanthropy: making a difference, helping others. • Work and Career, job success and enjoyment. • Connecting with Family and Friends, good relationships with significant others and friends. Parents (collectively or individually) most often chosen to represent images of success (37.93%) followed by philanthropists and those dedicated to helping others (13.79%) <i>Gender:</i> Females identified both mothers and fathers (together or individually) as successful; males did not identify mothers (collectively or individually) at all.

Study and Publication Type (% Quality Rating)	Sample Characteristics and Study Design	Data Source	Findings
Fan (1997) Journal Article Australia (80%)	Two groups of female students. 1. Australian ($n = 65$) Age: 13.9 yrs. 2. Chinese immigrants living in Australia ($n = 113$) Age: 14.9 yrs. Purpose was to develop a measure of definitions of success.	Participants responded to five open-ended questions asking them to provide their current (as a student), and future (at 25 years of age) definitions of success, and those held by their parents, peers and teachers.	Five success categories identified: 1. Relationships (family, social, romantic) 2. Happiness and being yourself. 3. Goal achievement and achieving excellence. 4. Material possessions and career (e.g. money, a good job). 5. Being a good teacher and student behaviour (that is teach well, respected by students). Independently judged to correspond to theoretical definitions of success: • Communion success (1 and 5). • Self-actualisation (2). • Agentic success (3 and 4). No significant cross-cultural differences overall but success themes of happiness or self-actualisation moderated by ethnic identification and length of Australian residency.

Success Perceptions: Quantitative Studies

The quantitative studies consisted of two homogenous subsets investigating perceptions of success in Russian or American youth. Russian adolescents linked success most strongly with goal achievement followed by satisfaction (related to feeling proud of their performance or effort), personal growth, self-actualisation (realisation of their talents or skills), the ability to overcome obstacles (suggesting that success is the result of hard work and effort rather than luck), and well-deserved happiness or joy (Bukhalenkova, 2013; Bukhalenkova & Karabanova, 2018a, 2018b; Karabanova & Bukhalenkova, 2016). Status, popularity, and fame were less important. These studies did not include items that were specifically related to money, wealth, material possessions, or financial security.

The early State of our Nation's Youth reports show that in general, American teenagers view work and career (98%-99%), personal-development and fulfilment (97%), and close relationships with family and friends (92%-95%) as being most important to personal success (Park, 1998, 1999, 2000). Contributing to society was also valued by many of these young people (76%-77%; Park, 1998, 1999, 2000).

Contextualising adolescent success perceptions through fixed-choice responses, however, is largely dependent upon the survey items. From 2001, these reports amended the success statements, removing those associated with work or career and personal development and satisfaction. These were replaced with items that reflected more traditional notions of success such as wealth, fame, and, popularity. Interestingly, success was still defined by most participants in terms of personal relationships, in particular, family (78%-84%)¹. This generation of youth were also more focussed on making a contribution (48%-51%) than

¹ It should be noted that there was also a change in the rating scale with this amended measure of success. In addition the more recent data indicate the highest strength of agreement (that is, 'very important' to success whereas the previous years' results appear to reflect the average of the top two scale points ('agree' and 'strongly agree')). Thus, the lower percentages (from 2001) for items that remained consistent (e.g. personal relationships, contribution) are largely reflecting these differences in data reporting.

earning money (32%-44%), achieving fame (23%-28%), or being popular (8%-9%; Hart, 2002, 2003; Peter D. Hart Research Associates, 2001). The lower priority given to attaining wealth in this amended version seems to suggest that the importance placed on work and career in earlier reports was not solely related to earning money or material possessions. When personal satisfaction was again included in the response items in 2003, 90% of participants indicated that this was very important to their definition of success (Hart, 2003).

Success models and wellbeing.

The Russian studies proposed a number of theoretical models of subjective success perceptions that signify the Taxonomy of Motivation espoused by SDT (Ryan & Deci, 2020) where there is a continuum of “internalisation”. The taxonomy starts with external motivations such as receiving rewards and praise from others (*external regulation* and *introjection* respectively) to attributing more personalised value and meaning for goals and behaviours (*identification* and *integration*) to ultimately achieving ‘intrinsic motivation’ where goals and behaviours are adopted based on interest, enjoyment, and inherent satisfaction. The findings from this review about definitions of success span across this taxonomy and are presented below, in order of most frequent responses:

Self-development and self-actualisation. This reflected a preference to focus on internal rather than external success criteria. Adolescents that fell within this category were striving for personal growth, self-actualisation and satisfaction, feeling pride, joy and happiness as a result of their efforts and achievements. They were less concerned with others’ perceptions, external praise, and recognition. Around half of the participants in these studies held this view of success (Bukhalenkova & Karabanova, 2018b; Karabanova & Bukhalenkova, 2016).

Social recognition. This indicated a desire for popularity or status and socially recognised success. Teenagers who defined success in this way were also striving for self-

development and goal achievement but derived more satisfaction from the end result (personally and socially) rather than the process. Approximately one third of participants fit this model (Bukhalenkova & Karabanova, 2018b; Karabanova & Bukhalenkova, 2016).

Fulfilment of external social requirements. In this model success was associated with goal achievement as a means to an end. Youth that were placed in this category were less likely to derive any personal meaning, satisfaction, or happiness from their accomplishments. They also placed more value on luck relative to internally or emotionally oriented success definitions. A minority of participants (13%) defined success in this way (Bukhalenkova & Karabanova, 2018b).

Diffused awareness. This model was used to categorise participants (13%) for which there was no clear pattern of success perceptions. Instead there was a tendency to define success equally across many characteristics which suggests that these young individuals were yet to develop a clear understanding or personally meaningful view of success (Karabanova & Bukhalenkova, 2016).

These different types of success perceptions were associated with various aspects of wellbeing. Adolescents who conceptualised success as self-development and self-actualisation, and hence had more internalised motivation, displayed higher levels of self-esteem, self-evaluated success, life satisfaction, goal orientation, and desire to seek or recognise success in friendships (Bukhalenkova & Karabanova, 2018b; Karabanova & Bukhalenkova, 2016). Perceiving success as social recognition, popularity, and status was also linked with favourable self-belief and evaluation but less so with satisfaction and social wellbeing outcomes (Bukhalenkova & Karabanova, 2018b; Karabanova & Bukhalenkova, 2016). Consistent with Ryan and Deci's (2020) review, the poorest wellbeing outcomes were observed with those who linked success primarily with the fulfilment of external social requirements (focussing on goal achievement or results rather than personal effort, meaning

or happiness) or held a diffused awareness of this construct (Bukhalenkova & Karabanova, 2018b; Karabanova & Bukhalenkova, 2016). These types of success notions were associated with lower self-esteem, self-evaluated success, life satisfaction, meaning in life, and motivation to succeed (Bukhalenkova & Karabanova, 2018b; Karabanova & Bukhalenkova, 2016). Findings support the higher association with wellbeing for notions of success that are associated with greater internalisation (identification and integration) relative to those that are linked primarily with external motivations.

Age and Gender Patterns.

It was not possible to discern if there were any age or developmental patterns in success notions in these studies. All of the Russian investigations examined teenagers in mid- to late-adolescence (15-17 years). Although the State of our Nation's Youth studies reports covered a wider age range (mostly 14-18 years) these results were not differentiated by age.

