Development and initial validation of the Brief Adolescent Life Event Scale (BALES)

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DEVELOPMENT AND INITIAL VALIDATION OF THE BRIEF ADOLESCENT LIFE EVENT SCALE (BALES)

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We report initial validity analyses of the Brief Adolescent Life Event Scale (BALES). This instrument addresses negative and positive events pertinent to the well being of adolescent boys and girls, and is designed for use in studies utilizing an extended research protocol. Selection of items was guided by emerging perspectives on *positive psychology*, *action theory*, and *personality vulnerability*, as well as by new developments in statistical modeling theory. The 36 items of the scale tap negative and positive events, each of which addresses interpersonal and achievement life domains. Using a large sample of early-adolescents ($N = 895$), we confirmed the hypothesized structure that includes four domain-level latent factors (i.e., negative interpersonal events, negative achievement events, positive interpersonal events, positive achievement events), and two overarching factors (negative events and positive events). Indices of positive and negative events predicted adolescent depressive symptoms in expected ways, and positive events buffered the effect of negative events on depressive symptoms. These findings encourage an informed use of the BALES and highlight considerations involved in the development of brief measures of stress and coping processes.

Keywords: Brief adolescent life event scale (BALES); Positive psychology; Action theory

Adolescence has been described as a rather tumultuous period involving elevated levels of emotional distress (Compas *et al.*, 1994). Such distress, shown to be associated with considerable social and clinical impairment (Gotlib *et al.*, 1995; Lewinson *et al.*, 2000), is frequently precipitated by stressful life events (Compas, 1987). These findings highlight the importance of developing psychometrically appropriate measures of life events that are tailored to the adolescent population.

To date, measures of adolescent life events that are available include, but are not limited to, the Adolescent Perceived Events Scale (APES, Compas *et al.*, 1987), the Life Events Checklist (Johnson and McCutcheon, 1980), and the Children Hassles and Uplifts Scales (Kanner *et al.*, 1991). These are reliable, valid, well-researched,

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and distress-sensitive measures. They are also relatively lengthy. In the present study we sought to draw from them in developing a brief measure of adolescent life events. Our aim was not to replace these scales, but to address practical needs posed by researchers who employ extended assessment protocols in order to test comprehensive multivariate models of adolescents' well being. Such extended protocols, usually employed in clinical and cross cultural studies (e.g., Leadbeater et al., 1997; Lopez and Little, 1996), do not necessarily focus on the assessment of life events in adolescence. Nevertheless, the inclusion of a brief instrument of adolescent stress may inform the understanding of other psychological constructs targeted by these protocols.

In devising the Brief Adolescent Life Events Scale (BALES), we first reviewed the above mentioned instruments of adolescent life stress and identified life domains targeted by all of them. These scales target the following six life domains: family life, close friendships, peer relations and extracurricular activities, school, general performance, and health and appearance. In sampling life events pertaining to these domains, we sought to assess positive events, in addition to negative/stressful ones. Underlying this objective were recent studies, inspired by the movement of Positive Psychology (Seligman and Csikszentmihalyi, 2001), showing that positive events protect from adolescent distress, either directly (Kanner et al., 1991) or by buffering the adverse effects of negative events (Cohen et al., 1984).

We also sought to equally represent interpersonal life events and achievement-oriented ones. Shahar and Priel (in press) discuss the tendency of researchers to sample more interpersonal events than achievement-related ones (e.g., Bartelstone and Trull, 1995). This tendency is not consistent with recent theoretical conceptualizations of personality vulnerability as equally focused around two life domains: interpersonal relatedness and self-definition (Blatt and Zuroff, 1992). An equivalent sampling of interpersonal and achievement-related events is particularly pertinent to adolescent research because adolescence has been theorized to involve a successful integration of interpersonal relatedness and self-definition (Blatt and Blass, 1996).

Our wording of the items was guided by various action-theory perspectives that depict individuals as actively shaping their environment and development (e.g., Lerner, 1983; Brandstädter, 1998; Little et al., in press; Shahar, 2001). Accordingly, we worded BALES items in terms of participants' action (e.g., "I argued with a family member"), or lack thereof (e.g., "I was not allowed [by my parents] to do something that I wanted to"). This assessment of negative and positive events in terms of frustrated or facilitated action is compatible with the conceptualization of stress processes in terms of conservation of resources (Hobfoll, 1988, 1989).

Finally, we took into account recent developments in statistical modeling. As argued by Little, Widaman, and colleagues (Kishton and Widaman, 1994; Little, 1997; Little et al., 1999; Little, Cunningham et al., in press), item parceling (i.e., the aggregation of items to form indicators of latent constructs) is a psychometrically sound strategy, provided that it is theoretically and empirically informed. Additionally, as shown by Little and colleagues (Little et al., 1999), parceling also facilitates the optimization of indicators for representing latent constructs.

