

# Hope-enhancement interventions: A third wave coalesces

Investigators propose that the discipline of “positive psychology (PP)” is currently enjoying its third decade of research activity<sup>1</sup>—a milestone best appreciated with the metaphor of waves that simultaneously spawn and overlap one another.<sup>2,3</sup> The article by McLouth et al.<sup>4</sup> published in *Psycho-Oncology*, can be contextualized with a similar allegory for interventions designed to augment “hope,” a subset of PP that has been the focus of energized scholarship during a comparable time frame (Figure 1).

The first wave—the genesis of Hope Theory—can be traced to 1987 when, during a sabbatical year from the University of Kansas, Professor C.R. Snyder carried out a grass-roots project. Specifically, Snyder interviewed a large number of people (“*n*” unknown) who were characterized by others as “hopeful” and identified three common threads in their thought patterns: pursuing a goal, developing workable routes to reach such goals, and harboring a willingness to embark on those routes.<sup>5</sup> These observations morphed into a formal theory, positing that hope was composed of a crucial triad: goals, pathways, and agency. In our previous writings, we sometimes have referred to these as the “conditions for hope to thrive.”<sup>6</sup> Research now shows that people often report *feeling* hopeful when these components or conditions are present in their lives.<sup>6</sup> With time, this understanding of hope has been further operationalized and measured with validated scales<sup>7,8</sup> and—quite suddenly—hope had transitioned from a nebulous phenomenon to a scientifically quantifiable entity.

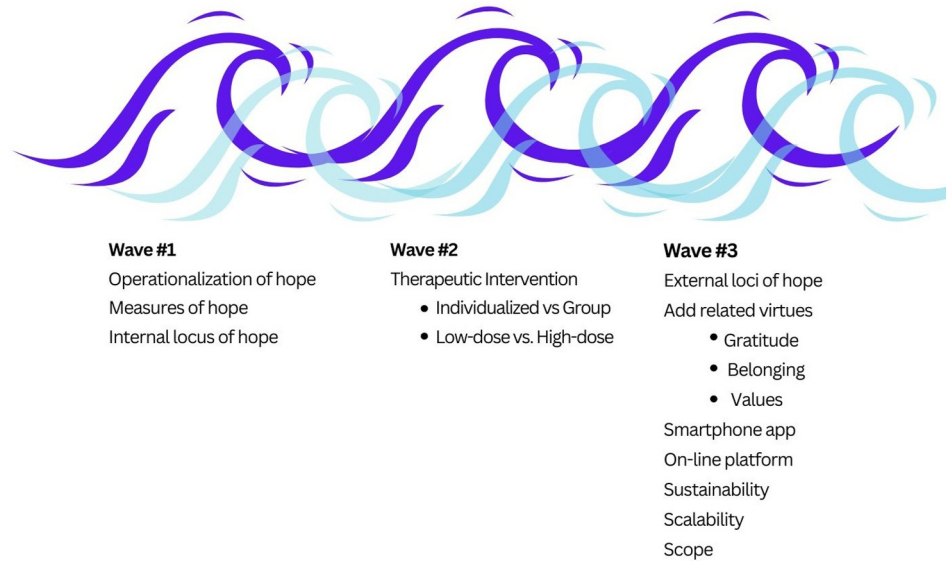
A second wave emerged as investigators recognized the value of Snyder's contributions and endeavored to translate a theoretical—albeit quantifiable—concept into pragmatic, therapeutic interventions that could help others in the community (both healthy individuals and those with diagnosable psychological disorders as well as physical illnesses) become more hopeful. Such interventions are often collectively known as “Hope Therapy.” One of the first therapeutic interventions was principally developed by Dr. Jennifer S. Cheavens,<sup>9</sup> a co-author of the accompanying article by McLouth et al.<sup>4</sup> In many programs, multiple sessions (i.e., high-dose hope therapy)—sometimes as many as ten—were used to teach practices for selecting goals (which were not only meaningful but also achievable), devise pathways toward goal attainment, and identify sources of agency to drive these behaviors.<sup>10</sup> Given the large investment of time necessary to facilitate such interventions, there was a need to lower participation-burden. For this reason, Feldman and Dreher were among the first to explore whether hope interventions could be modified into a single 90-min session (i.e., low-dose hope therapy).<sup>11</sup> Their approach included a micro-didactic lecture

emphasizing the clinically relevant highlights of Hope Theory; a “hope mapping” activity; and a “mental rehearsal” exercise crafted for participants to access agency, plan pathways, and internalize the prior principles. After this single session, those completing the workshop showed significant increases in hopefulness when compared to a control group who engaged only in a relaxation exercise. Unfortunately, it was not clear from their work that higher outcome levels of hope could be sustained long-term.

The current single-arm clinical trial by McLouth et al.<sup>4</sup> is a superb illustration of a second-wave strategy. The authors address a venue for pragmatic hope generation in the context of one of the most common and morbid malignancies (i.e., lung cancer) encountered globally.<sup>12</sup> The investigative team delivered two individual sessions of a hope intervention during infusions to participants with advanced lung cancer 3–12 weeks into systemic treatment, as well as three phone calls with a nurse or occupational therapist where participants discussed their values, goals, and goal strategies. In McLouth and colleagues' study, significant investments were made toward “interventionist training” to optimize adherence to a manualized protocol, with dividends paying off vis-à-vis maximal fidelity to and minimal drift from the written instructions. Furthermore, feasibility and acceptability were rigorously defined a priori with results that exceeded expectations. Aside from the exemplary design and execution of the study, a welcome bonus was the observed improvement of hope *itself* coupled with other benefits in patient-reported outcomes. Moreover, these accomplishments were achieved despite the daunting challenge of conducting research amid the COVID-19 pandemic.<sup>13</sup> Upon reading the report, we emerged as proponents of the Pathways intervention.