There were, however, some gender differences in success perceptions that were observed. In the Russian subset personal growth, self-development and self-actualisation, and overcoming obstacles were more important success characteristics for females (Bukhalenkova & Karabanova, 2018a, 2018b; Karabanova & Bukhalenkova, 2016). In contrast, males were more likely to equate success with social recognition or present a diffused notion of this construct (Bukhalenkova & Karabanova, 2018a, 2018b; Karabanova & Bukhalenkova, 2016). Similarly, American female adolescents rated personal development and satisfaction, extended family, making a contribution to society, and being involved in religious activities more highly than males (Park, 2000). These findings suggest that females hold more personally meaningful and internalised perceptions of success.

Success Perceptions: Qualitative Studies

The unstructured response techniques employed in the qualitative studies provided the opportunity to explore teenagers' self-perceptions of success that were not limited by a pre-

determined set of options but were instead self-generated. Despite the diversity of participants and data collection methods, a common set of themes emerged across the studies. These related to self-actualisation, happiness, connection, money, career, and to a lesser extent contribution and status.

Self-actualisation was one of the main themes to emerge across these investigations. Five studies discussed success perceptions that emphasised personal growth, fulfilment, satisfaction, or finding their place in life (Andrelchik & Schmitt, 2014; Fan & Karnilowicz, 1997; Hoskins & Barker, 2017; Joos, 2003; Trask-Kerr et al., 2019). For some participants this was described as a process of self-discovery. Their priority was defining their dreams and aspirations and establishing personally meaningful goals which did not necessarily align with others' expectations or beliefs (Andrelchik & Schmitt, 2014; Joos, 2003).

Happiness was commonly associated with success in four of the seven studies reviewed. For some participants this positive state was seen to occur as a result of achieving success professionally, for example, performing well in their job or attaining financial security (Hoskins & Barker, 2017). For others, it meant being happy with themselves or satisfied with their achievements (Joos, 2003). Often, however, this term was not defined but linked with success in a more general sense (Hershberg, DeSouza, Warren, Lerner, & Lerner, 2014; Trask-Kerr et al., 2019).

Connection with family, friends, or within the wider community also featured prominently in these teenagers views of success (Fan & Karnilowicz, 1997; Hershberg et al., 2014; Joos, 2003; Trask-Kerr et al., 2019). A desire for strong personal connections with significant others, romantic relationships, and a happy family was often expressed by these young people and is consistent with the psychological need to affiliate with others (referred to as relatedness in SDT).

Money was also viewed as important to success. In some instances this was related to achieving wealth and the status associated with being rich (Hershberg et al., 2014; Trask-Kerr et al., 2019; Wilhsson, Svedberg, Carlsson, Hogdin, & Nygren, 2017). For many, however, it seemed to be more connected to earning enough to be financially secure or living comfortably (Hoskins & Barker, 2017; Joos, 2003; Trask-Kerr et al., 2019). Interestingly, one study reported that there was a distinct group of adolescents (22%) who emphasised that having a lot of money was not something to which they aspired (Joos, 2003). This may reflect a belief that placing too much importance on making money or personal gain might be at the expense of achieving happiness (Hoskins & Barker, 2017). It should also be noted, however, that many of the participants who were less concerned about money were from privileged or advantaged backgrounds and attended private schools (Hoskins & Barker, 2017; Joos, 2003; Trask-Kerr et al., 2019). Therefore, they may not have been as focussed on financial issues as those experiencing less economic security.

Career was frequently mentioned in personal definitions of success particularly with regards to job satisfaction and enjoyment (Fan & Karnilowicz, 1997; Hershberg et al., 2014; Hoskins & Barker, 2017; Joos, 2003). Whilst having a job was associated with providing a comfortable living or 'good life', for many the salary was less important than being successful and happy in their work (Hoskins & Barker, 2017; Joos, 2003). Thus, future employment related to success from both an economical and emotional perspective. The emphasis on career and job fulfilment as a marker of success may also be due to the socio-economic advantage of many of the participants and the modelling of their parents' values, many of whom will have highly successful and rewarding careers as opposed to having to hold a job, any job, to survive.

Contribution was envisioned as making a difference or philanthropic efforts (Hershberg et al., 2014; Joos, 2003). Although this was referenced less frequently in young

people's definition of success, it still emerged as a strong theme within three of the studies reviewed (Hershberg et al., 2014; Hoskins & Barker, 2017; Joos, 2003). For some teenagers success was measured through their ability to have a positive influence on others' lives, effect change, contribute to society, build a better world, or achieve something that would be meaningful to other people.

Status was also important to a small number of participants in two of the studies reviewed (Hoskins & Barker, 2017; Wilhsson et al., 2017). This was envisaged as being popular, projecting the right image (fashion or physical appearance), accumulating wealth, or succeeding in sport or business. This social recognition was perceived to be important to attaining power, autonomy, and upward social mobility (Hoskins & Barker, 2017; Wilhsson et al., 2017).

Wellbeing.

Although there were no direct links made between success perceptions and wellbeing in the qualitative investigations, connection and contribution were related to thriving and positive youth development (PYD) in one study (Hershberg et al., 2014). Moreover, most participants associated success with happiness or positive emotions such as joy and satisfaction (Andrelchik & Schmitt, 2014; Fan & Karnilowicz, 1997; Hershberg et al., 2014; Hoskins & Barker, 2017; Joos, 2003; Trask-Kerr et al., 2019). Feeling happy was often viewed as an indication of success. Participants discussed striving for happiness in general or associated this positive emotional state with the process of achieving success through accomplishing something personally meaningful. Conversely, the expectations and pressure to be successful and 'achieve' from significant others and self were also perceived to adversely impact wellbeing, creating stress, anxiety, and dissatisfaction (Wilhsson et al., 2017). This reflects the 'controlling' aspect of motivation which undermines autonomy and can impair wellbeing (Ryan & Deci, 2017).

Age and Gender Patterns.

Most of the qualitative investigations examined success perceptions across the later adolescent years. Only one longitudinal study followed participants across adolescence (Hershberg et al., 2014) comparing these beliefs at three significant transition points (sixth grade, 11.98 years; ninth grade, 15.07 years; and, 12th grade, 18.31 years). The pattern of results suggests that notions of future success may demonstrate a qualitative shift as participants move through school reflecting changing priorities and activities. For example, connection, contribution, happiness, and career aspirations became more meaningful for many participants in later adolescence which could be due to maturation and experience (Hershberg et al., 2014) and a decreased focus on the self resulting from the development of formal operations that enable more insight into the thoughts and experiences of others and how these can differ from their own (Elkind, 1967). This is also a period where planning for the future may take on greater significance as the transition from school to university and/or the workforce becomes more salient.

Gendered success perceptions were also identified among these qualitative investigations. Male participants were more self-oriented perceiving success as self-improvement or high achievement, seeking power, status, and prestige (Hershberg et al., 2014; Hoskins & Barker, 2017; Wilhsson et al., 2017). In contrast, although female participants also focussed on the self (e.g. seeking popularity and personal growth) they also oriented to ‘others’, conceptualising success as forming connections and social relationships, or making a difference and influencing positive change at work or within the community (Hershberg et al., 2014; Hoskins & Barker, 2017; Wilhsson et al., 2017).

Images of Success.

