REVIEW ARTICLE



Hope that Benefits Others: A Systematic Literature Review of Hope Theory and Prosocial Outcomes

Zachary Schornick¹ · Nolan Ellis¹ · Elizabeth Ray² · Bobbi-Jo Snyder¹ · Kendra Thomas³

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Abstract

This systematic literature review serves to illuminate the state of research that examines empirical evidence of hope and other-oriented variables (i.e. benefit individuals other than those who are being measured in the included studies). Thirteen articles were eligible for inclusion after the screening process and snowballing. Hope was positively related to variables such as social support seeking, altruism, community and social participation, and acting in favor of helping others. Data from the included studies revealed that individuals who score high on hope perform more behaviors that benefit others. These findings indicate that Hope Theory might provide a small glimpse into its definition of hope as a virtue that benefits others. This systematic review points to the dearth of research of hope as an individual difference that benefits others, but the potential of this line of inquiry.

Keywords Hope \cdot Hope Theory \cdot Prosociality \cdot Character development \cdot Systematic review

1 Introduction

The dominant paradigm of empirical hope research in psychology is Hope Theory (Snyder, 2002), and the studies of the past decade have highlighted the utility of integrating hope into one's life for personal growth and positive individual outcomes. However, philosophers and theologians have also long categorized hope as a virtue (Snow, 2018), one that is rooted in relationships, faith (Scioli, 2020), and

¹ The College of Applied Behavioral Sciences, University of Indianapolis, Indianapolis, IN, USA

Zachary Schornick schornickz@uindy.edu

² Department of Psychological and Brain Sciences, Indiana University Bloomington, Bloomington, IN, USA

³ Psychology Department, Hope College, Holland, MI, USA

social change (Tanesini, 2020). The current systematic literature review serves to illuminate the state of research that examines empirical evidence of hope (as defined by Hope Theory) and other-oriented benefits. The purpose of this paper is to understand the extent to which the existing evidence points to hope as a character virtue that provides inherent benefit to others, as opposed to one that is honed solely for self-improvement or mental health (e.g. better grades or positive health outcomes). The introduction will outline existing research on Hope Theory and propose the importance of systematically investigating hope as a virtue that benefits others.

1.1 Hope Theory

The dominant research paradigm of hope in psychology has been established by C. R. Snyder et al. (1991), who defined hope as a parallel system of both agency (the will to achieve one's goals), and pathways (the means of achieving those goals). According to Hope Theory, hopeful thinking requires the successful integration of both agentic and pathway thinking, and more successful hope usually involves multiple pathways to account for future challenges (Snyder, 2002). Generating multiple pathways suggests an action-oriented approach where there is an overarching goal with multiple smaller goals along the way. Having pathways to achieve these smaller goals allows people to experience positive emotions that propel them towards continuing their pursuit of the larger overarching goals.

The Adult Dispositional Hope Scale uses twelve items: four for pathways, four for agency, and four distractors (Snyder, et al., 1991), while the Children's Hope Scale uses six items: 3 for each subscale (Snyder et al., 1997a, 1997b). Snyder's Hope Theory scales have consistently held strong reliability and validity. (Snyder et al., 2007; Valle, et al., 2004). The Hope Scale has been broadly used with acceptable scale reliability in populations outside of the US, such as French adults (Gana et al., 2013), Serbian adolescents (Jovanović, 2013), Japanese undergraduates (Kato & Snyder, 2005), Chinese youths in both low and high income households (Lei, et al., 2019), and South African children (Savahl et al., 2020).

Research on this model suggests that the effectiveness of hope in part lies within these expectations of positive emotions that propel plans into motion (Snyder et al., 2002; Rand & Touza, 2021). In this sense, goal achievements create a feedback loop that allows for sustaining high hope. Conversely, multiple failed attempts at meeting one's goals can result in a loss of hope (Rand and Cheavens, 2009). Hope Theory has generated a vast amount of research (Corn et al., 2020; Yotsidi et al., 2018). Much of Hope Theory examines hope as a precursor to positive individual outcomes, with higher levels of hope predicting better psychological and physical well-being, emotional regulation, and higher academic and work performance (Rand & Touza, 2021). There is also work demonstrating how hope acts as both a buffer and a coping mechanism that gives purpose and meaning to individuals in the midst of adverse experiences (Scioli, 2020).

The Snyder model distinguishes hope from optimism and self-efficacy (Rand, 2018). Whereas optimism means possessing a general belief that life events or experiences will unfold in one's favor, hope means developing plans to ensure these

events come to fruition. Optimism could be unfounded, superstitious, or passive. Self-efficacy is the amount one believes in their ability to achieve their goals, but, contrary to hope, does not mean possessing the will to follow-through (Rand, 2018). Hope theory grounds itself in action for personal gain, and has been examined within the scope of individual benefit since Hope Theory's emergence.

A recent review of Hope Theory revealed the emphasis psychology has put on the individual benefits of hope, such as greater well-being, physical health, and greater academic and work performance (Rand & Touza, 2021). That review also noted how deeply hope is rooted in relationships and faith, and how psychology has yet to examine the relationship between hope and these transcendent and relational constructs.

Psychological studies of hope's benefit for others have not been prolific. The purpose of this systematic review is to understand what evidence there is within Hope Theory that demonstrates its connection to other-oriented constructs, ones that benefit those outside of the hopeful individual. To advocate for the rationale of hope as a virtue that has communal value, the section below will outline the theoretical connection between hope and character development that supports the rationale for this review.

1.2 Character Development and the Common Good

Character is a system that involves other-regarding socio-emotional skills, such as being able to take others' perspectives (Nucci, 2018). Perspective-taking is important for cultivating positive relationships, and positive relationships are key for developing character (Lerner & Callina, 2014). Maintaining and reinforcing positive relationships are influential factors of guiding character development (Lerner, 2018). The purpose of developing character is to possess knowledge that allows people to seek meaningful ways to thrive and succeed within their community. Much of the philosophical research on character development comes from the neo-Aristotelian paradigm that character benefits the broader community (Lavy, 2020). Developing character relies on social cues to determine what aspects of character are a good fit for interacting with the environment one resides in. Because of this, character enables one to live a life that is beneficial for both the individual and the community (Narvaez, 2008).

Character development and hope are both closely tied to relationship development and quality. Erikson and Erikson's (1998) psychosocial theory claims that hope originates alongside infant attachment. According to Erikson and Erikson (1998), hope is nurtured through maternal care and is deeply embedded in relationships. Similarly, positive relationships drive the development of character virtues in children (Thomas et al., 2022; Berkowitz et al., 2017). This aligns with the idea that attachment is needed for the cultivation of hope as a virtue (Scioli, 2020).

