



Coping Flexibility Following Bereavement or Divorce May Not Be Predictive of Physiological Parameters

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Background

- Individual responses to stressful life events (e.g. bereavement, divorce) impact mental and physical health.
- Research suggests that coping flexibility, or the flexible command of multiple coping strategies, may be more adaptive than sole use of traditionally “beneficial” strategies¹ (e.g. emotional reappraisal).
- Coping flexibility is associated with long-term adjustment despite including seemingly opposing strategies² (e.g. working through a stressor and emotional avoidance).
- Coping flexibility is conceptualized as *broad repertoire*¹, the implementation of a wide range of coping strategies³.
- Findings on *broad repertoire* suggest a small positive effect on mental health outcomes ($r = 0.12$)¹ but effects on physical parameters are unknown.

Objective

This study examines the association between 3 measures of *broad repertoire* (as an index of coping flexibility) and immunological and physiological parameters in bereaved women and divorced adults.

Coping Flexibility Computation

Three measures of *broad repertoire* were calculated:

- COUNT: coping repertoire size, as the sum of endorsed strategies
- AVERAGE: general use of coping repertoire, as the average of subscale means
- VARIABILITY: within person variability, as the mean of all subscale standard deviations.

Methods

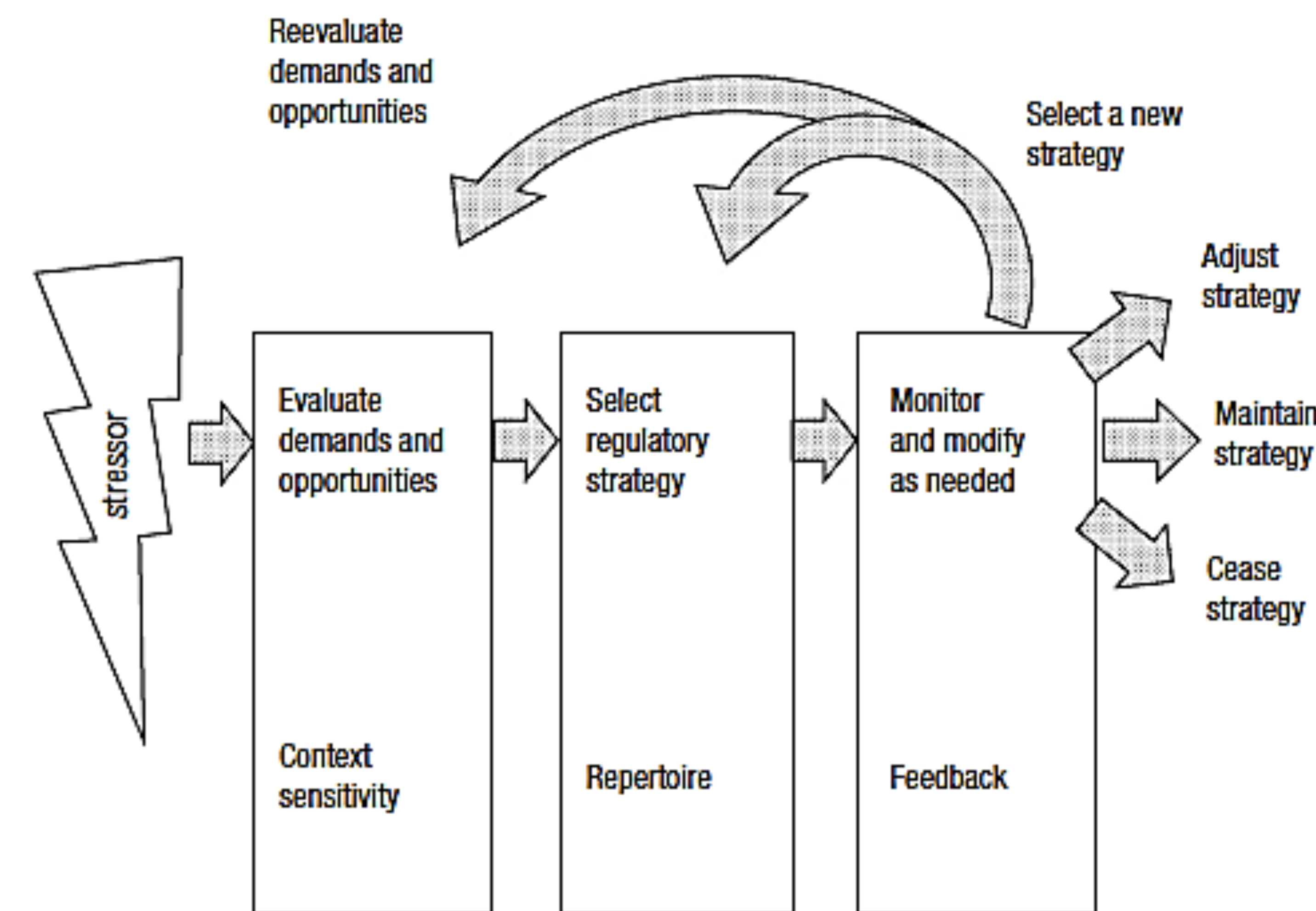
Bereaved individuals (N = 20) completed:

- The COPE scale⁵ (6 subscales: acceptance, mental disengagement, behavioral disengagement, religious coping, denial, instrumental social support) and 8 emotional approach coping items (emotional processing and emotional expression⁴)
- High frequency heart rate variability (HF-HRV)
- Salivary IL-1 β and TNFr2.

Divorced individuals (N = 133) completed:

- Brief COPE⁶ (14 subscales)
- Respiratory Sinus Arrhythmia (RSA)
- Systolic and diastolic blood pressure

Coping Flexibility



Three sequential components of coping/regulatory flexibility and their corresponding abilities. Reprinted with permission¹. Copyright 2013 by SAGE Publications.

Coping & Physiology

	Bereaved (N=20)		Divorced (N=133)	
	Mean	SD	Mean	SD
Coping Flexibility				
COUNT	5.45	0.94	9.50	2.02
AVERAGE	2.50	0.34	2.42	0.40
VARIABILITY	1.00	0.21	1.02	0.19
HF-HRV	134.45	268.34		
RSA			5.93	1.26
Heart Rate	74.67	8.76	70.52	10.47
IL-1 β (log transformed)	4.19	1.40		
TNFr2 (log transformed)	4.97	1.38		
Systolic BP			138.52	17.81
Diastolic BP			79.90	12.88

Demographics

	Bereaved (N=20)		Divorced (N=133)	
	Mean/N	SD/%	Mean/N	SD/%
Age	42.75	9.68	40.65	9.76
Sex (Female)	20	100%	84	63%
Ethnicity (non-Caucasian)	3	15%	29	22%
Education (Post graduate)	9	40%	30	23%
Time since death/divorce (Months)	24.05	21.19	3.98	2.42
Body mass index	24.53	5.52	25.61	5.21
Alcohol (Drinks per week)	1.36	5.71	5.71	6.71

Continuous variables: mean (\pm SD); categorical variables: n (%).

Results

- Regression models were conducted to test whether COUNT, AVERAGE, and VARIABILITY individually predicted immunological and physiological parameters in the bereaved and divorced samples
- After controlling relevant variables for each outcome (e.g. age, time since event, BMI), the coping flexibility variables did not predict outcomes in either sample ($p > 0.05$).

Discussion

- Contrary to theory, these data suggest that coping flexibility, conceptualized solely as *broad repertoire*, is not associated with immunological or physiological parameters and is thus limited in its utility.
- Broad repertoire* describes flexible coping without reference to context; how, when, and under what circumstances strategies are deployed remains unknown.
- Consequently, *broad repertoire* may too limited and fail to differentiate effective and ineffective strategies across situations⁷
- Future research should investigate a more comprehensive model of coping flexibility that includes context.

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