Three studies also investigated teenagers images of success asking participants to describe people who they considered to be successful (Bukhalenkova, 2013; Bukhalenkova &

Karabanova, 2018a; Joos, 2003). Two of these were of Russian origin (Bukhalenkova, 2013; Bukhalenkova & Karabanova, 2018a; Table 1) whilst the third was an American study (Joos, 2003; Table 2). Overall, male figures featured most prominently in the examples provided, and parents (collectively or individually) were the most popular choice reflecting the influence of family on shaping success perceptions. This was followed by philanthropists and those who had dedicated their lives to helping others (American adolescents) and celebrities, politicians, or wealthy individuals (American and Russian adolescents).

Gender differences, noted previously, were also observed in these young peoples' images of success. Although male figures were most often identified by all participants, female adolescents were more likely than their male counterparts to mention successful women (Bukhalenkova & Karabanova, 2018a; Joos, 2003). Males typically preferred to describe their fathers, or figures from politics, business and sports perhaps reflecting gendered stereotypes, or traditional images of success that are linked with power, status, and social recognition (Bukhalenkova & Karabanova, 2018a; Joos, 2003). In contrast, females were more likely to give examples from significant others (family and friends) or those within their 'day to day' life as well as famous women in showbusiness (Bukhalenkova & Karabanova, 2018a).

Discussion

The aim of this systematic review was to examine adolescent conceptions of success and develop an understanding of how these beliefs relate to wellbeing to inform Positive Education approaches. A total of 17 studies met the inclusion criteria. These investigated subjective success definitions through fixed-response surveys or unstructured response techniques such as interviews and focus groups over a 21 year time-period from 1997-2018.

Success Themes

The main themes identified represented a mix of success orientations that can be seen to span across SDT regulatory states. More highly internalised and autonomous regulatory states, such as self-actualisation, happiness, personal satisfaction, connection, and relationships were commonly endorsed by most participants regardless of whether these notions were primed through fixed response survey items or spontaneously self-generated. Work, career, and money (which can encompass a range of motivations that are person-specific) were also important whereas typically externalised and controlled regulatory states such as status, fame, and popularity, featured less prominently.

This would indicate that young people today, particularly those in late adolescence, are more likely to value internalised and personally meaningful definitions of success above extrinsic and controlled success benchmarks. Furthermore, markers of success involving work, career, and money appeared to be linked more often with personal satisfaction and living comfortably rather than accumulating wealth, showing characteristics of the more internalised and autonomous forms of extrinsic orientations. Whilst this seems promising given the relationship between intrinsic and autonomous aspirations, meeting basic psychological needs and enhanced wellbeing, few studies examined intra-individual success patterns to ascertain the relative importance of qualitatively different success beliefs or the underlying motivations that might drive them as suggested by Ryan and Deci (2017). In addition, intrinsically-oriented values and goals may not always align with behaviour, especially under the influence of peer pressure and social media (Chia, 2010; Ryan & Deci, 2017; Steinberg & Monahan, 2007). Hence, to gain a clearer understanding of how success beliefs and wellbeing are related future studies could examine the enablers and barriers of enacting success beliefs, including social stigma and opportunities. Using more implicit methods, such as through the use of vignettes, may also minimise the response bias of

socially desirable responding and provide additional information to verify the accuracy of these findings.

Gender Differences in Success Perceptions.

The seven studies that observed gendered success notions reported consistent findings with females displaying greater internalisation and other-focused conceptions of success compared with males who were more self-focussed and extrinsically oriented (Bukhalenkova & Karabanova, 2018a, 2018b; Hershberg et al., 2014; Hoskins & Barker, 2017; Karabanova & Bukhalenkova, 2016; Park, 2000; Wilhsson et al., 2017). These gender differences, mirrored in their perceptions of successful people, are consistent with traditional gender stereotypes and those reported in investigations of adult and adolescent goals and values which show that females are more affiliative, pro-social, and open to change whereas males are more concerned with materialism, power, and achievement (Castiglione, Rampullo, & Licciardello, 2014; Rijavec, Brdar, & Milovic, 2011; Schwartz & Rubel, 2005). Young males may benefit from targeted guidance or support that encourages them to expand their success notions, exploring those that encompass more internalised values that can satisfy the need to relate to others for mutually beneficial reasons through for example civic engagement and emotional connections. This is very much aligned with content typical of Positive Education programs which underscore the importance of high quality relationships and pro-social behaviours for wellbeing (Norrish, Williams, O'Connor, & Robinson, 2013; Seligman, 2011; Vella-Brodrick et al., 2019).

Contribution.

Although success conceptions were generally quite similar across the quantitative and qualitative studies there were some distinct differences which may be a function of the contrasting methodologies or sampling characteristics. Contribution, reflecting a desire to make a difference by positively influencing others' lives, society, or the environment, was

valued by approximately 50%-77% of the youth surveyed in the State of Our Nation's Youth reports. Yet, this theme was one of those least frequently endorsed by participants when they were required to self-generate their success views. This suggests that adolescents may recognise the value of contribution but it is not necessarily a salient marker of success in their present lives. Alternatively, selecting options relating to this theme might be prompted by socially desirable responding.

Sampling characteristics could also account for the higher preference for this success theme in two of the qualitative studies. Participants in the study by Hershberg et al. (2014) were described as being on a trajectory towards thriving as they displayed high levels of PYD. This developmental theory proposes that young people thrive when they strengthen Competence, Confidence, Character, Connection, and Caring with high levels of these 'five-C' attributes leading to a sixth C, Contribution (Lerner, 2004; Lerner, Dowling, & Anderson, 2003; Lerner et al., 2013). These students regularly participated in 4-H community-based programs over the eight-year study-period. 4-H programs are well-recognised for their focus on PYD and their participants are more likely to make contributions to their communities and be civically active than those involved in other out-of-school activities (Lerner et al., 2013). Perceiving success as contribution may also be a process of maturation as these participants were more likely to include contribution within their success parameters in mid-to late-adolescence (ninth grade 33.93%; 12th grade 28.57%) than when they were younger (sixth grade 16.07%).

Similarly, the participants in Joos's (2003) study were members of a church choir-group known as Sonlight. Although this was not a religious program, it did incorporate youth 'values education' through engaging weekly focus discussions that encouraged members to explore their future goals and to "search for messages which communicated values of

altruism, compassion, activism, and service” (Joos, 2003, p. 130). The choir songs were also carefully chosen to reflect “humanistic values and goals” (Joos, 2003, p. 130).

The fact that both of these cohorts were participating in well-respected outside-of-school youth programs that focussed on positive development, values, and self-discovery might explain these participants higher regard for contribution within their success beliefs. However, these samples also had a disproportionate number of females (Hershberg et al., 2014, 66%; Joos, 2003, 68%). This may also have influenced this success notion as contribution was noted as a gendered aspiration, preferentially valued by females, in two other studies included in this review (Hoskins & Barker, 2017; Park, 2000).

Success and Wellbeing

Although the distinct body of recent Russian studies show that intrinsic orientations favour wellbeing outcomes more so than extrinsic orientations, particular combinations of extrinsic and intrinsic success conceptions may influence wellbeing in different and complex ways.

