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# RISKY RESILIENCE AND RESILIENT RISK: THE KEY ROLE OF INTENTIONALITY IN AN EMERGING DIALECTICS

GOLAN SHAHAR Ben-Gurion University of the Negev, Israel Yale University School of Medicine, USA

JULIA ELAD-STRENGER Ben-Gurion University of the Negev, Israel

CHRISTOPHER C. HENRICH Georgia State University, USA

Drawing from both clinical experience and the risk/resilience research, we posit that many psychosocial factors actually embed elements of both. Underlying this *risky-resilience* and *resilient-risk* dialectics are two methodological conditions— statistical suppression and complex moderation. Focusing on a host of psychosocial factors (e.g., dependency, self-concept, social support, positive life events, coping strategies), we illustrate the dialectics and theorize that it is related to individuals' intentionality, particularly their need to project one's self into the future and to use available resources for the purpose of realizing possible selves.

Clinical experience working with adolescents and young adults has taught us that the tendency to classify psychosocial factors into clear-cut, risk vs. resilience categories is in need of a serious reex-

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Address correspondence to Golan Shahar, Ph.D., the Self & Health (SEALRTH) lab, Department of Psychology, Ben-Gurion University of the Negev, Beer-Sheva 84105, Israel; E-mail: shaharg@bgu.ac.il.

amination. Consider the following hypothetical case composite.<sup>1</sup> A seventeen year old adolescent girl presents chronic bulimic disorder, comorbid with dysthymic disorder. Despite her gnawing distress, and a history of past trauma, she works diligently in therapy and gets better symptomatically. What keeps her going is a clear vision of her future self. Coming from an economically improvised background, she is determined to go to college, get an education, and then a job. The patient vows not to have sex prior to her marriage for fear of getting pregnant, which will come in the way of her future plans. Pressured by her boyfriend to have sex, she does not yield. Her boyfriend, whom she loves, breaks up with her. She relapses into bulimia and depression.

Does the adolescent girls' resistance to having sex put her at risk, or is it a manifestation of her resilience? From the point of view of the highly influential *stress-generation model* (Hammen, 1991, 2006), our hypothetical patient epitomizes individuals' tendency to maintain their distress by creating interpersonal stress (in this case, romantic breakup). However, from a more existential-integrative perspective (Shahar, 2006, 2010, 2011; Shahar & Davidson, 2009; see below), this girl is seen as paying with stress-related psychiatric symptoms for the prospect of becoming what she might.

This hypothetical case composite is reminiscent of a recent study conducted by Hauser and colleagues, focusing on resilience in severely disturbed adolescents (Hauser, Allen, & Golden, 2006; Hauser, Golden, & Allen, 2006). Over seventy adolescents hospitalized during the 1980s in a closed psychiatric setting were followed up for over a decade. An extensive battery of measures was administered to these former patients, tapping social and emotional development, occupational functioning, psychological symptoms, etc. The same battery was also administered to 143 never-hospitalized young adults. Thirteen percent scored in the top half of adaptive functioning on all measures administered to the entire group of previously hospitalized and never-hospitalized young adults, render-

<sup>1.</sup> This hypothetical case is a composite case synthesizing a thoroughly disguised information from a myriad of patients, all exhibiting the putative risk/resilience dialectics. Use of such a composite case illustration is common in clinical case writing, where the aim is to illustrate a general clinical perspective rather than to shed light on a unique patient (see Clift, 1986; Duffy, 2010; Shahar & Davidson, 2009; Sieck, 2012; Sperry & Pies, 2010). It is important to emphasize that such composite cases serve to illustrate, not to demonstrate: Namely, they have little veridical value. Controlled empirical science is the only arbiter of the veridicality of clinical and theoretical statements.

ing these patients resilient. These patients were then interviewed extensively, and their narrative accounts were analyzed. Similar interviews and qualitative analyses were conducted with former patients who were doing about average for the former patient group. Three major factors distinguished between the two groups: relatedness (i.e., positive interactions with others), agency (a conviction that one can intervene effectively with one's own life), and reflectiveness (curiosity about one's inner thoughts and feelings). Hauser et al.'s study attests to the presence of resilience in the most psychiatrically dire of samples. It suggests that even people with severe psychopathology can have substantial sources of strength. We, however, would like to take this conclusion a step further by positing that most, if not all, psychosocial factors include elements of both risk and resilience.