Hope is considered morally positive, a component of character development, and a character strength in the Values In Action Inventory of Strengths (VIA-IS) and Values In Action Youth Survey (VIA-Youth) (Wagner, 2019; Wagner et al., 2021; Ray et al., In Press). Studies utilizing the VIA character trait assessments have identified connections between hope and various relational outcomes in adolescents (Wagner, 2019) and adults (Wagner et al., 2021). In adolescents administered the VIA-Youth Survey, hope was viewed as a positive personal characteristic as well as an important and valuable characteristic in a friend (Wagner, 2019). More research is necessary to establish reliability of the VIA-Youth in adolescents across cultures, languages, and countries (Ray et al., In Press). In adult samples utilizing the VIA-IS, hope is a predictor of flourishing, subjective well-being, and general well-being in contexts of work, love, education, and leisure (Wagner et al., 2021). Hope (defined by VIA-IS) relates to marital satisfaction, decreased relationship burnout in couples, and intimacy (Boiman-Meshita & Littman-Ovadia, 2022). Also, partners are similar in their expression of hope suggesting assortative mating (Brauer et al., 2022).

Research on hope outside of Hope Theory and the VIA-IS has documented the connection between hopeful thinking and contributions to the common good (Snyder 1997b), and has shown hope to be an important predictor of life satisfaction (Park et al., 2004; Peterson & Seligman, 2004). Contribution is a pillar of positive youth development (Lerner et al., 2005; Schmid et al., 2011), and having hopeful future expectations are demonstrated to engender individuals to positively contribute to their families, communities, and society (Snyder et al., 1997b; Flanagan, 2003). Since Hope Theory is the primary paradigm used to study hope, it is imperative that researchers have a clear picture of how this paradigm has documented other-oriented values and outcomes.

1.3 Purpose of Current Study

In sum, there are strong theoretical reasons to understand how hope can benefit those beyond the hopeful individual. However, the dominant paradigm for hope research does not specify the value for others. Thus, this review seeks empirical evidence for the communal virtuous value that hope possesses. This paper examines the empirical research conducted on the prevalence of research on hope theory and variables that highlight positive outcomes to other people, or the common good. Since hope has been historically written as a virtue in philosophical and theological writings, it is important to explore the prosocial and other-benefiting variables it has been empirically associated with. The purpose of this review is to understand the scope of relevant research between Hope Theory and the benefit and wellbeing of others.

2 Methods

2.1 Search Method

A systematic literature search was conducted on Hope Theory and variables that are *good for others* (i.e. benefit separate individuals from those who are measured in hope). Four electronic search databases (PsychINFO, PsychArticles, Psychbooks, PsychEXTRA) were searched for scientific, peer-reviewed, published articles utilizing a variety of search terms ("hope theory" and any one of the following: virtue, social support, altruism OR altruistic, compassion, collaboration OR collaborative OR collaborate, community, morality, prosocial, teamwork, cooperation, "community hope," and prosociality). In addition, articles were searched via snowballing of the ones found in the above method, and individual researchers were contacted for unpublished findings and feedback.

The following search combinations yielded results and led to articles included in the final review: "Hope theory" which was searched with the following terms; "Virtue," "Social support," "Altruism or altruistic," "Compassion," "Collaboration or collaborative or collaborate," "Community," "Morality," and "Prosocial." Examples of search combinations utilized before deciding various exclusion criteria (i.e. Hope Theory; not Hope Theory or Hope) include: Hope, Negative predictor, Change, Hope Theory, Prosocial, Moral virtue, Social support, Learning, Predicting, Character virtue, Predicting.

2.1.1 Screening Method, Inclusion Criteria, and Exclusion Criteria

Authors conducted different listed search combinations and screened each search result based on inclusion and exclusion criteria. Studies met the inclusion criteria if they had a Hope Theory quantitative measurement (Snyder & Lopez, 2002), and had a measure that fit within a broad umbrella definition of *benefiting others*. Benefiting others could be measurements such as prosocial behaviors, anti-bullying actions, volunteerism, collaborative efforts, etc. There were multiple exclusion criteria that excluded articles from further analysis such as using operational definitions and measurements outside Hope Theory (Snyder & Lopez, 2002). Behaviors were excluded from review if the behavior's main objective was primarily self-benefiting. For example, Klausner et al. (2002) was excluded during full text-review because, although the intervention was group based (hope-based group treatments for depressed older adult outpatients), all measured outcomes were of personal benefit. This study included both communal behaviors (group treatments), and benefiting oneself (outcome of one's treatment after program). However, the measurement that was used (success) was a personal outcome not an outcome that benefited others. Literature reviews were initially flagged in the search term process, but were also excluded due to the lack of empirical data, which was a criteria for inclusion.

After initial screening based on inclusion and exclusion criteria, a second screener reviewed each article. This led to either a confirmation of the initial screening or discussion between the collective group of authors to reach a consensus on inclusion and exclusion criteria. This iterative process generated a robust and internally consistent review process. Using the PRISMA Method (See Fig. 1 for PRISMA Flowchart) (Liberati et al., 2009), articles (n=105) were first identified. Based on abstract screening and removal of repeated articles from the screening list, a total of 89 articles were excluded and 24 articles remained eligible for full text screening.

Of these 24, 17 articles were excluded using the inclusion and exclusion criteria, leaving seven articles identified through database search as eligible for inclusion. Each of the seven articles were then *audited*, reviewed again by a second author, with the second round of authors ensuring all details were noted accurately and

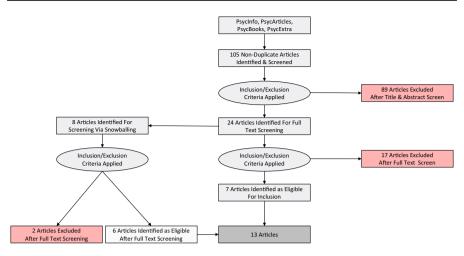


Fig. 1 PRISMA Flowchart

wholly. Whenever there was any question about the fit of a specific article, or how to best summarize the information, the team of authors discussed it and further honed the inclusion and exclusion criteria. Throughout the screening process, eight additional articles were identified and included for screening from snowballing (n=8). Of the eight additional articles identified using snowballing, two were excluded upon full review and six were included based on inclusion and exclusion criteria (n=6). Each of the articles were also *audited* with the second round of authors ensuring all details were noted accurately and wholly. Upon final review, another article was excluded due to having a relatively weak connection to our "good for others" criteria. A total of twelve articles were eligible for inclusion. See Fig. 1.

2.2 Assessing Publication Bias

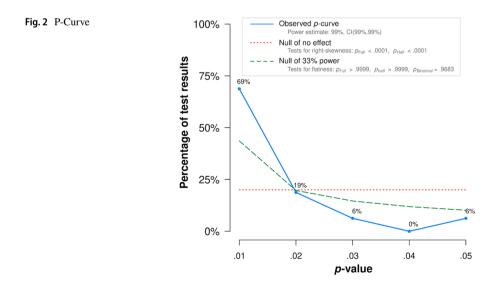
The extensive survey of the empirical studies on hope and benefit for others led to a limited amount of studies. To assess the extent to which publication bias may have affected our limited identification of published studies, researchers contacted relevant researchers in the field. To get other perspectives on our search methodology and outcomes, the authors contacted the researchers who had published most recently and relevantly and had articles included in this study. A total of four researchers were contacted and authors corresponded with three who responded. All three researchers who responded said they were not surprised that this systematic search revealed few empirical studies. One scholar even suggested that there is nothing inherent to Hope Theory operational definition that is inherently virtuous or other-benefiting. The contacted researchers found it believable that the available literature was likely as thin as this systematic review revealed and provides face validity to the small amount of published literature on this topic.