Adolescents who valued self-development and self-actualisation over and above extrinsic orientations displayed higher levels of self-esteem, self-perceived achievement, life satisfaction, and affiliation or connection to others (Bukhalenkova & Karabanova, 2018b; Karabanova & Bukhalenkova, 2016). In other words, these internalised and autonomous success orientations did, as predicted by SDT, satisfy the psychological needs of competence, relatedness and autonomy. In contrast, ambiguous success expectations or striving to succeed purely to satisfy others or culturally imposed ideals, without deriving personal meaning or satisfaction from the process or end result, were associated with the poorest outcomes (Bukhalenkova & Karabanova, 2018b). As this particular model of success displays characteristics of external and introjected regulation, the most controlled forms of motivation, this is not unexpected. From a SDT perspective this success pattern could negatively impact

wellbeing because a) intrinsic motivation is crowded out through an excessive focus on external outcomes or b) autonomy satisfaction is undermined as behaviour is regulated by a desire to please others, gain approval, or avoid negative emotional states (Haerens, Aelterman, Vansteenkiste, Soenens, & Van Petegem, 2015; Ryan & Deci, 2017). As observed in the qualitative studies, adolescents' success beliefs may not always be concordant with others' expectations or more commonly held views of success (Andrelechik & Schmitt, 2014; Joos, 2003). This is not necessarily problematic if subjective success is perceived to be fulfilment of personal desires, but, as it also entailed living up to the expectations of friends, parents, and school (Wilhsson et al., 2017), adolescents are at risk of falling into this less optimal mixed-pattern of success motivation. It would not be uncommon for example, for students to aspire to achieve academically to meet the high expectations of parents or teachers which, if not assimilated over time as being personally meaningful, can make them vulnerable to negative wellbeing effects (Ryan & Deci, 2013). Thus, educational curricula that encourages students to examine the reasons underlying their success beliefs and how these fit with their personal and authentic values and aspirations so that they can become more internalised, could be beneficial to students.

Interestingly, these findings also indicated wellbeing benefits (albeit to a lesser degree) for individuals who showed dominantly extrinsic success-orientation (e.g. social recognition, popularity) but also valued intrinsic success related to self-development and personal satisfaction. Adolescents who followed this pattern also displayed favourable self-belief and self-perceived success. As highlighted by SDT, striving for outward markers of success may not always be detrimental if they are perceived to be achievable, rather than idealistic and out of reach (contributing to competence needs), and internalised so that they have some personal relevance or value (satisfying autonomy), or are a means to personal

fulfilment by enabling the achievement of other intrinsic goals (Rijavec et al., 2011; Sagiv & Schwartz, 2000; Sirgy et al., 2013; Vansteenkiste et al., 2006).

Investigations of various combinations of high/low intrinsic and extrinsic goals in tertiary students suggest that although individuals displaying high intrinsic patterns report the greatest satisfaction of autonomy, competence and affiliation, the presence of extrinsic aspirations does not necessarily thwart these psychological needs or diminish wellbeing and is in fact preferable to having no meaningful or clearly defined goals at all (Rijavec et al., 2011). The different models of success patterns proposed by the Russian studies would seem to parallel these findings. However, as the information gained from the Russian papers is dependent upon the accuracy of the translated text and there was a lack of clarity concerning the details and psychometric properties of the measures employed, these results should be interpreted with caution. Further exploration is warranted to clarify how subjective success perceptions align with more widely accepted, understood and validated measures of wellbeing.

Other findings from this review suggest that the success themes of connection and contribution align not only with the three SDT psychological needs but also with PYD attributes such as caring, connection, contribution, confidence, and competence, particularly for females moving through late adolescence (Hershberg et al., 2014). It would seem that forming strong relationships and helping others, on a personal level as well as on a broader community level, are conducive to wellbeing. There is considerable theoretical and empirical support for this (Seligman, 2011; Ryan & Deci, 2019). For example, young people who are civically engaged feel more connected to others, have better mental health, lower substance use, and engage in less risk-taking behaviour (Ballard, Hoyt, & Pachucki, 2019). In addition and consistent with previous findings (Lyubomirsky et al., 2005), most young people associated success with happiness and satisfaction, either as an indication of success or as a

result of the process of achieving something meaningful. Given that internalised and autonomous conceptions of success were more common among the young people sampled in the reviewed sample, and that these success attributions are typically associated with eudaimonic (actualisation, meaning and other focused) as opposed to hedonic happiness (momentary sensory gratification), it is likely that success was associated with eudaimonic forms of happiness. This, however, warrants further research attention.

Implications for Educational Contexts

Schools are well positioned to apply these insights about success perceptions and their relationship with wellbeing in relevant curricula to guide students to select success pathways that are intrinsically satisfying, foster autonomous regulation, support psychological health, and optimise wellbeing. With insights from SDT and PYD and through the medium of Positive Education which already includes content on psychological needs, goal striving, authenticity, meaning, and values, this seems highly plausible.

An exploration of success beliefs would also help schools to expand on their own messaging around student success given that schools typically focus on external, quantitative indicators of achievement fostering an extrinsic culture of success that may not align with students' own notions of success (Ryan & Deci, 2013). As striving to meet others' expectations can have adverse effects on wellbeing, particularly when externally imposed beliefs conflict with one's personal success perceptions, educational environments could benefit from developing a deeper understanding of what constitutes success from the perspective of the adolescents that they are educating and from the scientific evidence available. This could inform decision making around curriculum content and educational practices and ensure that students are supported and feel validated in achieving success that is personally meaningful, developmentally relevant, and conducive to their wellbeing. For example, encouraging success perceptions that encompass altruism or helping others may be

especially advantageous during the upper secondary-school years when adolescents are less egocentric and have more fully developed formal operations that enable them to understand the perspectives and experiences of others (Elkind, 1967; Inhelder & Piaget, 1958).

The value of this review lies in the application of the knowledge gained from multiple research fields to benefit populations experiencing significant life transitions and mental health issues. Hence, encouraging adolescents in school settings to consider their success beliefs, understand how these may influence their wellbeing, and empower them to make personal choices about goal aspirations and behaviours, can be a very powerful process. The emerging field of Positive Education, with its focus on positive emotions, relationships and life purpose, can provide a complementary forum in which to discuss success beliefs and regulation styles that facilitate wellbeing through the fulfillment of psychological need satisfaction. Future work should focus on developing school-based initiatives that incorporate these various perspectives with the view to fostering adolescent wellbeing and autonomy supportive environments.

Limitations

There are a number of limits to this review and the studies included in the review. First, methodological issues and sampling characteristics limit the generalisability of these results. Although the use of the same success measure and consecutively similar samples provided a snapshot of the consistency of success conceptions over time within the Russian and American sub-sets, the pre-generated survey items restricted and primed participants responses. Consequently, some discrepancies were noted in the themes of contribution and connection not just between these two cultures (due to a limitation of the Russian-studies design which did not examine success themes relating to contribution or connection) but also in comparison to the self-generated responses in the qualitative studies. Furthermore, little information was provided on the details and psychometric properties of the measures

employed in the quantitative studies. In contrast, the confounding sample characteristics (e.g. use of specific cohorts involved in a particular extra-curricular youth group or program, disproportionate number of females) and varying qualitative methodologies, measures, and analytical approaches employed in the remaining investigations highlight the diverse but disconnected nature of research in this area. Whilst these reflected more spontaneous success perceptions, the results are not so easily generalised or validated. Some of these limitations would be mitigated by employing mixed-method designs which would enable a deeper understanding and more rigorous exploration of success conceptions.