If research related to Hope Theory is now, indeed, surfing its second wave, then what might be the components of third-wave hope interventions? We propose that this may involve several additions: First, researchers may consider extensions to the hope concept itself. For instance, Bernardo contended that Hope Theory could be broadened to include not only pathways and agency derived from individuals' own perceived capabilities but also pathways and agency emanating from external loci, including family, peers, and spirituality.<sup>14</sup> Such expansion of the model, Bernardo has suggested, may be a better fit across cultures, particularly for those with more collectivist orientations who derive key elements of social identity from a community-based orientation.

Second, Einav et al. have noted that interventions built around a core of Hope Theory could also incorporate other related or predicting factors.<sup>15</sup> For example, when a sense of gratitude is



**FIGURE 1** Schematic representation of the three waves of hope enhancement. The first wave includes definition and measurement; the second wave is characterized by therapeutic interventions; the third wave subsumes adaptation, implementation and dissemination. Rather than advancing in linear fashion, “sloshing” occurs during propagation, which testifies to potential overlap of the depicted waves.

cultivated, an individual's focus can be shunted away from negativity and pessimism.<sup>16</sup> It is, therefore, not surprising that gratitude is associated with a sense of enhanced life meaning and greater well-being.<sup>17,18</sup> Moreover, a “gratitude writing intervention” has been shown to increase hope.<sup>19</sup> As another example, loneliness is consistently associated with decreases in coping strategy adoption.<sup>20</sup> Thus, it may be worthwhile to explore whether cultivating a sense of belonging (often considered the inverse of loneliness) and a perception of social support could function as counterweights to the pernicious effects of loneliness, and vice versa.<sup>21,22</sup> In future interventions, factors such as gratitude, sense of belonging, and perceptions of social support could thus be seamlessly conjoined with the hope construct. Indeed, the Pathways intervention—as described by McLouth et al.<sup>4</sup>—anticipates this third wave by incorporating a values-clarification exercise as well as stigma-reduction efforts, both of which are not necessarily components of Hope Theory per se, but complement the model.

The recent pandemic has also underscored a vulnerability of society, wherein close daily proximity to others cannot be taken for granted. We suspect that this is one reason that McLouth et al.’s<sup>4</sup> intervention included not only in-person sessions, but also phone-based interactions. Such innovations allow for greater levels of contact than might be practically feasible via traditional in-person-only experiences. Here, the researchers expanded and integrated communication approaches to nurture and optimize opportunities that facilitate the generation of hope as a portable and tailored concept to reach patients where they are in the setting of their real lives.

Engaging hope through technological innovation also represents a crucial next-phase approach to intervention research. For instance, a smartphone app can enable extension of the hope mapping exercise

into the daily lives of participants after the initial intervention has ended.<sup>23,24</sup> Such an app allows participants to revise their goals, pathways, and sources of agency as the conditions of their lives change or as they achieve (or have difficulties achieving) the goals they set during the intervention itself. Future research will determine whether the inclusion of such a tool can extend or sustain the effects of more traditional hope interventions. Beyond the sustainability factor, these available technologies also offer the potential for scaling the process of hope intervention. The process would, thus, be less susceptible to temporal and spatial limitations imposed by pandemics and other socially isolating forces. In addition, the “scope of hope” could easily encompass concentric groups of people including families, communities, and possibly broader populations.

It is worth noting that the vector of hope interventions has evolved from conceptualization on the part of a singular thought leader to adaptation and modification by numerous researchers as well as clinicians and, most recently, toward incorporation of the inputs from multiple users (i.e., user-centered design). The hopes of a given patient do not always comport with the clinician's perception of the patient's hope. Every person has unique goals and hope can, in turn, be individualized. Simultaneously, clinicians are well-positioned not only to “hold” the hopes of their patients<sup>25</sup> but also to help patients recognize and diversify their hopes.

Enormous progress has been made in the relatively short interval since Professor Snyder developed Hope Theory. As we witness hope interventions coalescing and improving, we dare not be passive observers of this ongoing movement. Rather, it behooves us to scrupulously assess these new opportunities by adopting the commitment to methodological rigor demonstrated by McLouth and colleagues. Beyond our duty to procure and conduct high-quality interventional research, we also recognize today's need for hope as a basic social

currency in our dual roles as scientists and global citizens. This urgency for hope and its precursors is rapidly escalating during a time of intensive world violence, unrest, and divisiveness. In fact, hope offers not only a venue for empirical assessment of humanity's desire to survive and thrive in the context of psychosocial oncology, but also a potential coping mechanism for all of us committed to social justice and the alleviation of human suffering.<sup>26,27</sup> In recognizing the myriad implications of hope and hope-based interventions, it is our view that these continued waves of development will crest toward a high tide, to be regarded as a source of inspiration by those waiting with anticipation at the shore.

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## DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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