The BALES's 36 items are presented in Table I. These items tap six facets: family life, close friendship, peer relations and extracurricular activities, school, work and general performance, and health and physical appearance. The first three facets reflect the domain of interpersonal life events, and the latter three facets reflect the domain of achievement or performance-related events. Each facet in each domain is represented

TABLE I Complete listing of the 36 BALES items

Family Events	*School Events*
I argued with a family member	I got a bad grade in school
I made up with a family member	I got a good grade in school
I got help from a family member when I needed it	I completed an important assignment (on time)
I did NOT get help from a family member when I needed it	I did NOT complete an important assignment (or was late)
I was allowed to do something I wanted to	A teacher told me I did well on an assignment
I was NOT allowed to do something that I wanted to do	A teacher told me I did poorly on an assignment
Close Friends Events	*Work and Non-School Events*
I argued with a friend	I discovered I can do something better than someone else
I made up with a friend	I discovered I can NOT do something better than someone else
I got help from a friend when I needed it	I did something I felt proud embarrassed by
I did NOT get help from a friend when I needed it	I did something I felt proud of
A friend joined me for a special event when I asked	I did something outside of school that I was praised
A friend did NOT join me for a special event when I asked	I did something outside of school that I was criticized
Peer Events	*Health and Body Events*
A classmate teased or threatened me	My body changed in a way I wanted
A classmate defended me from others	My body changed in a way I did not want
I was invited to join in with a group event	I became sick or got injured
I was excluded from a group event	I got well after a sickness or recovered from an injury
I had an enjoyable romantic date	Someone insulted me because of the way I look
I had a disappointing romantic date	Someone complimented me because of the way I look

by six items, three pertaining to negative events and three to positive events. Thus, three indicators each measure 12 constructs (i.e., six facets pertaining to both negative and positive events). In the present study, we report data collected from the BALES and from the Child Depression Inventory (CDI, Kovacs, 1992), a frequently used measure of child and adolescent distress.

We expected the BALES data to conform to a factor structure that highlights the distinction between negative and positive events, and also tap interpersonal and achievement-related events. We additionally expected negative and positive events to be associated with adolescent distress in expected ways. Finally, consistent with recent reports of a small but statistically significant buffering effect of positive events (Shahar and Priel, in press), we hypothesized that these events would buffer, or ameliorate, the effect of negative events on emotional distress.

METHOD

Participants

We administered the BALES to 895 adolescents in grades 7, 8, and 9 during the third wave of a multi-wave; multi-measurement project aimed at examining personal and contextual/ecological processes pertinent to adolescent well being. The 895 participants (51% female) were recruited from an urban district serving lower to upper-middle class families. The 7th ($N = 310$) and 8th ($N = 314$) grade participants all came from the districts' sole middle school and the 9th ($N = 271$) graders came from the districts'

sole high school. In accordance with census demographics, approximately 68% classified themselves as European-American, 4% Hispanic, 17% African-American, and 11% other. The overall active-consent participation rate was 73%.

Measures

Brief Adolescent Life Events Scale (BALES)

The 36 items of the BALES are presented in Table I. Participants rated the frequency with which they experienced each event in the last four weeks on a 4-point scale ranging from 0 ("Never") to 3 ("A lot"). In administering the BALES, we found that the scale takes about five minutes to complete. Personal accounts by select participants indicated that this instrument is considerably relevant to their everyday phenomenology.

We derived a total of 18 indices from the BALES. Six pertain to the sum of the three negative items for each facet: family events (NFME), negative friendship events (NFRE), negative peer-related and extracurricular activities events (NPEE), negative school events (NSCHE), negative work events (NWE), and negative health and physical appearance events (NHPAE). Six complementary indices were derived using positive events (i.e., PFME, PFRE, PPEE, PSCHE, PWE, and PHPAE). We derived four domain-level indices by collapsing across the interpersonal and achievement-related domains: negative interpersonal events (NIE = NFME + NFRE + NPEE), negative achievement-related events (NACE = NSCHE + NWE + NHPAE), positive interpersonal events (PIE = PFME + PFRE + PPEE) and positive achievement-related events (PACE = PSCE + PWE + PHPAE). Finally, two overarching indices represented negative events (NEG = NIE + NACE) and positive events (POS = PIE + PACE).

The scale's reliabilities were quite sound for a brief instrument of this nature, particularly at the higher aggregate levels. The 12 facet-level indices had internal consistencies that ranged from 0.60 to 0.80 with a median of 0.67. The four domain-level indices had internal consistency estimates of 0.80–0.84, while the two overarching indices (positive events *vs.* negative events) had internal consistency estimates of 0.88 and 0.87, respectively. Table II lists the means and standard deviations of each of the indices. Note that negative events were significantly more common than positive events and the distributions of responses were generally normal for all indices.