2.3 Assessing p Hacking

Researchers utilized p-curve analysis to analyze the distribution of the included studies' p-values and understand the vulnerability of this review to p-hacking (when researchers engage in questionable analysis practices for findings just below the significance level; See Fig. 2). To do this, we utilized the p-curve app created by Simonsohn, Nelson, and Simmons (http://www.p-curve.com/app4/) One study had to be excluded from p-curve analysis due to inadequate data detail for the app to calculate the precise p-value. According to guidance from Simonsohn et al. (2014), since both the half and full p-curve test are right-skewed with p < 0.05, p-curve analysis indicates that p-hacking is unlikely to have occurred in our sample of studies.

3 Results

All studies included in this review are detailed in Table 1. Five of the studies were conducted in educational contexts (four colleges and one K-12 school). Three studies were conducted in support/recovery groups (for spinal cord injury, drug/alcohol addiction, and parents of children with FASD/ASD). Two studies were conducted in work environments and four studies were interventions. All but one study was conducted in Western countries, with nine studies from the US, one from Canada, one including data from US, Canada, and the UK, and one from China. Six of the thirteen studies mentioned some type of adversity such as poverty, a violent environment, severe medical conditions, addictions, and major organizational changes at work. Ten studies utilized a correlational design method and two studies were experimental.



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Included Article Research Grafts Stungt item from Good for others Stungt item from Coord for others Stungt item from Coord for others Results (K kg) Blake, et al. (2018) To determine if Coord for others F									
18) To determine if hope predicts Correlation in community in community The Impact on the borg predicts The off ances of home predicts Protectiated with community Oper Agency is correlated with community An participation in community Participation in community The Impact on community The chances of in community Prosocial subscales Hope Agency is in community An participation in community Community community Community in community Community community Community protection in contralated with Participation Participation Participation Participation Participation Participation Parti	Included Article	Research Goals & Purpose	Study Design	Good for others measure utilized	Sample item from Good for others measure	Good for others measure informa- tion	P value(s) for Good for others Measure		Results & Key Findings
Evaluated hope as a Correlational protective factor The Social Skills The Social Skills The Social Skills The Social Skills Presentation Hope is negatively Hope is negatively Hope is negatively Presentation Presentin Presentation Presentat	Blake, et al. (2018)	To determine if hope predicts participation in community events	Correlational	The Impact on Participation and Autonomy Ques- tionnaire (IPAQ; Cardol et al., 1999) reverse coded to measure likelihood of community participation	"The chances of me being able to do my paid or voluntary work are"	Prosocial subscales include ability to carry out family duties, participate in social gatherings, and contribute in one's occupation (work/school)	Hope Agency is correlated with Community Participation (p < 0.1). Hope Pathways is correlated with Community Participation (p < 0.01)	Hope Agency is correlated with Community Participation (r = 47). Hope Pathways is correlated with Community Participation (r = .53)	Attachment theory predicts hope, attachment medi- ates hope and participation, and increases social and community participation
To further validate Correlational Qualitatively cod- N/A, qualitative Goals generated by Hope significantly Hope significantly Snyder's hope ing responses judgment of par- participants were predicts long predicts long Scale to open-ended ticipant goals as binarily coded as term, prosocial term, prosocial scale to open-ended ticipant goals as binarily coded as term, prosocial term, prosocial participant's goal prosocial or not prosocial or not goals (p=.005) goals (b=.04) participant's goal cintraclass cor- achievement, relation =0.95)	Cedeno, et al. (2010)	Evaluated hope as a protective factor against problem behaviors and explored relation- ships with expo- sure to violence and social skills		The Social Skills Rating System Survey (SSRS-T)	The Social Skills Rating System Survey (SSRS-T) included follow- ing items for: PBs: "verbal or physical ageres- sion toward others, arguing," and SC: "dem- onstrates helping behaviors, appro- priately responds to conflicts"	SSRS-T includes social compe- tence (a = 94; cooperation, assertion, and self-control) and problem behav- iors (a = .88; externalizing and internalizing) subscales; teacher rates each student	Hope is negatively correlated with external- izing behaviors (p < 0.05). There is no significant correlation between hope and social skills for boys or girls (p > 0.05)	Hope is negatively correlated with external- izing behaviors (r = -0.27). There is no significant correlation between hope and social skills for boys or girls	Problem behav- iors were more frequent and social skills were lower among those with more exposure to violence. However, hope was found to be a protective factor, lowering externalizing behaviors
	Cheavens, et al. (2019)	To further validate Snyder's hope scale	Correlational	Qualitatively cod- ing responses to open-ended essays on participant's goal achievement,	N/A, qualitative judgment of par- ticipant goals as prosocial or not	Goals generated by participants were binarily coded as prosocial or not (intraclass cor- relation = 0.95)	Hope significantly predicts long term, prosocial goals (p= .005)	Hope significantly predicts long- term, prosocial goals (b = .04)	Higher hope scores were related to more prosocial goals

Table 1 Results Table

Table 1 (continued)	ed)							
Included Article	Research Goals & Purpose	Study Design	Good for others measure utilized	Sample item from Good for others measure	Good for others measure informa- tion	P value(s) for Good for others Measure	Effect sizes for Good for others Measure	Results & Key Findings
Dekhtyar, et al. (2012)	To determine whether agentic hope is con- nected to lower reincarceration rates among indi- vdiuals presently imprisoned	Correlational	A modified version of Miller & Del Boca's Form 90 (1994)	A self-report of previous 90 day incarceration for the Good for oth- ers measurement	Self-report of incar- ceration over the past 90 days	Higher agency predicts lower incarceration ($p = .02$). Higher global hope predicts lower incarceration ($p = .04$)	Higher agency predicts lower incarceration (odds ratio = .72), higher global hope predicts lower incar- cration (odds ratio = .90). Each one-unit increase of agency was associated with a 24% lower chance of reincarceration within one year	Dekhtyar, et al. sup- ported the hypoth- esis that lower levels of global hope and agency would significantly predict reincarcera- tion, but pathways would not predict reincarceration
Ferrari and et al., (2014)	Explored which characteristics best determine an individual's like- lihood to volun- teer by examining hope's effect on volunteerism	Correlational	The Civic Action scale, which measures ratings of willingness to participate in activities that benefit one's community (Moely, et al., 2002)	"I plan to help others who are in difficulty."	Civic Action scale: 8-items, a= .88; Universal Orien- tation Scale: 20 items, a = .76	Hope Pathways is correlated with civic action (p < 0.01). Hope Pathways is correlated with non-prejudice (p < 0.001). Hope Agency is correlated with non-prejudice (p < 0.04)	Hope Pathways is correlated with civic action (r = .329). Hope Pathways is correlated with non-prejudice (r = .382). Hope Agency is correlated with non-prejudice (r = .283)	In students who engage in campus activities, hopeful tendencies for addressing social issues in com- munity engagement is predicted by non- prejudicial beliefs