It is easy to invoke numerous studies in which a clinical/health outcome is predicted from numerous psychosocial factors which are classified as either risk or protective factors (e.g., Kilmer, Cook, Munsell, & Salvador, 2010; Krzvsztof & Zimmerman, 2006; Laser, Laster, & Oshio, 2007; Lewis, Phillip, Bowser, DeLuca, & Rosen, 2009; Siefert, Finlayson, Williams, Delva, & Ismail, 2007; Tinsley, Nussbaum, & Richards, 2007), including our own (Kidd & Shahar, 2008; Schatner, Shahar, Lerman, & Abu-Shakra, 2010). Rarely do these kinds of studies consider the possibility that a construct might actually serve as both a risk factor and a resilience factor. However, an awareness of such dialectics encourages an appreciation of the complexity inherent in any psychosocial factor presumed to confer risk or resilience, and to investigate causal relations among various risk and resilience factors. Clinically, this dialectics necessitates a nuanced, pretreatment assessment of both risk and resilience, and a treatment planning that targets both risk and resilience concurrently. As well, such a dialectics has implications for larger scale intervention and prevention efforts targeted at at-risk children. Some of the risks targeted may have protective dimensions, whereas intervening to promote protective factors may have unanticipated consequences.

And what is the underlying justification for this dialectics? Herein we propose that individuals' intentionality, particularly their attempt to create themselves in line with their real self, render most, if not all, psychosocial factors potentially both risk-related and protective/resilience-related. Below we elaborate on these issues. Before we do, however, we wish to describe two methodological condi-

tions that assist in identifying the risk/resilience dialectics, namely, *statistical suppressions* and *complex moderation*. We illustrate these two methodological conditions' operation with respect to numerous psychosocial dimensions (e.g., dependency, self-concept, social support, positive life events, coping strategies) which are considered, on an a-priori basis, as either risk or resilience factors.

# STATISTICAL SUPPRESSIONS AND COMPLEX MODERATION: METHODOLOGICAL CLUES FOR THE RISK-RESILIENCE DIALECTICS

Risk and resilience might confer their effects in (at least) two ways: By exerting a main effect, mediated by known or unknown mechanisms, or through the interaction with other risk or resilience factors. For instance, stressful life events, an epitome of psychosocial risk, might lead to depression either directly (Brown & Harris, 1978; Monroe, 2008) or through an interaction with individuals' genetic makeup, for instance, the polymorphism in the 5-HTT gene (Caspi et al., 2003). Respectively, the risk/resilience dialectics might be detected by attending to two methodological conditions: suppression situations, which uncover inconsistent main effects of putative risk and resilience factors, and complex moderation, which illuminate complex interactive patterns involving risk and resilience.

# SUPPRESSIONS, MAIN EFFECTS, AND THE RISK/RESILIENCE DIALECTICS

Given X, Y, and S, where X is an independent variable, Y is a dependent variable, and S is a suppressor, then entering S into a multivariate equation bolsters the X -> Y effect. This is counterintuitive, because investigators expect that entering another predictor to a multivariate model will minimize, or even eliminate, the effect of putative predictors on the outcome (namely, they expect the added variable to act as a confound, McKinnon, Krull, & Lockwood, 2000). This counterintuitive nature of the suppression effect often propels investigators to dismiss findings emanating from this effect as statistical noise.

<u>Tzelgov and Henik (1991)</u> define suppressors in terms of criterion validity. They propose that Predictor X includes numerous variance

facets, only some of which are relevant for predicting Criterion Y. Facets that are irrelevant to Y derail its prediction by X. However, these variance facets might be shared with, or captured by, other variables. When these other variables are entered into a multivariate model, they suppress, or neutralize, an irrelevant variance facet, thereby enhancing the predictive effect of X on Y (i.e., enhancing criterion validity).

