



Introducing Resilience Outcome Expectations: New Avenues for Resilience Research and Practice

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Abstract

The present paper introduces Resilience Outcome Expectations (ROE) as the belief in achieving positive adaptation results through one's action despite an adversarial experience. Resilience is one of the most researched areas in positive psychology and is considered a key to managing mental health and well-being when faced with challenges. The study of resilience has progressed in four waves, encompassing identifying individual factors, recognizing complex processes, developing interventions, and exploring neuroscientific underpinnings for positive adaptation. Additionally, resilience research has been explored in various contexts and cultures, establishing its association with several variables like well-being, self-efficacy, and social support, among many others. Similarly, since the conceptualization of the outcome expectation's (OE), considerable research has been conducted, illustrating its relevance and significance in different areas such as psychotherapy, exercise, and addictions. There is evidence to indicate that OEs are crucial in motivating, goal-setting toward behavior change, and translating goals into action. Despite such conclusive findings available in these areas, no study has exclusively investigated resilience and OEs. Hence, this paper spotlights new avenues for research by introducing ROE and outlining its usefulness in psychology research. Finally, potential implications of ROE for future directions in research, assessment, and practice are presented.

Keywords Resilience outcome expectations · Self-efficacy · Hope · Dispositional optimism · Resilience · Outcome expectations

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Resilience is one of the most researched topics in positive psychology. Yet new ideas continue to gain the interest of researchers. It is defined as the ability of a dynamic system to adapt successfully to challenges that threatens its function, survival, or development through multisystem processes (Masten et al., 2021). The study of resilience has advanced in four significant waves of research as put forth by researchers such as Wright et al. (2013). The first wave of resilience focused primarily on identifying individual factors and environmental characteristics that facilitate survival in adversity (Masten & Garmezy, 1985). The second wave recognized the complex underlying and interwoven processes that foster positive adaptation (Cicchetti, 2010; Masten, 2007). The third wave aimed to test the theories of resilience and promote resilience through developing interventions (Masten, 2011) such that the occurrence of negative outcomes can be prevented in the first place (Wright et al., 2013). The fourth wave focused on the multilevel neuroscientific underpinnings of resilience (Masten, 2007), such as the complex interactions between genes and the environment (Gottlieb, 2007).

With time, resilience research has expanded to cover different contexts and cultures and established its association with several variables like well-being, self-efficacy, and social support among many others. Although resilience research has systematically progressed in four waves, none of these waves have made any attempt to explore outcome expectations (OEs) in resilience research. Considering the importance of resilience in OEs and the lack of attention to it, this paper attempts to introduce the concept and outline its usefulness in psychology research.

1 Resilience Outcome Expectations (ROE)

Resilience Outcome Expectations (ROE) are introduced as the belief in achieving positive adaptation results through one's action despite an adversarial experience. This description is derived from Bandura's (2001) definition of OEs, which presents it as the desired outcomes of intentional actions in which an individual engages. To the best of the authors' knowledge, the term ROE has not been used in literature before. Subsequently, this paper proposes that the term ROE be used to refer to expected outcomes in resilience stemming from one's course of actions.

Although there are no studies exclusively exploring OEs and resilience, there have been several attempts to connect expectations to resilience. For example, Arampatzi et al.'s (2019) study on positive expectations and resilience found that individuals with more positive expectations for the future experienced smaller decreases in subjective well-being and adapted faster to the adverse event as compared to those with less positive expectations. Additionally, individuals with consistent positive expectations before and during the adverse event had higher subjective well-being than those who shifted from positive to negative expectations. Research by Carver et al. (2010), Cohn et al. (2009), and Rand (2018) further present that positive expectations can serve as a source of psychological capital, engendering positive emotions, building better social relationships, and developing adaptive capacities to cope with life's challenges. Moreover, individuals with higher levels of different types of positive expectancies, such as self-efficacy (Luszczynska et al., 2005), optimism (Carver et

al., 2010), and hope (Roesch et al., 2010) are more likely to engage in active problem-focused coping and use lesser passive coping strategies like avoidance enabling them to remain resilient and exhibit growth despite difficult times. Therefore, individuals who expect positive future outcomes tend to evaluate stressful events more positively (Hecht, 2013). As a result, positive expectations serve as an anxiety and stress buffer, allowing people to remain happy in the wake of adverse events (Arampatzi et al., 2019).