Table 1 (continued)	1)							
Included Article	Research Goals & Purpose	Study Design	Good for others measure utilized	Sample item from Good for others measure	Good for others measure informa- tion	P value(s) for Good for others Measure	Effect sizes for Good for others Measure	Results & Key Findings
Fraser (2021)	Examined connections between hope, prosociality, and citizenship	Correlational	The Civic Engage- ment Scale, the Multidimen- sional Measure of Prosocial Behavior, and a measurement for effortful control	An example of an item from the Multidimensional Measure of Prosocial Behav- ior is: "If I see someone being given a hard time, I stand up for that person."	The Multidimen- sional Measure of Prosocial Behavior (a = .90, instrumental/ problem solving and empathic sub- scales), Effortul Control (Activa- tion control: doing unwanted behav- tion control: doing unwanted behav- ing pleasing yet socially undesir- able behaviors)	Hope predicts prosocial behavior scores ($p < 0.01$). Hope predicts volunteer hours ($p < 0.05$)	Hope predicts prosocial behavior scores (beta = 43). Hope predicts volunteer hours (beta = .31)	Hope and prosocial behavior are related such that civic attitudes predicted prosocial activity in one's community
Geiger, et al. (2019)	To determine whether teaching hope leads to more engagement in climate change discussions	Experimental	This article measured Good for others as engagement in discussions about climate change	Frequency of discussion with visitors was measured for engagement in discussion about climate change	Participants report frequency that they discuss climate change with (1) the general public and (2) visions to the institution (200/aquarium/ national park) on a scale of () (never)-8 (eve- ryday); $a=.86$ (pre-training) and $a=.74$ (post- training)	Hope was signifi- cantly correlated with more dif- ficult discussions (p < .01)	Hope was signifi- cantly correlated with more dif- ficult discussions (r = .53)	The intervention promoted more discussions through pathways thinking

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 subscales for compassion and empathy, and the Balanced Emo- tional Empathy Scale (BEES)			hope by examin- ing how the After School Matters program cor- relates with hope and compassion
	Scate was: "When Scate was: "When bers or fright mem- bers or fright mem- bers or fright mem- a need to reach out to them." An example litem from the Bal- anced Emotional Empathy Scale (BEES) was: "I cannot feel much sorrow for those who are responsi- ble for their own misery."	I see family mem- bers or friends bers or friends teeling sad, I feel a need to reach out to them." An example item from the Bal- anced Emotional Empathy Scale (BEES) was: "I cannot feel much sorrow for those who are responsi- ble for their own misery."	sions of 21-item Scale was: "When subscales for I see family mem- compassion and bers or friends empathy, and the feeling sad. I feel Balanced Emo- a need to reach tional Empathy out to them." An Scale (BEES) count the Bal- anced Emotional Empathy Scale (BEES) was: "I cannot feel much sorrow feel much sorrow feel much misery."

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Included Article	Research Goals & Purpose	Study Design	Good for others measure utilized	Sample item from Good for others measure	Good for others measure informa- tion	P value(s) for Good for others Measure	Effect sizes for Good for others Measure	Results & Key Findings
Wang and Lei (2021)	To determine the mediating effects of proactive engagement on job satisfaction	Correlational	The Social Support Rating Scale (Xiao, 1994)	"How many close friends do you have who can get social support and help?"	10 items, 3 sub- scales (subjective support, objective support, support utilization), a = .82	Hope is cor- related with Job Satisfaction ($p < 001$). Hope ($p < 001$) Hope with Perceived with Perceived Social Support ($p < 001$)	Hope is cor- related with Job Satisfaction (r=.39). Hope is correlated with Perceived Social Support (r=.40)	Participants with high proactive personalities held a significantly higher sense of hope
Watson et al. (2013)	Sought to under- stand the impact of caregiver hopefulness on the future of chil- dren living with FASD/autism	Correlational	The Questionnaire on Resources and Stress, Friedrich's Short Form (QRS-F) and qualitative inter- view questions	"T worry about what will happen to when I can no longer take care of him/ care of him/ of a qualitative interview ques- tion includes: "T would like to see him have a family and live on his own."	Used 31 items from the QRS-F with the parent/family problems and the parental pessimism subscales; past research found Kuder-Richard- son coefficients (type of internal consistency) for mothers (.93) and fathers (.85)	There were no significant differences in Hope Theory measurements between parents of children with autism and FASD (p > 0.05)	There were no significant differences in Hope Theory measurements between parents of children with autism and FASD	No significant differ- ences in hopeful- ness or concern between caregivers of a child with autism or FASD's future. Caregivers of children with either diagnosis were worried about the future well- being of their chil- dren. Qualitatively, parents of children with FASD were less hopeful about their child's future, citing the possibil- ity of a variety of negative social and vocational outcomes

Table 1 (continued)	ed)							
Included Article	Research Goals & Purpose	Study Design	Good for others measure utilized	Sample item from Good for others measure	Good for others measure informa- tion	P value(s) for Good Effect sizes for for others Measure Good for other Measure	Effect sizes for Good for others Measure	Results & Key Findings
White-Zappa (2001)	To determine the value of appre- ciative inquiry in building employee hope and organiza- tional good for others behaviors	Experimental	Self and supervi- sor reports of employees' Organizational Citizenship Behavior (OCB) scale; self-report of employees' motivation to do OCBs; and measures of work ethic, respect for others, coop- eration, positive mindset, being helpful beyond requirements, and rule compliance	"I help others with heavy work- loads."	Four types of OCB were measured for employees: conscientiounsess (a = .6152), altru- ism (a = .8444), sportsmanship (a = .7051), and civic virtue (a = .8495)	Hope is correlated with altruism ($p < 0.01$). Hope is correlated with Civic virtue ($p < 0.01$). Hope Levels with use of AI ($p < 0.001$)	Hope is correlated with altruism (r = .526). Hope correlated with Civic virtue, (r = .439)	Appreciative inquiry was effective at increasing employee hope and OCBs. Increased hope correlated with increased OCBs

3.1 Other-Benefitting Outcomes

There were a wide variety of other-benefiting variables that were examined within the identified studies. Some of the measured other-benefitting variables appear to focus on positive behaviors that have a clear benefit to others while other variables are more focused on restraint of behaviors that would be harmful to others or the broader group. Some studies also used qualitative measures of good-forothers including categorizing the written goals of study participants as prosocial or not prosocial and analyzing the concerns that caregivers had for their children. The variables examined include social support seeking, altruism, community and organization participation, decreased delinquency, civic attitude and advocacy, conversation willingness, increased compassionate relationships, lower externalizing behaviors, and acting in favor of helping others. Reported effect sizes were typically in the medium range with reported beta coefficients ranging from 0.31 to 0.43 and Pearson's correlations ranging from 0.27 to 0.53. Only one study used odds ratios, reporting 0.90 and 0.72, indicating hope and agency's inverse relationship to reincarceration.

The intervention based articles found that interventions focused around increasing hope were also related to creating and acting upon more prosocial goals and increasing organizational citizenship behaviors (actions beyond one's individual job description that help others and the company). Increasing hope through increasing pathways was also linked to higher willingness to engage in conversations that were difficult but useful and productive.