Davis (1985) defines suppressors as nodes in an inconsistent causal link. Let X be the causal agent and Y—the outcome. X might increase Y through some paths and decrease it through others. The inconsistent paths cancel each other out, resulting in a meager, or null, bivariate relationship involving X and Y. Sometimes, such a meager/null bivariate relationship is baffling, because previous theory and/or research implicate X as one-directional cause of Y. The mystery is cleared when inversely directed X -> S -> Y path is identified, shedding additional light on the complex nature of X. In this instance, S can be referred to as a suppressing mediator (Cohen, Cohen, West, & Aiken, 2003). Davis' (1985) approach might be construed as a special case of Tzelgov and Henik's (1991), whereby the former is specifically applied to causal modeling. Specifically, Davis' approach necessitates (a) a causal effect of X on S (as opposed to a bivariate association), and (2) a causal effect of S on Y.

Shahar and Priel (2002, 2003) assessed six-hundred and three Israeli high school freshmen twice: during the first week of school (W1) and sixteen weeks later (W2). In their first publication from this data set, Shahar and Priel (2002) focused on the enigmatic role of positive life events (satisfying social interactions, pleasurable activities, and successful performances) in emotional distress. Extant research construed these events as protective in two ways: by directly reducing distress, and by buffering the adverse effect of negative life events (e.g., Lteif & Mavissakalian, 1995). However, similarly designed studies yielded null findings regarding the protective effect of positive life events (Johnson, Crofton, & Feinstein, 1996). Addressing this inconsistency, Shahar and Priel (2002) proposed that the positive events construct relies on two variance facets: a valence related facet (pertaining to the positivity of the construct) and an event-related one (referring to the fact that a novel event takes place in individuals' lives). They surmised that the valence-related aspect is negatively associated with emotional distress, but that the event-related one is positively associated with distress, because it involves change and uncertainty. These two variance facets might

cancel each other out, yielding a relatively small and often statistically nonsignificant association between positive life events and emotional distress. However, when negative life events are entered into a multivariate equation along with positive life events, the event-related valence of positive life events is suppressed, or neutralized, by negative life events (Tzelgov & Henik, 1991), thereby bringing to the fore the valence-related facet of positive events, and augmenting its association with emotional distress.

The investigators constructed latent constructs of adolescents' emotional distress (indicated by depression and anxiety) at both waves, and of positive and negative life events (indicated by interpersonal and achievement-based events) at Wave 2. Employing Structural Equation Modeling (SEM) to examine the effect of positive events on changes in distress, with and without the inclusion of negative events, they found, consistent with their theorization, the following: without the negative events in the equation, the effect of latent positive events on changes in distress approached zero (standardized  $\beta = -.08$ , ns). However, with negative events in the model, a strong and statistically significant effect of positive events on distress emerged (standardized  $\beta = -.53$ , p < .01).

Next, Shahar and Priel (2003) focused on the links between personality and distress, as well as the intervening role played by negative and positive life events in this link. They built on Blatt's theory of personality development and psychopathology (e.g., Blatt, 2004; <u>Blatt & Zuroff, 1992</u>), according to which dependency and self-criticism are two central personality dimensions, implicated in psychopathology. Dependency refers to the tendency to seek nurturing and supportive relationships, even at the expense of self-expression, whereas self-criticism pertains to the tendency to pursue achievement and self-esteem but to adopt a punitive stance towards the self.

However, in empirical research, self-criticism emerges as a clearcut vulnerability factor whereas dependency appears to be more weakly associated with psychopathology (for review, see Shahar, 2001). Shahar and Priel (2003) noted that underlying self-criticism are negative mental representations of self and others (Mongrain, 1998), which, when translated into interpersonal action, might lead to the creation of a maladaptive social context, characterized by risk factors and by a dearth in protective factors (e.g., Mongrain & Zuroff, 1994; Priel & Shahar, 2000; Zuroff, 1992). In contrast, dependency appears to be linked with more complex mental representations of