Second, whilst intrinsic success themes featured prominently and were more likely to be endorsed by adolescents than those that were extrinsically oriented only a few studies investigated intra-individual patterns of success beliefs and these were all within the Russian sub-set. These patterns are important as they indicate a relative preference for one success belief (intrinsic versus extrinsic) over another, as opposed to an absolute measurement that only provides information about what success notions are valued. In addition, examining the underlying motivations of extrinsic success beliefs would provide a more nuanced understanding. As suggested by SDT it is the relative degree of autonomy and self-regulation that differentially impacts wellbeing rather than the success notion itself. Therefore, ensuring that study designs incorporate an assessment of these aspects would also extend our understanding of the importance and comparative value of qualitatively and motivationally different success perceptions in young peoples' lives. Researchers could then identify common success patterns or specific models of success perceptions that align with particular wellbeing outcomes.

Third, this review focussed on success perceptions of adolescents from the general population and thus does not represent the notions of young people from discrete or minority groups. Disadvantaged or delinquent youth may have different views of success. As Positive

Education is typically a universal program relevant for all students, success constructions for more diverse populations could maximise and extend the impact of these programs.

Last, due to the scarcity of research in this area there were no restrictions placed on the types of papers included in this review. Information was sourced from the empirical research and grey literature, and included non-government reports, unpublished works and non-English papers. Although this broadened the scope of the review only seven studies were assessed as high quality, although a further six were determined to be at low risk of bias. While this makes it difficult to form valid or firm conclusions about subjective success and wellbeing it does highlight the need for more rigorous and systematic empirical research in this area.

Future Research

Success and wellbeing feature prominently in educational, political, and academic discourse and policy. Yet, despite spanning 21 years of research, there appears to have been little advancement or systematic development of knowledge pertaining to adolescent success perceptions and wellbeing. Few studies have examined subjective success beliefs and even fewer have examined these beliefs in relation to happiness, life satisfaction, positive or negative affect or other aspects of prominent wellbeing theories such as PERMA (Seligman, 2011), whilst only one study has examined intra-individual comparisons across time. In addition, the current understanding of adolescent success conceptions is, for the most part, drawn from research conducted with American and Russian youth. Thirteen of the studies reviewed originated from these two countries with the remaining four representing Australia, the United Kingdom and Sweden. Although the universality of basic needs satisfaction for optimal functioning is well accepted (Ryan & Deci, 2017) cultural factors are likely to have a strong influence on the development and internalisation of subjective success beliefs. Further research questions can include: how do qualitatively and motivationally different success-

orientations link with current wellbeing theories? What is the optimal pattern of success beliefs in relation to wellbeing? How do these perceptions vary from early- to mid- to late-adolescence? What factors, such as gender and culture, mediate these perceptions? Is it possible to modify success beliefs, particularly with adolescents in schools, in a way that meaningfully impacts on wellbeing or vice versa?

Conclusion

Despite the paucity of research in this area the findings of this current review suggest that adolescents, especially teenage girls, are more likely to hold personally meaningful or intrinsic success notions rather than those that focus on external reward or recognition mirroring findings in the goals content or SDT literature. Success themes of self-actualisation, happiness, personal satisfaction, and connection featured prominently across the studies whereas status, fame, and popularity were less frequently endorsed. Although career, work, and money were also identified as being important this was not necessarily for the purposes of accumulating wealth or materialistic gain. Furthermore, two homogenous sub-groups of studies representing American and Russian youth respectively, attest to the stability of these conceptions over the short-term (five years). There was also a positive association between the success themes of connection and contribution and PYD in later adolescence and some evidence to suggest that certain patterns of qualitatively and motivationally different success beliefs may be associated with aspects of wellbeing.

These preliminary findings suggest that subjective success beliefs might be understood from an SDT and wellbeing perspective potentially providing insights into emerging values and life-goals that can impact psychological health across the life span. Furthering our understanding of how adolescents construct and contextualise their subjective success notions as they mature and transition into adulthood, and the factors shaping these perceptions, would be helpful, particularly when linked with wellbeing outcomes. This can

then lead to school-based interventions that encourage data-informed conversations around success beliefs and their consequences, particularly for psychological health. To date this has been lacking, and instead, young people often rely on marketing or generic messages, to inform them about the pathways to success that will lead them to happiness and wellbeing. Positive Education can provide a relevant gateway for these conversations and reflections. We hope that this review will prompt further work in this important field of work.

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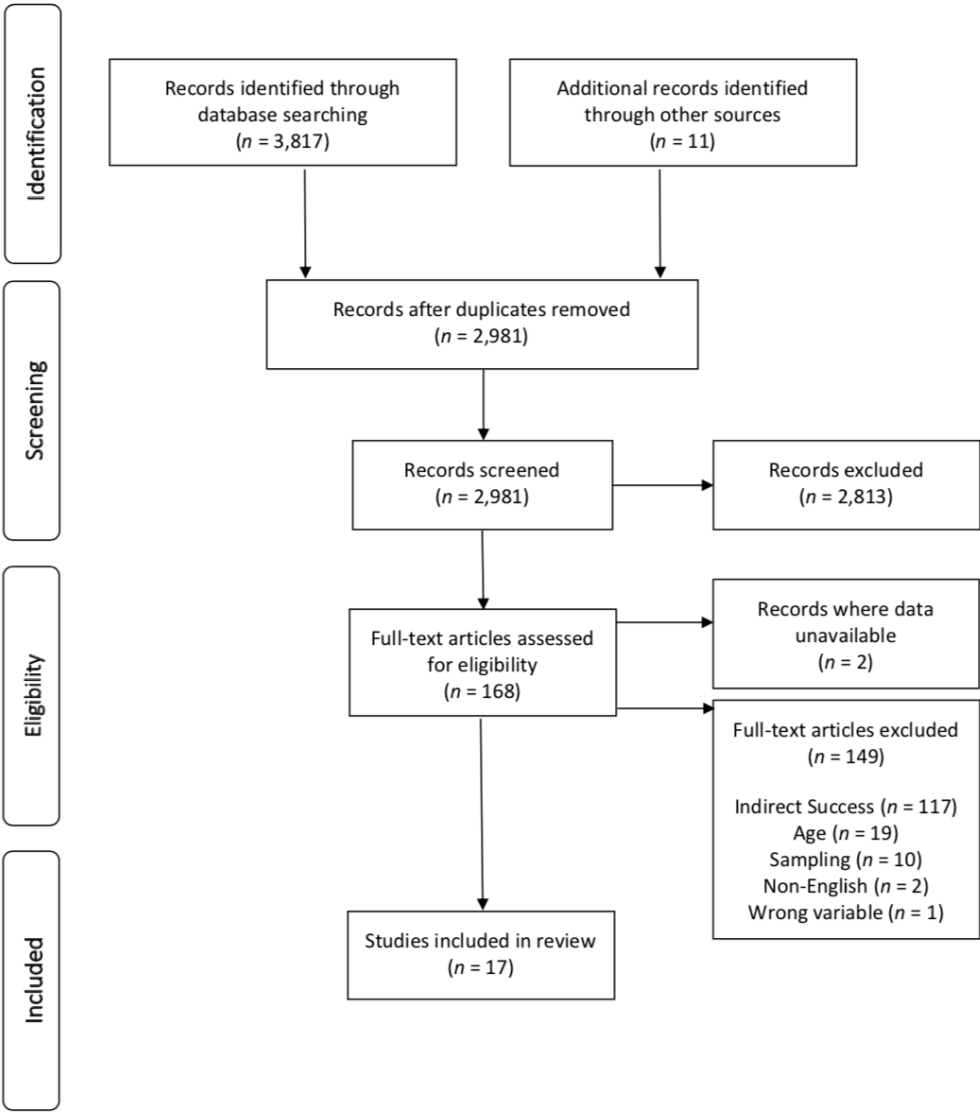


Figure 1. Prisma flow diagram.