Secure attachments were associated with hope (Blake et al., 2018), secure attachment mediates hope participation in community-based interventions, and increasing hope related to increased volunteering in group-based treatments for spinal cord injuries. Further, participants with high proactive personalities in the workplace (i.e. taking initiative on work tasks and actively engaging with colleagues and leaders) held a significantly higher level of hope (Wang & Lei, 2021). Relationships that foster compassion also foster hope (Guthrie, 2012). A qualitative examination found that children who received compassion expressed higher hope, and also expressed more compassion towards their peers (Guthrie, 2012).

Multiple studies centered around adversity of some sort. Guthrie (2012) found that when youth experience financial hardship, their hope comes from their relationships with others, and receiving compassion from others increases hope and leads to more compassion for others. Cedeno et al. (2010) found that increased exposure to violence was correlated with lower social skills and an uptick in problem behavior frequency. However, hope was a protective factor linked to lower externalizing behaviors such as verbal or physical aggression towards others and arguing.

Data from the other-benefitting measures across the included studies revealed that people who score high on hope were more likely to perform behaviors that benefit others. No inverse relationships were found in any examined study. Fraser (2021) found that hope was linked to more civic attitudes such as advocacy and a belief in one's obligation to make a difference in the community, which correlated with increased prosocial activity in one's community. Ferrari et al. (2014) found that, among students who engage in campus activities, hopeful tendencies

for addressing social issues in community engagement was predicted by nonprejudicial beliefs. Dekhtyar and colleagues (2012), supported the hypothesis that higher levels of global hope and agency significantly predicted lower reincarceration among mutual-help recovery residents. However, pathways specifically did not predict reincarceration. This nuance demonstrates that hope theory's sub-constructs might provide a glimpse into its definition as a virtue that benefits others or its connection with character development.

3.2 Comparison of Hope Scores Across Samples

There appear to be meaningful quantitative differences in hope across samples as measured by the Children's Hope Scale and the Adult Hope Scale. While most of the studies' results were quantitatively comparable (see Table 2), Geiger et al. (2019) was excluded as it used modified items and an abnormal number of items. Two studies using the Children's Hope Scale were conducted in high-adversity settings (poverty and violence), yet despite these hardships, their hope scores were quite high. Two standards were found, including the findings from Snyder et al. (1997a, b) of an average score of around 25 for the Children's Hope Scale, with later research by Lopez et al. (2000) reporting that the top 15% most hopeful children studied had a score of 29 or higher. Given these benchmarks, Guthrie's (2012) sample of after-school program participants has remarkably high hope with a mean of 29.52 despite their adversity. However, Guthrie (2012) recognizes that this may not be a result of the after-school program. She reasons that participants in the program were likely some of the most motivated youth in the community, so the high hope scores found may reflect the program's attraction to already hopeful youth as opposed to an actual hope builder. Likewise, the sample of students from Cedeno et al. (2010) also had a high mean hope score (26.91) even in the presence of poverty and school violence.

Among the studies utilizing the Adult Hope Scale, Ferrari et al. (2014), Dekhtyar et al. (2012), and Wang and Lei (2021) appear to have particularly low hope scores compared to the Adult Hope Scale's average score of 48 (Lopez et al., 2000; see Table 2). Ferrari and colleagues (2014) reported an abnormally low mean hope score among undergraduate students, falling even lower than individuals who were previously incarcerated (Dekhtyar et al., 2012). The low hope scores from Dekhtyar et al. (2012) are understandable as participants were simultaneously contending with substance abuse issues and the hardships that come with having previously been incarcerated such as higher rates of both unemployment (Couloute & Kopf, 2018) and insecure housing (Herbert et al., 2015). The sample of workers in a mining region of China from Wang and Lei (2021) also has a particularly low average Hope Scale score compared to the other studies. Through these comparisons, it appears that contexts of high adversity, such as poverty and community violence, do not automatically relegate individuals to low amounts of hope, and a context of opportunity, such as a college environment, does not necessarily result in high levels of hope.

4 Discussion

This systematic review found a limited set of articles at the intersection of Hope Theory and other-oriented benefits. The authors hypothesize that this gap may be due to: (1) Hope Theory scale items are centered around personal goals which make examining other-benefitting behaviors difficult to measure, (2) the low number of studies could be masking publication bias, leading to an overrepresentation of positive significant results.

Of the twelve articles included in this systematic review, six were snowballed. This provides further evidence that research on hope's effect on other-benefitting variables lacks a central organization that would facilitate theory-building. All told, Hope Theory has not yet been consistently connected to a paradigm measuring the benefits of hope on the community and more data is needed for a full picture.

Beyond the community as a mere recipient of the benefits of individual hope, collectivist cultures may conceive of hopeful action as a more communal undertaking, a concept that Hope Theory is not designed to measure. Bernardo (2010) identified Hope Theory's focus on independent completion of personal goals (such as this sample item: "I meet the goals I set for myself"). This focus on personal goals and independent success may not match well with more collectivist cultures where goals are primarily chosen and completed by a group as opposed to the individual (King et al., 2012; Markus & Kitayama, 2003). Furthermore, when first validating the Hope Scale, Snyder et al. (1991) solely used American participants, limiting the validity of its application to other parts of the world. Khumalo and Guse (2022) examined hope within the socio-cultural context of South African samples and also underscored the importance of emphasizing one's environment on the development and expression of hope. With these two barriers to the application of Hope Theory beyond individual-focused cultures, it is unsurprising that this review found only one study from outside the Western world (Wang & Lei, 2021). At this juncture, Hope Theory does not appear to be suited for examining an interdependent sort of hope, a hope that evolves and coincides with relationships and benefits others as well as the individual.

Character development is inherently a feedback loop that is informed by, informs, and benefits the individual and the greater community (Lerner, 2018), and hope and character development are closely tied to relationships (Erikson and Erikson, 1998). Thus, as is,Hope Theory is missing an integral piece of hope's communal value. Hope Theory focuses on the individual benefits for hope and does not include any scale items examining the benefits that hope has on others and the greater community. The articles examined in this review indicate a link between hope and attachment, social support seeking, increased work ethic that benefits others, prosocial goals, social participation, community participation, proactive personalities, compassion, and emotional regulation. These are qualities associated with other-benefitting behaviors and found with articles that examined these qualities alongside hope theory. This provides evidence that having higher self-focused hope contributes to an individual's willingness to engage in proactive, community-based behaviors. This reinforces the perspective that hope is a

Table 2 Comparison Table	on Table								
Comparison of Hope Scale Scores	pe Scale Scores								
In-text Citation	Sample	Adult or Chil- dren's Hope Scale	Sum Means (Standard Devia- tion)	Possible Sum Mean Range	Item Means (Standard Devia- tion)	Possible Item Mean Range	Likert Point Scale	Comparison Score for AHS**	Sample Size
Blake et al., 2018Members of the National Spina Cord Injury Association in US, Canada, and the UK	Members of the National Spinal Cord Injury Association in US, Canada, and the UK	Adult	NR	N/A	3.14+*	1-4	4	3.14+*	105
Cedeno et al., 2010	African- American fifth graders from four elementary schools, low SES, violent school climate	Children	26.91 (6.11)	6-36	4.485 + *	1–6	9	N/A	132
Cheavens et al., 2019	American undergraduate students in an introductory psychology course	Adult	51.54 (5.31)	8-64	6.44 *	1-8	×	3.22 + *	162
Dekhtyar et al., 2012	Addiction recov- ery house resi- dents who had been incarcer- ated within the past 90 days	Adult	Later reincarcer- ated: 40.62 (8.61); Not later reincarcerated: 46.72 (8.97)	8-64	Later reincarcer- ated: 5.078 + *; Not later reincarcerated: 5.840 + *	1-8	×	Later reincarcer- ated: 2.539 +*; Not later reincarcerated: 2.920 + *	45