self and others, which also include some positive expectations towards other people, possibly resulting in an ability to enlist social support (Mongrain, 1998, Priel & Shahar, 2000). Thus, Shahar and Priel (2003) hypothesized and found, that self-criticism will generate negative life events ( $\beta$  = .42, *p* < .01), and will de-generates (fails to generate) positive life events ( $\beta = -.39$ , p < .01) and that these two paths will lead to elevated emotional distress ( $\beta_{\text{[negative events -> distress]}} =$ .50, p < .001;  $\beta$  [positive events -> distress] = -.36, p < .001). Conversely, dependency was hypothesized and found to exhibit a complex picture, involving the generation of negative life events ( $\beta = .30$ , p < .001), but also of positive life events ( $\beta = .37$ , p < .001), which also include satisfying interpersonal exchanges. These two paths leading from dependency to emotional distress via negative events, and away from distress via positive events canceled each other out (Davis, 1985), in turn leading to a reduced effect of dependency on emotional distress, as compared with self-criticism ( $\beta_{\text{[dependency]}} = .10$ , p = .053 vs.  $\beta_{\text{[self-criticism]}} = .41; p < .001$ ). These findings join others (Bornstein, 1998; Shahar, 2008) in suggesting that that rather than serving as a risk factor, dependency is actually a complex construct embedding elements of both risk and resilience.

We now turn to illustrate statistical suppression in the context of risk/resilience research by focusing on social support and maladaptive coping. Of the numerous psychological factors serving as potential resilience factors, social support appears to be the most prominent (Cohen & Wills, 1985; Cohen, 2004; Uchino, 2004). It confers two types of protective effects: a direct and a stress-buffering one. Statistical suppression is relevant to the direct effect, according to which individuals reporting elevated levels of numerous types of support have fewer psychological and physical symptoms and/ or behavior problems. However, social support appears to have an unexpected, risk-related direct effect. For instance, parent and peer support are related to substance use in opposite directions (Lifrak, McKay, Rostain, Alterman, & O'Brien, 1997; Piko, 2000). Wills, Resko, Ainette, and Mendoza (2004) reported that family support was inversely related to both depressive symptoms and delinquency and friend support was unrelated to depression and positively related to delinquency. Wills et al. (2004) found that the relation of peer support to substance use represents a suppression effect. Specifically, peer support had a nonsignificant zero-order association with substance use, but a significant positive effect in the multivariate model, with the coefficient for support being increased when

other variables (e.g., good self-control) were added to the regression equation.

Another direct demonstration of statistical suppression in risk/ resilience research pertains to coping with stress. While active, problem-solving coping is usually associated with positive outcomes (e.g., Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001), more passive cognitive avoidance strategies predict higher levels of depression and anxiety (e.g., Blalock & Joiner 2000). However, it seems that the two coping strategies share a common variance facet, because, as shown by Gaylord-Harden, Cunningham, Holmbeck, and Grant (2010), active coping evinced a suppression effect on the link between avoidant coping and internalized symptoms. Specifically, in the presence of active coping, the positive association between avoidant coping and internalizing symptoms became stronger, as compared to the association between the latter two in the absence of active coping (Gaylord-Harden et al., 2010; Example 1). Thus, contrary to the common view of passive coping as a risk-related factor, a consideration of these suppressor effects implies there may be components of avoidant coping that are adaptive (e.g., actively avoiding potentially dangerous stressors) and components that are maladaptive (e.g., excessive anxious avoidance).

# COMPLEX MODERATION, INTERACTIVE EFFECTS, AND THE RISK/RESILIENCE DIALECTICS

In Figures 1 and 2 we present the expected pattern pertaining to interactive effects of risk and resilience factors, respectively. For a risk-related pattern, we assume that stressful events are the risk factors, and personality vulnerability is the augmenting/moderating agent (Figure 1). For a resilience-related pattern, we assume that social support is the resilience-related, moderating the risk-related effect of stressful events (Figure 2).

As shown in these figures, given elevated levels of the augmenting/moderating agent, the adverse effect of risk factors are stronger than their effect under low levels of the augmenting/moderating agent. Thus, the effect of stressful life events on depression would be particularly pronounced among individuals with elevated personality vulnerability (Blatt & Zuroff, 1992). Similarly, we expect that, given elevated levels of the resilience-related (protective) fac-

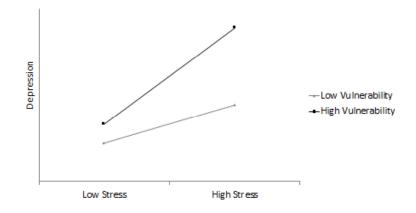


FIGURE 1. Personality vulnerability moderates the risk-related effect of stress.

tor, the adverse effect of the putative risk factor is smaller (i.e., more benign) than its effect under low levels of the resilience-related factor.