Besides contributing to the improvement in psychological health and well-being (Carver et al., 2010; Conversano et al., 2010; Long & Gallagher, 2018), positive expectancies are also inversely associated with psychological distress markers, including aspects of depression, anxiety (Rand, 2018) and posttraumatic stress symptoms (Gallagher et al., 2019). Furthermore, fewer behavioral problems and resistance to peer pressure were associated with positive expectations among adolescents (Dubow et al., 2001). Such expectations contributed to resilience by acting as a buffer against negative outcomes (Tevendale et al., 2008; Raffaelli & Koller, 2005). Similarly, in response to challenging times, it is proposed that individuals with high ROE levels might expect to achieve positive outcomes from their actions. Thus, higher ROE may promote resilience in the face of contemporary adverse events like pandemic or war.

Overall, these studies outline the potential of positive expectations helping in achieving healthy adaptation. Hence, further research on how OEs can be important in resilience research is necessary.

2 OE and its Application: A Brief Background

Albert Bandura introduced the construct of OEs with his Social-Cognitive Theory in 1986. It refers to the anticipation of physical, self-evaluative, or affective, and social outcomes of one's behavior (Bandura, 2001). OEs are believed to be crucial in motivating, goal-setting toward behavior change, and translating goals into action (Williams et al., 2005). Since then, an enormous amount of research has been conducted in different areas, indicating the significance of OEs in research. Some relevant findings from such investigations covering topics like psychotherapy, lifestyle behaviors, and career are discussed below to establish their importance and understand their scope in psychology research.

Psychotherapy is one area in which OE's has gained widespread attention (Constantino et al., 2020). This is evident from abundant literature on treatment outcome expectations (TOE), which is described as patients' expectations about the consequences of participating in treatment (Constantino et al., 2011). Studies on TOE report that higher pre-treatment OEs were significantly correlated with better post-treatment outcomes among patients (Constantino et al., 2018), greater satisfaction with the treatment (Hoogendam et al., 2021), collaborative working relationships with their therapist (Constantino et al., 2011), increased therapeutic alliances, better client outcomes (Dew & Bickman, 2005), improved treatment response to depression (Rutherford et al., 2010), and homework compliance; and was negatively related to attrition (Greenberg et al., 2006; Price & Anderson, 2012).

Likewise, in the context of substance abuse, research revealed that OEs are essential to understanding substance abuse behaviors like initiation, maintenance, withdrawal, and treatment (Kouimtsidis et al., 2014). For example, higher negative smoking OEs and positive abstinence OEs were related to better intent to quit (Kaufmann et al., 2020). Also, positive smoking cessation expectations included better health, lesser social pressure, and more financial resources (Garey et al., 2017). Similarly, positive alcohol OEs predicted an increase in alcohol consumption, and negative alcohol OEs predicted a decrease (Blume & Blume, 2014; Blume & Guttu, 2015). Though advantages of positive OEs exist in research, it is noteworthy that holding positive expectations are not always desirable in all situations. For instance, in addition to the above-presented studies, research specific to health risk behaviors presents that individuals who consume excessive alcohol may have several positive OEs about its perceived benefits, such as social confidence, while others may have negative expectations, such as feeling sick (Barnett et al., 2014; Jones et al., 2001). According to the findings, positive expectations from drinking motivate the initiation and maintenance of drinking, whereas negative expectations influence its cessation (Blume & Blume, 2014; Jones et al., 2001; Patrick et al., 2009).

Additionally, research in the area of exercise presents that OEs have a role in adopting and sustaining specific exercise behaviors among older adults (Bohlen et al., 2022; Wójcicki et al., 2009). Also, it was linked to engagement in physical activities and served as a potential source of motivation for increasing physical activity behavior in persons with multiple sclerosis (Morrison & Stuijbergen, 2014). In other studies, physically active individuals had higher social and overall OE scores (Dlugonski et al., 2011; Suh et al., 2011).

Research on OE has also been conducted in the area of career development. OEs are crucial in predicting vocational interests (Adachi, 2004), academic motivation (Domene et al., 2011), career choices, and goals (Lent, 2013; Lent & Brown, 2013; Lent et al., 2000). OE allows individuals to act in ways that will lead to valued outcomes in their careers (Lent & Brown, 2013).