References

- Adams, J., Hiller-Brown, F.C., Moore, H.J., Lake, A.A., Araujo-Soares, V., White, M., & Summerbell, C. (2016). Searching and synthesising 'grey literature' and 'grey information' in public health: Critical reflections on three case studies. *Systematic Reviews*, 5, 164. doi.org/10.1186/s13643-016-0337-y
- American Psychological Association. (2002). Developing adolescents: A reference for professionals. Retrieved 16 June, 2020, from <https://www.apa.org/pubs/info/brochures/develop>
- Andrelichik, H., & Schmitt, R. (2014). Students' perception of success in the art classroom. *International Journal of Education & the Arts*, 15(13). <http://www.ijea.org/v15n13/>
- Ballard, P. J., Hoyt, L. T., & Pachucki, M. C. (2019). Impacts of adolescent and young adult civic engagement on health and socioeconomic status in adulthood. *Child Development*, 90(4), 1138-1154. doi:10.1111/cdev.12998
- Balsano, A. B. (2005). Youth civic engagement in the United States: Understanding and addressing the impact of social impediments on positive youth and community development. *Applied Developmental Science*, 9(4), 188-201. doi:10.1207/s1532480xads0904_2
- Benson, G. S., McIntosh, C. K., Salazar, M., & Vaziri, H. (2020). Cultural values and definitions of career success. *Human Resource Management Journal*, 30(3), 392-421. doi:10.1111/1748-8583.12266
- Bücker, S., Nuraydin, S., Simonsmeier, B. A., Schneider, M., & Luhmann, M. (2018). Subjective well-being and academic achievement: A meta-analysis. *Journal of Research in Personality*, 83(94). doi:10.1016/j.jrp.2018.02.007

- Bukhalenkova, D. A. (2013). Representations of success in today's adolescents. *National Psychological journal*, 4(12), 31-35.
http://npsyj.ru/pdf/npj_no12_2013/npj_no12_2013_31-35.pdf
- Bukhalenkova, D. A., & Karabanova, O. A. (2018a). Adolescent notions of success. *The European Proceedings of Social & Behavioural Sciences*, 666-675.
doi:10.15405/epsbs.2018.07.88
- Bukhalenkova, D. A., & Karabanova, O. A. (2018b). Features of self-esteem in adolescents with different understanding of success. *National Psychological Journal*, 3, 148-157.
doi:10.11621/npj.2018.0314
- Burckhardt, R., Manicavasagar, V., Batterham, P. J., & Hadzi-Pavlovic, D. (2016). A randomized controlled trial of strong minds: A school-based mental health program combining acceptance and commitment therapy and positive psychology. *Journal of School Psychology*, 57, 41-52. doi:10.1016/j.jsp.2016.05.008
- Castiglione, C., Rampullo, A., & Licciardello, O. (2014). High school students' value system. *Procedia - Social and Behavioral Sciences*, 141, 1330-1334.
doi:10.1016/j.sbspro.2014.05.229
- Chia, S. C. (2010). How social influence mediates media effects on adolescents' materialism. *Communication Research*, 37(3). doi:10.1177/0093650210362463
- Chodkiewicz, A. R., & Boyle, C. (2017). Positive psychology school-based interventions: A reflection on current success and future directions. *Revista De Educacion*, 5(1), 60-86.
doi:10.1002/rev3.3080
- Chusmir, L. H., & Parker, B. (1992). Success strivings and their relationship to affective work behaviors: Gender differences. *The Journal of Social Psychology*, 132(1), 87-99. doi:10.1080/00224545.1992.9924691

- Critical Appraisal Skills Programme. (2018). *CASP qualitative studies checklist*. Retrieved from https://casp-uk.net/wp-content/uploads/2018/03/CASP-Qualitative-Checklist-2018_fillable_form.pdf
- Eisenberg, N., Carlo, G., Murphy, B., & Van Court, P. (1995). Prosocial behavior in late adolescence: A longitudinal study. *Child Development*, 66(4), 1179-1197.
doi:10.2307/1131806
- Elkind, D. (1967). Egocentrism in Adolescence. *Child Development*, 38(4), 1025-1034.
doi:10.2307/1127100
- Fan, C., & Karnilowicz, W. (1997). Measurement and definitions of success among Chinese and Australian girls. *Journal of Cross-Cultural Psychology*, 28(5), 589-599.
doi:10.1177/0022022197285005
- Gnambs, T., & Hanfstingl, B. (2016). The decline of academic motivation during adolescence: An accelerated longitudinal cohort analysis on the effect of psychological need satisfaction. *Educational Psychology*, 36(9), 1691–1705. [doi:10.1080/01443410.2015.1113236](https://doi.org/10.1080/01443410.2015.1113236)
- Haerens, L., Aelterman, N., Vansteenkiste, M., Soenens, B., & Van Petegem, S. (2015). Do perceived autonomy-supportive and controlling teaching relate to physical education in students' motivational experiences through unique pathways? Distinguishing between the bright and dark side of motivation. *Psychology of Sport and Exercise*, 16(Part 3), 26-36. doi: 10.1016/j.psychsport.2014.08.013
- Hart, P. D. (2002). *The state of our nation's youth 2002-2003*.
<https://files.eric.ed.gov/fulltext/ED467073.pdf>
- Hart, P. D. (2003). *The state of our nation's youth 2003-2004*.
<https://eric.ed.gov/?id=ED478710>

- Hershberg, R. M., DeSouza, L. M., Warren, A. E. A., Lerner, J. V., & Lerner, R. M. (2014). Illuminating trajectories of adolescent thriving and contribution through the words of youth: Qualitative findings from the 4-H study of positive youth development. *Journal of Youth and Adolescence*, 43, 950-970. doi:10.1007/s10964-014-0102-2
- Hoskins, K., & Barker, B. (2017). Aspirations and young people's constructions of their futures: Investigating social mobility and social reproduction. *British Journal of Educational Studies*, 66(1), 45-67. doi:10.1080/00071005.2016.1182616
- Huppert, F. A. (2009). Psychological well-being: Evidence regarding its causes and consequences. *Applied Psychology: Health and Well-Being*, 1(2), 137-164. doi:10.1111/j.1758-0854.2009.01008.x
- Inhelder, B., & Piaget, J. (1958). *An essay on the construction of formal operational structures. The growth of logical thinking: From childhood to adolescence*. (A. Parsons & S. Milgram, Trans.). Basic Books. <https://doi.org/10.1037/10034-000>
- Joos, K. E. (2003). *What does it mean to be a success? The future goals and values of American teenagers* (Doctoral dissertation). Available from ProQuest Dissertations & Theses database. (3096629)
- Karabanova, O. A., & Bukhalenkova, D. A. (2016). Perception of Success in Adolescents. *Procedia - Social and Behavioral Sciences*, 233, 13-17. doi:10.1016/j.sbspro.2016.10.116
- Kasser, T., & Ryan, R. M. (1993). A dark side of the American dream: Correlates of financial success as a central life aspiration. *Journal of Personality and Social Psychology*, 65, 410-422. doi:10.1037/0022-3514.65.2.410
- Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin*, 22(3), 280-287. doi:10.1177/0146167296223006