Comparison of Hope Scale Scores In-text Citation Sample Ferrari et al., Psychology 2014 undergradu- ates active in clubs or campus Fraser, 2021 First-year Ameri- can undergradu- ate students								
	Adult or Chil- dren's Hope Scale	Sum Means (Standard Devia- tion)	Possible Sum Mean Range	Item Means (Standard Devia- tion)	Possible Item Mean Range	Likert Point Scale	Comparison Score for AHS**	Sample Size
	Adult us	Agency: 6.49 (0.93), Pathways: 6.41 (1.06); Summed Total: 13.00 +*	8-32	1.63+*	1-4	4	1.63 + *	52
	i- Adult u-	NR	N/A	T1: 6.50 (1.16); T2: 6.67 (.98)	1-8	∞	T1: 3.25 + *; T2: 3.34 + *	217
Guter & Cheav- American ens, 2016 undergraduate students in an introductory psychology course	Adult	50.5 (6.5)	8-64	6.31+*	1-8	×	3.16+*	162
Guthrie, 2012 African-Ameri- can adolescents in an after- school program, age 14–18, low SES	Children 13, 11, v	29.52 (3.423)	6–36	4.92+*	1-6	9	N/A	42
Wang & Lei, Workers in petro- 2021 leum mining areas of North East China	o- Adult	NR	N/A	2.44 (.55)	4-1	4	2.44 (.55)	590

Table 2 (continued)	ed)								
Comparison of H	Comparison of Hope Scale Scores								
In-text Citation	Sample	Adult or Chil- dren's Hope Scale	Sum Means (Standard Devia- tion)	Possible Sum Item Means Mean Range (Standard Do tion)	Sum MeansPossible SumItem MeansPossible ItemLiker(Standard Devia-Mean Range(Standard Devia-Mean RangePointtion)tion)tion)Scale	Possible Item Likert Mean Range Point Scale	Likert Point Scale	Comparison Score for AHS**	Sample Size
Watson et al., 2013	Caregivers of children with ASD compared to caregivers of children with FASD in Canada	Adult	Autism Spectrum 8–64 Disorder: 51.13 (5.20), Fetal Alcohol Syndrome Disorder: 49.99 (9.77)	8-64	Autism Spectrum 1–8 Disorder: 6.391 + *, Fetal Alcohol Syndrome Dis- order: 6.249 + *	1-8	×	ASD: 3.196+*, 135 FASD: 3.125+*	135
White-Zappa, 2001	Employees from two behavioral health centers in the US undergoing major organiza- tional change	Adult	Pre-intervention: 27,48 *; Post- intervention: 29,11 *	8-32	Pre-intervention: 1–4 3.435 + *; Post- intervention: 3.639 + *	4-1	4	Pre-intervention: 3.435 +*; Post- intervention: 3.639 +*	173
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NR = sum mean not reported in original article, * = SD not reported or not available for calculated mean, + = calculated by present authors

** Calculated as an item mean on 4-point Likert scale for comparison across studies using the Adult Hope Scale

multifaceted virtue that has inherent communal value. However, to further the understanding of hope as a virtue, new measures could aid in the effort to solidify this understanding.

Other hope scales have been developed within the past 15 years that examine qualities beyond the individual self (Schrank, et al., 2011; Scioli, et al., 2011) such as faith, trust, and connection, but their utility and validity are not as well established yet. However, Hope Theory has been the primary paradigm for research, and viewing hope only through the lens of individual benefit could limit the possibility that hope's benefit extends beyond the person.

The identified articles examined various operationalizations of good-for-others variables including social support seeking, altruism, community and organization participation, decreased delinquency, civic attitude and advocacy, conversation will-ingness, increased compassionate relationships, lower externalizing behaviors, and acting in favor of helping others. Authors of the included studies theorized that hope correlates with these variables because higher hope is associated with increased benevolence, motivation, resilience to adversity, goal-setting and goal-directed behavior, emotional regulation, compassion, and job satisfaction. Furthermore, hope is theorized to be associated with these other-benefitting variables because of hope's link to decreased depression and anxiety. Future research is needed to further explore the role of these variables as covariates, mediators, or moderators between hope and other-benefitting variables.

4.1 Limitations

The current review established a broad inclusion criteria of benefiting others because of the lack of research that highlights benefits outside of the personal domain. The breadth of the inclusion criteria used was primarily due to the dearth of research on hope in the prosocial or character domains, requiring an even broader horizon. However, the large swath of search terms also made it challenging to ensure saturation of the topic. Six out of the twelve articles included were found through snowballing (checking the citations of articles found through our systematic search) as opposed to being found directly with the search terms. The authors interpret these challenges as a strong reason to theoretically align hope within character development to further hone the measurement, conceptualization, and organization of the literature. This review is a step in this direction. This review only included studies in which Snyder's Scale for Hope Theory was utilized. Measures for hope that were not in line with Snyder's Hope Theory (i.e. any scales other than Snyder's scale and Snyder's children's scale) were excluded from review. Hope Theory is the dominant paradigm of research and has generated the most empirical results within psychology, but is not comprehensive of all ways to psychometrically define hope. It is also important to note that the overwhelming majority of articles included in this review emerged from Western countries. Perhaps a more communally-defined and other-benefitting approach to the study of hope could help address the dearth of research in developing countries. Additionally, there was a lack of longitudinal studies for consideration

within this study, leading to a lack of insight into how hope develops over time within individuals.

4.2 Future Directions

Contrary to the work of religious and philosophical scholars on hope that emphasizes the role of personal relationships as source of hope and hope as a necessary part of morality (Scioli, 2020; Tanesini, 2020), Snyder's hope theory neglects to incorporate the social or moral component of hope included by most historical hope scholars. Snyder's Hope Theory instead focuses on variables relevant to the completion of personal goals rather than the nature of such goals, such as their value or harm to the social world. With only one study found using Hope Theory and good-for-others measures outside of the Western world, there is a clear need for more research to account for cultural differences in the expression of hope. Further, longitudinal studies on the development of hope across the lifespan, how stable hope is and how it changes over time, and its relation to adverse life events could provide fruitful insights into what contributes to hopefulness and what factors may change hope or help it remain stable over time. Caspi, et al. (2005) examined the benefits of understanding how individual differences variables remain stable or change over time within and between individuals.

5 Conclusion

The present study provides evidence that points to hope as a character virtue that provides inherent benefit for others. With hope theory being the predominant paradigm used in hope research, and with a demonstrable lack of central organization that would facilitate theory building, more research is needed to fully extrapolate our understanding of this position. Current research could be confining our ability to understand the full benefits hope has on the well being of individuals, others, and the greater community. This study advocates for the development of scales and measures that expands our understanding of the multidimensional utility and potential hope possesses.