Besides the discussion pertaining to specific topics detailed above, an essential point about expectations is that “having unrealistic or excessively high expectations promotes negative progress, leading to feelings of frustration and failure” (Reesor et al., 2017, p. 431). For instance, studies on weight loss report that unrealistic weight-loss expectations are widespread and are significantly associated with poor long-term outcomes (Foster et al., 2001). Moreover, when unreasonable expectations remain unmet, individuals can be disappointed, frustrated, and have a sense of failure (Polivy, 2001), resulting in goal abandonment and poor performance in goal accomplishment (Foster et al., 2001). Individuals in weight loss programs frequently have unrealistic expectations or are not fully aware of the required behavioral changes to meet their targets, resulting in frustration and giving up (Polivy, 2001). Therefore, it is vital to understand and distinguish between potentially possible and unattainable expectations to avoid failure and distress.

Overall, OE research is widespread, just like resilience research. It has been studied in various contexts and with multiple variables, as presented above through the work of researchers such as Bohlen et al. (2022), Constantino et al. (2020), Kouimt-

sidis et al. (2014), Lent and Brown (2013) among others. Yet, no study has attempted to exclusively research resilience and OE.

3 ROE and Related Constructs

A literature review has shown that several constructs, including OE, self-efficacy, dispositional optimism (DO), and hope, are commonly studied under the broad term of expectations. While these variables may appear similar in some ways, they are also distinctly different. Therefore, it is important to bring to attention the differences among these variables as well as their connections with ROE.

Bandura (1977) defined OEs as anticipated positive or negative consequences resulting from engaging in a behavior. It is the degree to which one believes a particular outcome will occur. Following this, ROE can be presented as the belief in achieving positive outcomes from the deliberate actions one chooses to engage in. In contrast, self-efficacy is the degree of conviction about successfully being able to execute the behavior required to produce an outcome (Bandura, 1977). Although self-efficacy and OEs are part of the cognitive process preceding an action, self-efficacy influences an individual's choices, aspirations, amount of effort to be put in, and the extent of perseverance in the face of challenges (Bandura & Adams, 1977). However, OEs influence the satisfaction levels in task achievement and the enthusiasm to engage in similar or more challenging tasks (Takahashi, 2007). Following this, it can be deduced that self-efficacy differs from ROE in that self-efficacy represents the perceived capability to carry out a behavior, and ROE indicates an individual's intention to carry out behavior to achieve resilient outcomes.

Like self-efficacy, DO, and hope are other research areas closely resembling OE. DO is an individual's general expectation for the occurrence of good rather than bad things in life (Scheier & Carver, 1987). It is a personality trait that reflects the extent to which people have generalized positive expectations for their future (Carver & Scheier, 2014). Snyder and colleagues (1991) defined hope as a positive feeling and motivational state that emerges from the belief of having agency and pathways needed to achieve one's goals. It is a cognitive goal-oriented thought pattern of bringing up multiple pathways to achieve a goal, maintaining motivation to follow such pathways, and actively developing new pathways if required (Snyder, 2002). As described, the focus of DO is on more generalized expectations and emphasizes less on how or why the goal is attained (Carver & Scheier, 2002). In contrast, hope emphasizes the presence of goal-directed determination and the identification of specific means to achieve those goals (Rand & Cheavens, 2009; Snyder, 2002; Snyder et al., 1991). On this note, DO differs from hope and ROE, as these constructs emphasize the actions one adopts to achieve their desired goals. This means that hope and ROE explicitly focuses on the personal self-initiated actions one chooses to engage in to successfully achieve a future desired outcome. Additionally, with DO, an individual can expect desirable outcomes due to luck, external circumstances, personal or other's actions, unlike relying specifically on one's self capabilities and actions to achieve a positive future outcome (Alarcon et al., 2013).