- Katz, F. M. (1964). The meaning of success: Some differences in value systems of social classes. *The Journal of Social Psychology*, 62, 141-148.
doi:10.1080/00224545.1964.9919510
- Kessler, R. C., Amminger, G. P., Aguilar-Gaxiola, S., Alonso, J., Lee, S., & Ustün, T. B. (2007). Age of onset of mental disorders: A review of recent literature. *Current Opinion in Psychiatry*, 20(4), 359-364. doi:10.1097/YCO.0b013e32816ebc8c
- Lekes, N. (2011). Life goals: Intrinsic and extrinsic pursuits. In R. J. R. Levesque (Ed.), *Encyclopedia of Adolescence*. Springer.
- Lekes, N., Gingras, I., Philippe, F. L., Koestner, R., & Fang, J. (2010). Parental autonomy-support, intrinsic life goals, and well-being among adolescents in China and North America. *Journal of Youth Adolescence*, 39(8), 858-869. doi:10.1007/s10964-009-9451-7
- Lerner, R. M. (2004). *Liberty: Thriving and civic engagement among America's youth*. Sage Publications. doi:10.4135/9781452233581
- Lerner, R. M., Dowling, E. M., & Anderson, P. M. (2003). Positive youth development: Thriving as a basis of personhood and civil society. *Applied Developmental Science*, 7(3), 172-180.
- Lerner, R. M., Lerner, J. V., & colleagues. (2013). *The positive development of youth: Comprehensive findings from the 4-H study of positive youth development*. N.-H. Council. <http://www.4-h.org/about/youth-development-research/positive-youth-development-study/>
- Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin*, 131(6), 803-855.
doi:10.1037/0033-2909.131.6.803

- Nagaoka, J., Farrington, C. A., Ehrlich, S. B., Heath, R. D., Johnson, D. W., Dickson, S. E.,...Hayes, K. A. (2015). *Foundations for young adult success: A developmental framework*. <https://www.wallacefoundation.org/knowledge-center/Documents/Foundations-for-Young-Adult-Success.pdf>
- Niemiec, C. P., Ryan, R. M., & Deci, E. L. (2009). The path taken: Consequences of attaining intrinsic and extrinsic aspirations in post-college life. *Journal of Research in Personality*, 73(3), 291-306. doi:10.1016/j.jrp.2008.09.001
- Norrish, J., Williams, P., O'Connor, M. & Robinson, J. (2013). An applied framework for Positive Education. *International Journal of Wellbeing*, 3(2), 147-161. doi:10.5502/ijw.v3i2.2
- Osei-Tutu, A., Dzokoto, V. A., Adams, G., Hanke, K., Kwakye-Nuako, C., Adu-Mensa, F., & Appiah-Danquah, R. (2018). 'My Own House, Car, My Husband, and Children': Meanings of success among Ghanaians. *Heliyon*, 4(7), e00696. doi:10.1016/j.heliyon.2018.e00696
- Park, J. M. (1998). *The state of our nation's youth 1998-1999*. <https://eric.ed.gov/?id=ED424923>
- Park, J. M. (1999). *The state of our nation's youth 1999-2000*. <https://files.eric.ed.gov/fulltext/ED433922.pdf>
- Park, J. M. (2000). *The state of our nation's youth 2000-2001*. <https://files.eric.ed.gov/fulltext/ED444690.pdf>
- Park, L. E., & Crocker, J. (2005). Interpersonal consequences of seeking self-esteem. *Personality and Social Psychology Bulletin*, 31, 1587-1598.
- Peter D. Hart Research Associates. (2001). *The state of our nation's youth 2001-2002*. https://archive.org/details/ERIC_ED455952

- Protogerou, C., & Hagger, M. S. (2020). A checklist to assess the quality of survey studies in psychology. *Methods in Psychology*, 3, 100031. doi:10.1016/j.metip.2020.100031
- Quinlan, D. M., Swain, N., Cameron, C., & Vella-Brodrick, D. A. (2015). How ‘other people matter’ in a classroom-based strengths intervention: Exploring interpersonal strategies and classroom outcomes. *The Journal of Positive Psychology*, 10(1), 77-89. doi:10.1080/17439760.2014.920407
- Rijavec, M., Brdar, I., & Miljković, D. (2011). Aspirations and well-being: Extrinsic vs. intrinsic life goals. *Journal for General Social Issues*, 20(3(113), 693-710. doi: 10.5559/di.20.3.05
- Ryan, R.M., & Deci, E. L. (2013). Toward a social psychology of assimilation: Self-determination theory in cognitive development and education. In B. Sokol, F. Grouzet, & U. Müller (Eds.), *Self-regulation and Autonomy: Social and Developmental Dimensions of Human Conduct* (pp. 191-207). Cambridge University Press. doi:10.1017/CBO9781139152198.014
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness* (pp. 272-292). New York: Guildford Press.
- Ryan, R. M., & Deci, E. L. (2019). Brick by brick: The origins, development, and future of self-determination theory. In A. J. Elliot (Vol. Ed.), *Advances in motivation science*. 6. *Advances in motivation science* (pp. 111-156). Cambridge, MA: Elsevier Inc. doi:10.1016/bs.adms.2019.01.001.
- Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61. doi:10.1016/j.cedpsych.2020.101860
- Sagiv, L., Roccas, S., Cieciuch, J., & Schwartz, S. H. (2017). Personal values in human life. *Nature Human Behaviour*, 1(9), 630-639. doi:10.1038/s41562-017-0185-3

- Sagiv, L., & Schwartz, S. H. (2000). Value priorities and subjective well-being: Direct relations and congruity effects. *European Journal of Social Psychology*, 30, 177-198.
- Schwartz, S. H., & Bardi, A. (2001). Value hierarchies across cultures: Taking a similarities perspective. *Journal of Cross-Cultural Psychology*, 32(3), 268-290.
doi:10.1177/0022022101032003002
- Schwartz, S. H., & Rubel, T. (2005). Sex differences in value priorities: Cross-cultural and multimethod studies. *Journal of Personality and Social Psychology*, 89, 1010-1028.
doi:10.1037/0022-3514.89.6.1010
- Seligman, M. E. P. (2011). *Flourish: A visionary new understanding of happiness and well-being*. Free Press.
- Sichling, F., & Karamelic-Muratovic, A. (2020). 'Makin' it' in the heartland: Exploring perceptions of success among second-generation immigrant youth in St. Louis. *Journal of Adolescence*, 82, 11-18. doi:10.1016/j.adolescence.2020.05.005
- Sirgy, M., Gurel-Atay, E., Webb, D., Cicic, M., Husic-Mehmedovic, M., Ekici, A.,...Hohar, J. S. (2013). Is materialism all that bad? Effects on satisfaction with material life, life satisfaction, and economic motivation. *Social Indicators Research*, 110(1), 349-366.
doi:10.1007/s11205-011-9934-2
- Slemp, G., Chin, T., Kern, M., Siokou, C., Loton, D., Oades, L.,...Waters, L. (2017). Positive education in Australia: Practice, measurement, and future directions. *Social and Emotional Learning in Australia and the Asia-Pacific: Perspectives, Programs and Approaches* (pp. 101-122). doi:10.1007/978-981-10-3394-0_6
- Steinberg, L., & Monahan, K. C. (2007). Age differences in resistance to peer influence. *Developmental Psychology*, 43(6), 1531-1543. doi:10.1037/0012-1649.43.6.1531