However, what is not anticipated by such theorization is that risk and/or protective factors will interact with the moderating agent in ways that implicate a putative risk factor as protective, or a putative resilience factor as conferring risk. Nevertheless, this sometimes emerges in research. Under the rubric of complex moderation, we discuss and illustrate three such possibilities: (1) *negative buffering*, whereby a presumed stress buffer actually augments the adverse effect of stress on the outcome; (2) *higher-order moderation*, whereby putative risk or resilience factors behave as expected under specific conditions of a third variable, but act contrary to expectation (i.e., risk factors conferring resilience, resilience factors conferring risk), under other conditions of this third variable; and, (3) *cross-over interactions*, whereby—alongside the expected buffering—a putative resilience-related factor exerts an adverse effect under low stress.

# NEGATIVE BUFFERING

Just like social support, financial support might be expected to buffer against the adverse effects of financial difficulties. However,

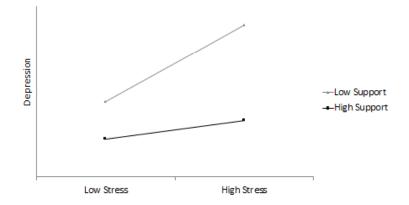


FIGURE 2. The resilience-related, stress-buffering effect of social support.

Krause, Liang, and Gu (1998) reported that, among older adults from the Republic of China, financial strain was associated with greater distress when significant others provided economic support (see also, among others, Ganster, Fusilier, & Mayes, 1986, for additional evidence as to negative buffering in social support research).

Our group, studying the role of the self in chronic schizophrenia, has stumbled upon very similar negative buffering effects (Weinberg et al., in press). We found that self-concept clarity prospectively predicted an increase in positive psychotic symptoms over time under high, but not low, levels of life stress. The graphical depiction of this interaction reveals that under high, but not low, levels of selfconcept clarity, life stress predicted an increase in positive psychotic symptoms. Intriguingly, in the same study, self-concept clarity behaves, expectedly, as a resilience-related factor: it predicted an increase in patients' quality of life, albeit under low levels of life stress (Weinberg et al., in press). As well, consistent with a resilience-related pattern, self-concept clarity also predicted a decrease in exposure to stigmatization over time (Noyman, Shahar, Weinberg, & Fennig, under review).

The risk-related effect of self-concept clarity on positive psychotic symptoms is, to the best of our knowledge, the only one thus far implicating this personality construct in risk, rather than in resilience. Weinberg et al. (in press) surmised that in schizophrenia, self-concept clarity might be linked with heightened self-focused attention driven by an attempt to process ambiguous internal cues (Lysaker & Lysaker, 2001; Whitfield-Gabrieli et al., 2009) leading, inadvertently, to positive symptoms such as hallucinations and delusions.

## HIGHER-ORDER MODERATION

Both Lefcourt, Martin, and Saleh (1984) and Sandler and Lakey (1982) found a stress-buffering effect of perceived support among individuals with internal, but not external, locus of control. Moreover, Cummins (1988) found that among individuals with internal locus of control, the effect of stress on distress was higher under elevated levels of perceived support focused on self-worth. According to the author, this negative buffering effect, situated within a higher-order moderating effect of locus of control, indicates that individuals who feel in control and perceive others as validating their self-worth are less defensive in the face of stress, and are thus more affected by stress (for additional findings attesting to higher-order moderation in social support research, see Liang & Bogat, 1994 and Brookmeyer, Henrich, Cohen, & Shahar, 2011).

## **CROSS-OVER INTERACTIONS**

Surprisingly, social support might lead to elevated distress under low levels of exposure to terror violence. Henrich and Shahar (2008) report a cross-over interaction between exposure to terror and social support among Israeli middle school students. Specifically, while social support prospectively predicted decreased depression for participants who were exposed to rocket attacks; it also prospectively predicted increased depression for participants who were not exposed to terrorism. Similarly, Shahar, Cohen, Grogan, Barile, and Henrich (2009) found that bombing-related perceived stress was strongly associated with increased post-bombing depression when pre-bombing social support from friends was low but not when it was high. As well, under low bombing-related perceived stress, social support from friends prospectively predicted an increase in adolescent depression. Shahar et al. (2009) speculated that, whereas the effect of friends' support on depression under high bombingrelated perceived stress is a stress-buffering one, the pattern emerg-

ing under low bombing-related perceived stress might be related to negative social comparison activated by friends' support offered without an apparent need.