As evident from the discussion above, hope and OEs share a few similarities. Nevertheless, these two constructs are different, as confirmed by researchers (e.g., Clayton et al., 2008; David et al., 2004; Montgomery et al., 2003). For instance, OEs are grounded in learned associations, past experiences, reasoning, and a probabilistic estimation of occurrence (Leung et al., 2009). In contrast, hope is associated with desirability, where the incidence of an event is likely possible but not necessarily probable (Kamihara et al., 2015; Leung et al., 2009). “This OEs not mean that expectancies are better than hope, but that hope is different, mainly grounded on personal ideals, values, and beliefs instead of objective facts” (Krafft et al., 2021, p.220). Both constructs represent possible outcomes. However, while many preferred outcomes involve personal assessments of their probability of occurrence, some persist despite indicating a lesser likelihood of accomplishment. Therefore, unlike hope, ROE is based on the probabilistic estimates of the occurrence of a positive outcome from one’s intentional acts.

Based on this discussion, it is possible to conclude that SE, DO, and hope are related to ROE but also distinct from it. The key features of ROE and its related constructs are summarized in Table 1.

4 The Need for ROE Research

The literature reviewed above establishes the significance of OE in various contexts and how positive expectations act as a source to foster resilience. Also, forming OEs to achieve one’s goals is understood to help in planning and executing actions. However, there is limited evidence on how OE contributes to resilience and vice versa. A careful review of OE research shows that individuals in different contexts, like health, treatment, or recovery, frequently negotiate with adversities to overcome from and adapt to it, with the overall aim of improving their life conditions. Despite this aspect of OE research, resilience was not found to be the main focus of studies available in the literature. Yet, from the findings, it may be inferred that adaptation to challenges is a crucial part of the process through which individuals make their life circumstances better. For example, in the context of psychotherapy, Snippe et al. (2015) aimed to determine whether high early OE predicted the desired outcome, that is, symptom improvement. In this study, resilience was not the focus and, hence, not specifically investigated. However, the improvement in symptoms upon participating in the treatment despite experiencing the challenges associated with chronic

Table 1 Summarizing the Features of Hope, Self-efficacy, DO, and ROE

Features	Hope	Self-Efficacy	DO	ROE
Positive expectations	Yes	Yes	Yes	Yes
Cognitive	Yes	Yes	Yes	Yes
Goal-directedness	Yes	Yes	Yes	Yes
Future-orientation	Yes	Yes	Yes	Yes
Generalized	Yes	Yes	Yes	No
Action-oriented	Yes	No	No	Yes
Probabilistic estimations of outcome occurrence	No	No	No	Yes

Note. DO – Dispositional optimism; ROE – Resilience outcome expectation

illness might be indicative of resilience. Therefore, it is important to investigate these indications further to gain a specific understanding of the connections between OE and resilience. Such investigations on ROE can provide interesting insights into the process and outcome, including predictions after adversity.

5 Implications and Future Directions

In view of the gaps identified in OE and resilience literature, implications and future directions in specific areas are highlighted below.

5.1 Research

As ROE is an unexplored area of research, studies are yet to identify what individual and social factors contribute to ROE and how. The following section attempts to discuss these contributors that can aid future work in the area.

Resilience was earlier viewed as a set of individual characteristics that facilitated successful coping with distress (Kumpfer, 2002). The first wave of resilience research delineated many individual factors responsible for adaptation despite adversity. These included problem-solving skills, self-confidence, and high self-esteem (see Wright et al., 2013). Similarly, within OE research, studies on individual personality factors have identified a number of contributors. For instance, Brown and Cinamon (2015) confirmed that higher levels of conscientiousness among students contributed to better OEs in academics. Both resilience and OE studies have, on their own attempted to identify the role of individual factors. It is now important for researchers to identify factors that contribute to ROE.

In recent times, there has been growing interest in studying resilience through a multisystemic approach as recommended by Ungar and Theron (2020), among others. Observations from researchers, including Ungar (2013), do not suggest treating it as an individual construct as it is a quality of the environment and its capacity to facilitate growth. Individuals vary in coping across cultures despite experiencing similar adversities (Ungar, 2006). For instance, in Raghavan and Sandanapitchai's (2019) multinational sample, participants who identified as Asian or South Asian scored significantly higher on resilience scores than their American counterparts. Hence, it can be derived from such findings that culture affects resilience. Similarly, its influences expectations too. Expectations about appropriate ways to cope with adversity are rooted in culture as they influence interactions between the environment and the individual (Ungar, 2013). Lent (2013) further confirms the role of cultural factors in influencing OEs. For example, the stress experienced by international students pursuing academics in different countries due to difficulties in adjusting to new cultural environments has negatively influenced their career OEs (see Franco et al., 2018). Therefore, future researchers must uncover the underlying cultural factors for forming and shaping ROE in the face of adversity.