- Trask-Kerr, K., Chin, T. C., & Vella-Brodrick, D. (2019). Positive education and the new prosperity: Exploring young people's conceptions of prosperity and success. *Australian Journal of Education*, 63(2), 190-208. doi:10.1177/0004944119860600
- Twenge, J. M., Gentile, B., DeWall, C. N., Ma, D., Lacefield, K., & Schurtz, D. R. (2010). Birth cohort increases in psychopathology among young Americans, 1938-2007: A cross-temporal meta-analysis of the MMPI. *Clinical Psychology Review*, 30(2), 145-154. doi:10.1016/j.cpr.2009.10.005
- Vansteenkiste, M., Lens, W., & Deci, E. L. (2006). Intrinsic versus extrinsic goal contents in self-determination theory: Another look at the quality of academic motivation. *Educational Psychologist*, 41(1), 19-31 doi:10.1207/s15326985ep4101_4
- Vella-Brodrick, D. A., Chin, T-C., Rickard, N. S. (2019). Examining the processes and effects of an exemplar school-based well-being approach on student competency, autonomy and relatedness. *Health Promotion International*, daz115. doi:10.1093/heapro/daz115
- Walkerdine, V., Lucey, H., & Melody, J. (2001). *Growing up girl: Psychosocial explorations of gender and class*. Macmillan. doi:10.4324/9780203621479
- Wilhsson, M., Svedberg, P., Carlsson, I., Hogdin, S., & Nygren, J. M. (2017). Handling demands of success among girls and boys in primary school: A conceptual model. *The Journal of School Nursing*, 33(4), 316-325. doi:10.1177/1059840516654743
- Zessin, U., Dickhäuser, O., & Garbade, S. (2015). The relationship between self-compassion and well-being: A meta-analysis. *Applied Psychology. Health and Well-Being*, 7(3), 340-364. doi:10.1111/aphw.12051

Appendix A: Definition of Key Concepts

Term	Definition
Autonomy	Perceptions of having self-direction and control.
Basic Psychological Needs	Autonomy, competence and relatedness.
Competence	Feelings of mastery and effectiveness.
External Regulation	Behaviour that is externally regulated (i.e. motivated by rewards or punishment).
Extrinsic Success	Success that is externally rewarded, recognised or acknowledged by others.
Happiness	Experiencing positive emotions and life satisfaction.
Identified Regulation	Willingness to engage in and value an activity for the benefits it procures although it is not experienced as interesting or enjoyable.
Integrated Regulation	Occurs when extrinsic pursuits are both personally valued and align with core beliefs and interests.
Intrinsic Success	Success that is personally meaningful and inherently satisfying and enjoyable.
Introjected Regulation	Behaviour that is regulated by a need to foster self-worth or to avoid guilt, anxiety or shame.
Personal Growth	Developing strengths or talents; building skills to improve self psychologically or physically.
Personal Satisfaction	Fulfilment of a need, want or goal leading to feelings of contentment, happiness and achievement.
Positive Education	Integrating best practice in education and positive psychology – feeling good, functioning well and doing good – to create an effective learning environment for promoting and developing wellbeing knowledge and skills in students (Huppert, 2009; Slemp et al., 2017).

Relatedness	High-quality social connections with others
Self-actualisation	Reaching one's potential.
Self-development	Developing strengths or talents; building skills to improve self psychologically or physically.
Self-esteem	Subjective evaluation of self-worth or value.
Self-realisation	Defined in the relevant review studies as personal fulfilment and satisfaction as a result of achieving goals, realising talents, skills and knowledge, being happy with self (Bukhalenkova, 2018b; Joos, 2003).
Values	Guiding life principles that reflect desirable broad goals (Schwartz& Badi, 2001).
Wellbeing	The constituents of psychological health including positive emotions, engagement, relationships, meaning and accomplishment (Seligman, 2011).

Appendix B: Details of Study Measures

Measure	Description
Adolescent Perception of Success (APS).	Provided 11 definitions of success: <i>Luck, good fortune</i> <i>Popularity in society, fame</i> <i>Recognition by authoritative people of importance to you</i> <i>Attainment of the goals set</i> <i>Satisfaction from the process of doing a job</i> <i>Satisfaction of a job well done</i> <i>The feeling of well-deserved happiness, joy</i> <i>Overcoming of obstacles</i> <i>Personal growth, self-improvement^a</i> <i>Realization of one's abilities, skills and knowledge in the results of one's activity</i> <i>Happiness^a</i> Participants indicated on a five-point scale the degree that each statement corresponded with their understanding of success.
Subjective Perceptions of Success.	Participants indicated on a five-point scale their degree of agreement with 11 statements that pertained to 'achieving success', 'feeling successful' or 'striving for success' across different areas in their life (school, friendships, personal life, society, and overall sense of success).
Meaningful Life Orientations.	Insufficient information was provided regarding this measure, but it appeared to assess perceived control over life and planning for the future. Consists of five sub-scales and a composite scale: 1. <i>Purpose in life^b</i> 2. <i>Process of life – life satisfaction</i> 3. <i>Results of life^b</i> 4. <i>Locus of control – I^b</i> 5. <i>Locus of control- life: capability to manage life, belief that life provides opportunities to realise of goals and dreams</i> 6. <i>Overall life meaning</i>
Meaning in life.	It was not possible to determine the specific details of this measure.

Measure	Description
Self-Esteem.	Measured real-time self-esteem relating to peer authority, ability to overcome difficulties, and successfulness. Further details on this measure could not be ascertained due to insufficient information.
State of Our Nation's Youth Survey: 2001-2003	Investigated definition of success in life^c. Survey question: <i>People today define success in lots of ways. For each of the following, please tell me how important the item is in your personal definition of success in life (very important, somewhat important, or not important at all).</i> <i>Having close family relationships</i> <i>Having a close group of friends</i> <i>Making a contribution to society</i> <i>Making a lot of money</i> <i>Having an active spiritual life</i> <i>Being famous or respected</i> <i>Being attractive and popular</i>
State of Our Nation's Youth Survey: 1998-2000	Investigated factors important to personal success^d Participants rated the extent to which they agreed with the following statements as being important or critical to their personal success: <i>Immediate family</i> <i>Extended family</i> <i>Friendships</i> <i>Make a contribution to society</i> <i>Work and career</i> <i>Religious/spiritual activities</i> <i>Personal development and satisfaction</i>

Note: ^aThese items were not included in the APS measure used by Bukhalenkova (2013). ^bA description of these scales was not provided. ^cRating scale changed and statements revised from previous years to include more traditional definitions of success. ^dThe exact survey question and rating scale were not stated in this report.