Similar cross-over interactions were found with regard to dependency and self-efficacy. Dependency is assumed to confer risk for psychopathology, whereas efficacy is considered a protective factor. Yet, Shahar, Trower, et al. (2004) found that elevated dependency predicted an increase in loss of independence under low efficacy, but predicted a decrease in loss of independence under high efficacy. As indicated by the graphical depiction of this interaction (Figure 1, p. 485), under high levels of dependency, efficacy prospectively predicted a decrease in loss of independence over time, under low levels of dependency, efficacy prospectively predicted an increase in loss of independence. An identical pattern of interaction between dependency and efficacy was evinced when the outcome variable was insight into the mental illness (Figure 2, p. 485), known to be an important facilitator of successful treatment.

Thus, in Shahar, Trower et al. (2004) efficacy, a putative resiliencerelated factor, not only buffered against the risk-related effect of dependency, but it also transformed this effect of dependency into a resilience-related one. As well, under low levels of the putative risk factor (dependency), efficacy actually evinced a risk-related effect. The authors posited that, among people with severe psychosis, efficacy actually taps a maladaptive, manic-like tendency involving denial of illness and its serious functional repercussions.

# WHY IS THAT?

By now, we hope we have made a convincing argument for the need to be wary towards any clear cut distinction between risk and resilience. Indeed, we posit that, at least until demonstrated differently, any psychosocial factor, by its very nature, should be expected to include elements of both risk and resilience.

Why is this so? A comprehensive answer is nowhere to be found in the literature, although attempts to elucidate the dialectics nature of specific risk/resilience factors have been made, and some are quite successful (e.g., Ibarra-Rovillard & Kuiper, 2011 for social support; Milevsky & Levitt, 2007 for religiosity, and Hobfoll, Hall, Canetti-Nisim, Galea, Johnson, & Palmieri, 2007 for posttraumatic growth). These theoretical accounts, however, are confined to a single factor, and thus do not address what we posit is a fundamental dialectics pertinent to most, if not all, psychosocial factors. By way of a first attempt to explicate this dialectical nature, we offer a hypothesis rooted in human intentionality.

In an evolving program of theoretical work inspired by existential philosophy and psychology (Cooper, 1990; Strenger, 1998), Shahar and colleagues located stress and distress in the context of human intentionality (Davidson & Shahar, 2007; Shahar, 2004, 2006, 2010, 2011; Shahar, Cross, & Henrich, 2004; Shahar & Davidson, 2009). Specifically, they argued that what makes stress human is the tension between individuals' attempt to launch themselves into the future and become what they might (labeled projectuality) and the fact that acute and chronic situations stand in the way of such a quest (labeled eventuality, see Shahar, 2011). This view is compatible with myriads of empirical strands, including (a) comparative cognitive science attesting to the uniquely abstract, future-oriented, and goaldirected information processing module shared by humans (Amati & Shallice, 2007); (b) social-psychological work highlighting the role of future goals and projects in personality and interpersonal behavior (Austin & Vancouver, 1996; Markus & Nurius, 1986); (c) developmental and clinical research suggesting the importance of intrinsic/autonomous (aka, authentic, self-related) motivation for optimal psychological development and well-being, and also documenting the adverse consequences of the absence of such intrinsic/ autonomous motivation (Deci & Ryan, 1985; Joiner, Sheldon, Williams, & Pettit, 2003; Sheldon, Joiner, Pettit, & Williams, 2003; Shahar, Henrich, Blatt, Ryan, & Little, 2003; Shahar, Kalnizky, Shulman, & Blatt, 2006; Shulman, Kalnizki, & Shahar, 2009).

When eventuality stands in the way of projectuality (namely, when events block, or derail, individuals' attempt to pursue personal projects consistent with their desired selves), individuals turn to available inner and external resources available to them so as to remove these obstacles. Sometimes, these resources alleviate obstacles directly, in turn culminating in both immediate and long-lasting adaptation. Other times, however, use of such resources raise novel problems, leading to strife and distress. Thus, rather than implicating putative resources as bad because they bring about strife and distress, it should be appreciated that, for many individuals, strife and distress constitute a price worth paying for what we label here as *teleological living*.