Declarations

Ethical Approval Not Applicable.

Informed Consent Not Applicable.

Conflicts of Interest On behalf of all authors, the corresponding author states that there is no conflict of interest.

References

- Berkowitz, M. W., Bier, M. C., & McCauley, B. (2017). Toward a science of character education: Frameworks for identifying and implementing effective practices. *Journal of Character Education*, 13(1), 33–51.
- Bernardo, A. B. (2010). Extending hope theory: Internal and external locus of trait hope. *Personality* and *Individual Differences*, 49(8), 944–949.
- Blake, J., Yaghmaian, R., Brooks, J., Fais, C., & Chan, F. (2018). Attachment, hope, and participation: Testing an expanded model of Snyder's hope theory for prediction of participation for individuals with spinal cord injury. *Rehabilitation Psychology*, 63(2), 230–239. https://doi.org/10.1037/ rep0000204
- Boiman-Meshita, M., & Littman-Ovadia, H. (2022). Is it me or you? An actor-partner examination of the relationship between partners' character strengths and marital quality. *Journal of Happiness Studies*, 23(1), 195–210.
- Brauer, K., Sendatzki, R., Gander, F., Ruch, W., & Proyer, R. T. (2022). Profile Similarities Among Romantic Partners' Character Strengths and Their Associations with Relationship-and Life Satisfaction. *Journal of Research in Personality*, 104248.
- Cardol, M., de Haan, R. J., van den Bos, G. A., de Jong, B. A., & de Groot, I. J. (1999). The development of a handicap assessment questionnaire: The Impact on Participation and Autonomy (IPA). *Clinical Rehabilitation*, 13(5), 411–419.
- Caspi, A., Roberts, B. W., & Shiner, R. L. (2005). Personality development: Stability and change. Annual Review of Psychology, 56(1), 453–484. https://doi.org/10.1146/annurev.psych.55.090902.141913
- Cedeno, L. A., Elias, M. J., Kelly, S., & Chu, B. C. (2010). School violence, adjustment, and the influence of hope on low-income, African American youth. *American Journal of Orthopsychiatry*, 80(2), 213–226. https://doi.org/10.1111/j.1939-0025.2010.01025.x
- Cheavens, J. S., Heiy, J. E., Feldman, D. B., Benitez, C., & Rand, K. L. (2019). Hope, goals, and pathways: Further validating the hope scale with observer ratings. *The Journal of Positive Psychology*, 14(4), 452–462. https://doi.org/10.1080/17439760.2018.1484937
- Corn, B. W., Feldman, D. B., & Wexler, I. (2020). The science of hope. *The Lancet. Oncology*, 21(9), e452–e459. https://doi.org/10.1016/S1470-2045(20)30210-2
- Couloute, L., & Kopf, D. (2018). Out of prison & out of work: Unemployment among formerly incarcerated people. *Prison Policy Initiative*.
- Dekhtyar, M., Beasley, C. R., Jason, L. A., & Ferrari, J. R. (2012). Hope as a predictor of reincarceration among mutual-help recovery residents. *Journal of Offender Rehabilitation*, 51(7), 474–483. https:// doi.org/10.1080/10509674.2012.711806
- Erikson, E., & Erikson, J. (1998). The Life Cycle Completed. W. W. Norton & Company.
- Ferrari, J., Haq, A., & Williams, S. (2014). Hope in civic action: To be optimistic and non-prejudicial. College Student Journal, 48(2), 185–188.
- Flanagan, C. A. (2003). Trust, identity, and civic hope. Applied Developmental Science, 7(3), 165–171. https://doi.org/10.1207/S1532480XADS0703_7
- Fraser, A. M. (2021). Longitudinal associations of hope and prosocial and civic behaviors in emerging adulthood [ProQuest Information & Learning]. In Dissertation Abstracts International: Section B: The Sciences and Engineering 82(11–B).
- Gana, K., Daigre, S., & Ledrich, J. (2013). Psychometric properties of the French version of the adult dispositional hope scale. Assessment, 20(1), 114–118.
- Geiger, N., Gasper, K., Swim, J. K., & Fraser, J. (2019). Untangling the components of hope: Increasing pathways (not agency) explains the success of an intervention that increases educators' climate change discussions. *Journal of Environmental Psychology*, 66. https://doi.org/10.1016/j.jenvp.2019. 101366
- Guter, M. & Cheavens, J. S. (2016). Hope, values, and goals: Predicting goal success and mental health outcomes [Unpublished Manuscript]. Department of Psychology, Ohio State University.
- Guthrie, D. D. (2012). "Hope is the ticket to life": Insights from disadvantaged African American youth [ProQuest Information & Learning]. In Dissertation Abstracts International Section A: Humanities and Social Sciences, 72, (8–A), 2966.
- Herbert, C. W., Morenoff, J. D., & Harding, D. J. (2015). Homelessness and housing insecurity among former prisoners. RSF: The Russell Sage Foundation Journal of the Social Sciences, 1(2), 44–79.

- Jovanović, V. (2013). Evaluation of the Children's Hope Scale in Serbian adolescents: Dimensionality, measurement invariance across gender, convergent and incremental validity. *Child Indicators Research*, 6(4), 797–811.
- Kato, T., & Snyder, C. R. (2005). Relationship between hope and subjective well-being: Reliability and validity of the dispositional Hope Scale, Japanese version. *Shinrigaku kenkyu: The Japanese journal of psychology*, 76(3), 227–234.
- Khumalo, I. P., & Guse, T. (2022). Factor structure of the Dispositional Hope Scale amongst South Africans: An exploratory structural equation modelling study. *African Journal of Psychological* Assessment, 4, 9.
- King, R. B., McInerney, D. M., & Watkins, D. A. (2012). Competitiveness is not that bad... at least in the East: Testing the hierarchical model of achievement motivation in the Asian setting. *International Journal of Intercultural Relations*, 36(3), 446–457.
- Klausner, E. J., Snyder, C. R., & Cheavens, J. (2002). A hope-based group treatment for depressed older adult outpatients. *Physical Illness and Depression in Older Adults*, 295–310.
- Lavy, S. (2020). A review of character strengths interventions in twenty-first-century schools: Their importance and how they can be fostered. *Applied Research in Quality of Life*, 15(2), 573–596.
- Lei, H., Wang, Z., Peng, Z., Yuan, Y., & Li, Z. (2019). Hope across socioeconomic status: Examining measurement invariance of the Children's hope scale across socioeconomic status groups. *Frontiers in Psychology*, 10, 2593.
- Lerner, R. M. (2018). Character development among youth: Linking lives in time and place. International Journal of Behavioral Development, 42(2), 267–277. https://doi.org/10.1177/0165025417 711057
- Lerner, R. M., & Callina, K. S. (2014). The study of character development: Towards tests of a relational developmental systems model. *Human Development*, 57(6), 322–346.
- Lerner, R. M., Lerner, J. V., Almerigi, J., Theokas, C., Phelps, E., Gestsdottir, S., et al. (2005). Positive youth development, participation in community youth development programs, and community contributions of fifth grade adolescents: Findings from the first wave of the 4-H Study of Positive Youth Development. *Journal of Early Adolescence*, 25(1), 17–71. https://doi.org/10. 1177/0272431604272461
- Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P., ... & Moher, D. (2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: explanation and elaboration. *Journal of Clinical Epidemiology*, 62(10), e1-e34.
- Lopez, S. J., Ciarlelli, R., Coffman, L., Stone, M., & Wyatt, L. (2000). Diagnosing for strengths: On measuring hope building blocks. In C. R. Snyder (Ed.), *Handbook of hope: Theory, measures, and* applications. (pp. 57–85). Academic Press. https://doi.org/10.1016/B978-012654050-5/50006-3
- Markus, H. R., & Kitayama, S. (2003). Models of agency: Sociocultural diversity in the construction of action. In V. Murphy-Berman & J. J. Berman (Eds.), Cross-cultural differences in perspectives on the self (pp. 18–74). University of Nebraska Press.
- Narvaez, D. (2008). Human flourishing and moral development: Cognitive and neurobiological perspectives of virtue development. In L. Nucci & D. Narvaez (Eds.), *Handbook of moral and character education* (pp. 310–327). Routledge.
- Nucci, L. (2018). Character: A developmental system. Child Development Perspectives, 13(2), 73–78. https://doi.org/10.1111/cdep.12313
- Park, N., Peterson, C., & Seligman, M. E. P. (2004). Strengths of character and well-being: A closer look at hope and modesty. *Journal of Social and Clinical Psychology*, 23(5), 628–634. https://doi.org/10. 1521/jscp.23.5.628.50749
- Peterson, C., & Seligman, M. E. (2004). Character strengths and virtues: A handbook and classification (Vol. 1). Oxford University Press.
- Rand, K. L. & Touza, K. (2021). Hope theory. In C. R. Snyder & S. J. Lopez, L. M. Edwards, & S.C. Marques (Eds), *The Oxford Handbook of Positive Psychology (3rd, ed., pp. 425–442)*. Oxford University Press.
- Rand, K. L., & Cheavens, J. S. (2009). Hope theory. Oxford Handbook of Positive Psychology, 2, 323–333.
- Rand, K. (2018). Hope, self-efficacy, and optimism: Conceptual and empirical differences. *The Oxford Handbook of Hope*, 45–58. Oxford University Press.