5.2 Methods and Assessment

The dearth of literature on ROE draws attention to the lack of standardized tools to measure this variable. It is essential to develop specific instruments for a sound understanding of ROE. This will also ensure that it is considered distinct from self-efficacy, hope, optimism, or similar variables. ROE tools can be further used to study the associations between ROE and other factors contributing to well-being. In addition to the focus on quantifying ROE, there is a scope and necessity for qualitative studies as well. The subjectivity of ROE can be comprehended better through a mixed-method approach, with qualitative methods tapping into the intricacies of individual adaptation and systemic influences. Additionally, it is likely to facilitate an understanding of the ROE process, leading to adaptive outcomes. Moreover, considering the dynamic nature of expectations, they can be subject to change. Longitudinal study designs can help in capturing how the prior framed ROE are maintained until the desired outcome is achieved. More specifically, the extent of change in ROE, if any, can be tracked over time. Furthermore, life-altering experiences with adversities can be understood through in-depth case studies exploring personal journeys of resilience reintegration and the role of ROE in it.

Exploring the suggestions presented above will aid in developing theoretical models to track an individual's resistance and recovery from adverse events, address the gaps in research and add to the literature specifically to ROE and broadly to the positive psychology field.

5.3 Clinical Practice

ROE has significant importance in clinical practice. As cognitions are flexible, expectations can be reinforced using psychotherapy or self-guided strategies (Gallagher et al., 2019). Consequently, individuals experiencing distress due to specific adversities can benefit from therapy or counseling aimed at developing and maintaining ROE. In therapeutic settings, clients can introspect and navigate various courses of action to achieve resilient outcomes by addressing their OEs. Likewise, it provides an opportunity to correct any unrealistic negative expectations that hinder attaining positive outcomes. Moreover, OEs are considered influential beliefs crucial to individual's motivation to perform or change a behavior (Bandura, 1997; Fasbender, 2018). Hence, exploring ROE in therapy can enable the individual and their therapist to gain insights into the client's motivational level and readiness to change. Besides traditional therapy accessed through professionals, self-help therapies via training programs and smartphone applications can be designed to incorporate self-administered ROE exercises for specific adverse situations.

Davis et al. (2009) observe that for most people, adversity need not be a major disaster, rather they could be the modest disruptions embedded in everyday lives. The recent pandemic is an example where even those not diagnosed with the coronavirus faced major or minor disruptions and had to incorporate changes into their regular lives while living in stressful situations. Similarly, experiences often may not be due to a severe, persistent underlying mental health condition and traumatic. Instead, the challenge might reflect the inability to manage a situation efficiently due

to short-term stress. These include experiencing academic stressors like examination anxiety, assignment deadlines, or organizational stressors like work overload and role conflict. In all of the examples cited above, reinforcing ROE is expected to be helpful in identifying one's goals and navigating different means of resources to achieve these outcomes. Thus, findings from ROE studies can be applied to a wide range of challenging situations.

Overall, it can be concluded that ROE has significant theoretical and practical implications.

6 Conclusion

Everyone experiences some adversity in life that disrupts their healthy functioning. These can range from daily hassles and regular life events to unexpected events like pandemics, natural calamities, and accidents. Furthermore, chronic, developmental, and genetically causing ailments greatly impact individuals and require resilience to resist, survive, and thrive. Moreover, multiple adversarial experiences affecting more than one area of life often lead to a cumulative risk. In such instances, ROE, the belief to achieve positive adaptation results through one's action, can provide an individual with the right direction to achieve the desired results. Estimating desired yet probabilistic outcomes from one's actions can help in realistic planning, adopting more adaptive pathways, and engaging in active coping strategies. Such expectations can aid in dealing with challenges effectively and contribute to their overall well-being.

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Declarations

Ethics Approval Institutional Ethics Approval was obtained for the study.

Informed Consent Not applicable.

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