Going back to the hypothetical composite clinical case opening this article, consider the role of social support in the adolescent girl's decision to withstand her boyfriend's pressure to have sex. In an attempt to master the wherewithal of resisting the pressure, the girl summons support from her best friend. The support is effective in the sense that the friend reminds our protagonist her vow not to have sex at this age, how this vow is related to her long term vision of her desired self and life. The helpful friend also provides reassurance as to the adolescent girl's self-worth (you don't have to sleep with him in order to feel good with yourself) and provides a strong sense of belongingness (I'll always be there for you when you need me). This effective social support, while safeguarding the adolescent girl's possible/desirable self, contributes to the ensuing romantic breakup, which in turn propels bulimia and depression (for a similar clinical illustration as to the price people are willing to pay for living teleologicaly, see Strenger, 1998).

### WHAT'S NEXT?

# **RESEARCH IMPLICATIONS**

First, we submit that an appreciation of the risk/resilience dialectics might enable its identification in hitherto undetected cases. Take, for instance, neuroticism and secure attachment, the former being a personality-based arch villain whereas the latter—an epitome of psychological health. But could neuroticism also be adaptive, and could facets of secure attachment be detrimental? We challenge the readers to speculate.<sup>2</sup>

Second, the risk/resilience dialectics caution against the aforementioned horserace risk/resilience research, in which a host of psychosocial factors are poured into a multivariate equation for the purpose of predicting a putative outcome, whereby some factors are resolutely defined as risks and other as protective (Kilmer et al., 2010; Krzysztof & Zimmerman, 2006; Laser et al., 2007; Lewis et al., 2009; Siefert et al., 2007; Tinsley et al., 2007). Because many of these factors are likely to embed elements of both risk and re-

<sup>2.</sup> In the famous movie, "Chariots of Fire," Sam Mussabini, Harold Amrahams' Italian coach, makes a passionate speech in defense of neuroticism as an aid to sprinters.

silience, their effect on putative outcomes, in the context of other (similarly complex) predictors, is not easily interpretable. In fact, a crucial next step in risk/resilience research must target the causal relationships among putative psycholsocial factors (e.g., between self-criticism and social support, see Priel & Shahar, 2000). Without this crucial step, erroneous conclusions are likely to be drawn from additive multivariate models of risk and resilience. Namely, factors not reaching statistical significance in a multivariate equation might be deemed less central, although these might be very important, albeit be fully mediated by other factors. Similarly, factors reaching statistical significance might be considered central, but they might actually come to the fore because an irrelevant variance facet in these factors is suppressed by another variable in the equation (Tzelgov & Henik, 1991), actually describing important causal relationships (Davis, 1985; Shahar & Priel, 2003).

As well, consistent with Bandura's famous reciprocal determinism principle (Bandura, 1978), as well as with emergent, action perspectives in social, personality, and clinical psychology (Buss, 1987; Henrich, 2006; Shahar, 2006), individuals and social environments are co-creative. The risk-resilience dialectics suggests that such a co-creation includes both a pull towards, and a push from, mental health. The above reviewed research on trait dependency exemplifies this pattern, suggesting that dependency creates both social conditions that facilitate well being (e.g., social support: Bornstein, 1998; Mongrain, 1998; Shahar, 2008; positive life events: Shahar & Priel, 2003) and those which undermine well being (e.g., negative life events: Shahar & Priel, 2003). Similarly, social support might confer its complex, risk-resilience effect by a concurrent impact upon negative and positive aspects of the self-concept (Wills & Bantum, this issue). Risk/resilience research should therefore adopt an increasingly ecological, prospective-longitudinal, and multi-wave nature, so as to be able to approximate the complexity inherent in person-context exchanges (Shahar, Lassri, & Luyten, in press; Luyten, Beutler, & Shahar, in press).