- Ray, E. M., Zeigler, C. L., Brixey, M. J., Atzhon, J. D., & Thomas, K. J. (In Press). The VIA-Youth character assessment: A systematic literature review. *The Journal of Psychology and the Behavioral Sciences*.
- Savahl, S., Adams, S., Florence, M., Casas, F., Mpilo, M., Louise Sinclair, D., & Manuel, D. (2020). Afrikaans adaptation of the children's hope scale: Validation and measurement invariance. *Cogent Psychology*, 7(1), 1853010.
- Schmid, K. L., Phelps, E., & Lerner, R. M. (2011). Constructing positive futures: Modeling the relationship between adolescents' hopeful future expectations and intentional self-regulation in predicting positive youth development. *Journal of Adolescence*, 34(6), 1127–1135.
- Schrank, B., Woppmann, A., Sibitz, I., & Lauber, C. (2011). Development and validation of an integrative scale to assess hope. *Health Expectations: An International Journal of Public Participation in Health Care and Health Policy*, 14(4), 417–428.
- Schwartz, S. H., Melech, G., Lehmann, A., Burgess, S., Harris, M., & Owens, V. (2001). Extending the crosscultural validity of the theory of basic human values with a different method of measurement. *Journal of Crosscultural Psychology*, 32(5), 519–542.
- Scioli, A., Ricci, M., Nyugen, T., & Scioli, E. R. (2011). Hope: Its nature and measurement. *Psychology of Religion and Spirituality*, 3(2), 78–97.
- Scioli, A. (2020). The psychology of hope: A diagnostic and prescriptive account. In *Historical and Multidisciplinary Perspectives on Hope* (pp. 137–163). Springer.
- Simonsohn, U., Nelson, L. D., & Simmons, J. P. (2014). P-Curve: A key to the file-drawer. Journal of Experimental Psychology: General, 143(2), 534–547. https://doi.org/10.1037/a0033242
- Snow, N. E. (2018). Hope as a democratic civic virtue. Metaphilosophy, 49(3), 407-427.
- Snyder, C. R. (2002). Hope theory: Rainbows in the mind. Psychological Inquiry, 13(4), 249-275.
- Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., & Sigmon, S. T. (2007). Adult Hope Scale (AHS). *Journal of Personality and Social Psychology*, 60, 570–585.
- Snyder, C. R., & Lopez, S. J. (2002). The future of positive psychology. Handbook of positive psychology, 751–767.
- Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., ... & Harney, P. (1991). The will and the ways: development and validation of an individual-differences measure of hope. *Journal of personality and social psychology*, 60(4), 570.
- Snyder, C. R., Hoza, B., Pelham, W. E., Rapoff, M., Ware, L., Danovsky, M., ... & Stahl, K. J. (1997a). The development and validation of the Children's Hope Scale. *Journal of pediatric psychology*, 22(3), 399-421.
- Snyder, C. R., Cheavens, J., & Sympson, S. C. (1997b). Hope: An individual motive for social commerce. Group Dynamics: Theory, Research, and Practice, 1(2), 107–118.
- Tanesini, A. (2020). (Good) Hope as an intellectual and civic virtue of the imagination. The Jubilee Centre for Character and Virtues.
- Thomas, K. J., da Cunha, J., & Santo, J. B. (2022). Changes in character virtues are driven by classroom relationships: A longitudinal study of elementary school children. *School Mental Health*, 1–12.
- Valle, M. F., Huebner, E. S., & Suldo, S. M. (2004). Further evaluation of the Children's Hope Scale. Journal of Psychoeducational Assessment, 22(4), 320–337.
- Wagner, L. (2019). Good character is what we look for in a friend: Character strengths are positively related to peer acceptance and friendship quality in early adolescents. *The Journal of Early Adolescence*, 39(6), 864–903. https://doi.org/10.1177/0272431618791286
- Wagner, L., Pindeus, L., & Ruch, W. (2021). Character strengths in the life domains of work, education, leisure, and relationships and their associations with flourishing. *Frontiers in Psychology*. https:// doi.org/10.3389/fpsyg.2021.597534
- Wang, H., & Lei, L. (2021). Proactive personality and job satisfaction: Social support and hope as mediators. *Current Psychology*, 1–10.
- Watson, S., Hayes, S., Radford-Paz, E., & Coons, K. (2013). "I'm hoping, I'm hoping" Thoughts about the future from families of children with autism or fetal alcohol spectrum disorder in Ontario. *Journal on Developmental Disabilities*, 19(3), 76–93.
- White-Zappa, B. (2001). Hopeful corporate citizenship: A quantitative and qualitative examination of the relationship between organizational hope, appreciative inquiry, and organizational citizenship behaviors. Benedictine University.
- Xiao, S. Y. (1994). The theoretical basis and research application of social support rating scale. *The Journal of Clinical Psychiatry*, 4(2), 98–100.

Yotsidi, V., Pagoulatou, A., Kyriazos, T., & Stalikas, A. (2018). The role of hope in academic and work environments: An integrative literature review. *Psychology*, 9(03), 385.

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