## CLINICAL/POLICY IMPLICATIONS

An evidence based clinical assessment is pivotal to the delivery of successful psychological treatment (Hunsley & Mash, 2005; Mash & Hunsley, 2005). However, such an assessment should be nuanced

and contextual. That is, once clinical factors are documented using psychometrically sound measures, it is left to up to the assessor to weight their relative importance, and more importantly—their interrelationships—for the purpose of tailoring evidence based treatment (Handler & Hilsenroth, 1998; Haynes, Leisen, & Blaine, 1997; Shahar & Porcerelli, 2006; Westmeyer, 2003). From the present point of view, it is important to consider the role of each factor assessed clinically in the risk/resilience dialectics.

Take, for instance, the hypothetical composite clinical case presented above. Arguably, at intake, the hypothetical patient would have been assessed as experiencing elevated levels of both social support (her best friend staunchly stands by her attempt to resist peer pressures) and depressive symptoms (exacerbating after the romantic breakup initiated by her boyfriend). She would also be assessed as having a very high level of self-criticism. How is one to relate—and narrate—these findings?

In Figure 3 we present a graphical depiction of the relationships between these hypothetical findings. The diagram is inspired by functional approaches to case formulation, which integrate psychological assessment principles with the logic of causal modeling (see Haynes et al., 1997; Shahar & Davidson, 2009; Shahar, Horesh, & Cohen, 2008; Shahar & Porcerelli, 2006). As shown in the figure, the girl's self-criticism is functional in the sense that it upholds her possible self: it regulates her goals in the direction of creating clean living. In the face of the boyfriend's insistence of having sex, selfcriticism is resurrected, soliciting social support from the best friend for the purpose of resisting pressure, which then increases the girl's ability to confront the boyfriend. Unfortunately, the latter leads to bulimia and depression, with social support from the best friend falling short in term of preventing these outcomes.

What follows from the causal chain presented in Figure 1 is the need to espouse *an integrative psychotherapeutic strategy*, which (a) differentiates between risk-related and resilience-related interpersonal cycles; (b) using evidence-based interventions for the purpose of short-circuiting the former while bolstering the latter; and (c) matching these interventions to patients' projectuality, namely, their possible (desirable) self (for an explication of such a therapeutic approach, see for instance: Shahar & Davidson, 2009). Thus, with the hypothetical composite case of the adolescent girl, the therapist might (a) explore, collaboratively with her, the meaning of vowing not to have sex at an early age and validate such a vow, relating it to

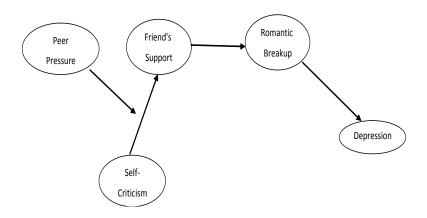


FIGURE 3. A graphical depiction of the risk/resilience dialectics in an adolescent girl.

the girl's family background and future vision; (b) employ cognitive restructuring to help her avoid a dichotomous thinking of an eitheror sort (either I sleep with my boyfriend, or he will break up with me), a dichotomous thinking that might have been strengthened, inadvertently, by the girl's best friend's support; (c) utilize techniques burrowed from interpersonal psychotherapy (IPT; Weissman, Markowitz, & Klerman, 2000) to help her explain her position to her boyfriend so as to try to keep both the relationship and her vows; and (d) anticipate the possibility of breakup, and prepare for it by building upon this girl's proactive coping style.

Such an integrative approach to assessment and intervention also has important implications for large-scale, preventive efforts. For example, in the context of screening children for a school-based preventive intervention designed to teach coping strategies to children who had been victimized by bullying (Varjas, Meyers, Meyers, Kim, Henrich, & Tenebaum, 2009), researchers found that students who were victims of bullies endorsed more adaptive coping strategies than those who were not victims, and that coping operated as a suppressing mediator of some of the adverse effects of victimization (Harper, Parris, Henrich, Varjas, & Meyers, under review).

# CONCLUSION

Observations from clinical work suggest a risk/resilience dialectics in which many psychosocial factors have the potential to embody both. Clinical and intervention research that takes into account the possibility of suppression and complex moderation effects can help shed light on this dialectical process of resilience. We argue that underlying this risk/resilience dialectics is a developmental process through which individuals actively structure and interpret their experiences, including those with adversity, to construct goals that bring meaning to their lives. In this way, teleological living functions to synthesize the seemingly opposing forces of stress and adaptation.

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