Child Depression Inventory

The Child Depression Inventory (CDI, Kovacs, 1992) is a self-report questionnaire assessing depressive symptoms in children between 8 and 14 years of age. It is essentially a downward extension of the Beck Depressive Inventory (Beck *et al.*, 1961). Kovacs (1992) introduced several additional items that tap areas of school, aggression, and other social – peer relations. The scale contains 27 items; each item consists of three statements that are graded in severity and are assigned numerical value from 0 to 2. A total score is computed by adding the numerical values assigned to each marked choice. The possible score range for the CDI is 0–54. Coefficient alpha of the scale is typically mid-0.80s, and in the present study it was higher ($\alpha = 0.92$).

TABLE II   Means and standard deviations of the BALES indicators and their correlations with the Child Depression Inventory

BALES Indicators	Mean	Std	r with CDI
The 12 Facets of the BALES (3 items each, possible range 0–9):			
Positive family events (PFME)	3.7	1.8	− 0.14**
Positive friendship events (PFRE)	2.4	1.7	− 0.10**
Positive peer-related and extracurricular activities events (PPEE)	1.3	1.5	− 0.041^{ns}
Positive school events (PSCE)	2.8	1.9	− 0.26**
Positive work events (PWE)	2.9	1.9	− 0.15**
Positive health and physical appearance events (PHPAE)	2.5	1.8	− 0.11**
Negative family events (NFME)	6.7	1.6	0.28**
Negative friendship events (NFRE)	5.9	1.9	0.19**
Negative peer-related and extracurricular activities events (NPEE)	4.2	2.1	0.27**
Negative school events (NSCE)	7.6	1.6	0.28**
Negative work events (NWE)	6.1	1.9	0.28**
Negative health and physical appearance events (NHPAE)	5.0	2.2	0.30**
The Four Domain-Level Dimensions of the BALES (possible range 0–27):			
Positive achievement-related events (PACE)	8.2	4.6	− 0.20**
Positive interpersonal events (PIE)	7.3	3.9	− 0.12**
Negative achievement-related events (NACE)	18.6	4.6	0.35**
Negative interpersonal events (NIE)	16.8	4.5	0.32**
The Two Higher-Order Dimensions of the BALES (possible range 0–54):			
Positive events (POS)	15.5	7.7	− 0.17**
Negative events (NEG)	35.4	8.2	0.37**

Note: The BALES items are coded $0 =$ never to $3 =$ a lot. CDI $=$ the Child Depression Inventory.
**$p < 0.01$; ^{ns}Non significant.

Procedures

Data Collection

The BALES was administered as part of a larger protocol consisting of three batteries of questionnaires, which were administered at the end of the spring semester across three sessions separated by approximately one week. Participating students remained in their classroom while a trained assistant guided them through the protocol and answered any question. Each session took approximately 35 min to complete. The order of the three questionnaire batteries was counterbalanced. The BALES was included as part of a battery that was separate from the CDI.

Analytic Procedures

We confirmed the hypothesized factor structure of the BALES by employing a standard Confirmatory Factor Analysis technique using the LISREL software program (Jöreskog and Sörbom, 1996). To evaluate model fit we used four standard fit indices: the Non-Normed Fit Index (NNFI), the Comparative Fit Index (CFI) and the Incremental Fit Index (IFI), for which values of about 0.90 and greater are generally deemed acceptable, and the Root Mean Square Error of Approximation (RMSEA), for which values of less than 0.08 are deemed acceptable. We did not rely on the maximum likelihood chi-squared statistic because it is extremely sensitive with large sample sizes. We then tested the hypothesized stress-buffering effect of the BALES positive events using a multiple regression analysis with an interaction term. Probing of the interaction was conducted following the recommendation of Aiken and West (1991).

RESULTS

Means, standard deviations and correlations between the BALES indices and the CDI are presented in Table II. As shown in this table, with the exception of the PPEE index, all the BALES indices correlated with CDI depressive symptoms in expected ways. Namely, the negative event indices were associated with elevated depressive symptoms, whereas the positive event indices were associated with reduced levels of depressive symptoms.

As mentioned, we subjected the 12 basic BALES indices to a Confirmatory Factor Analysis (CFA), parceling the three items of each facet to represent the 12 manifest indices. That is, each facet was represented by one parceled manifest variable. The CFA model included four domain-level latent factors: negative interpersonal events (NIE, indicated by the NFME, NFRE, and the NPEE facets), negative achievement-related events (NACE, indicated by the NSCHE, NWE, and the NHPAE facets), positive interpersonal events (PIE, indicated by PFME, PFRE, PPEE facets), and positive achievement-related events (PACE, indicated by the NSCHE, NWE, and the NHPAE facets).

In turn, the latent variables NIE and NACE were predicted by an overarching second-order factor designating negative events (NEG). The latent variables PIE and PACE were predicted by a second order factor designating positive events (POS). These two second-order factors were allowed to correlate. To identify the model, the variances of the second-order factors, NEG and POS, were fixed at 1.0 and, as recommended by Little *et al.* (1999), equality constraints were imposed on the two factor loadings of each higher-order factor. Additionally, we specified six residual correlations between domain-specific negative and positive life events (i.e., between the residuals of NFME and PFME, of NFRE and PFRE, of NPEE and PPEE, of NSCE and PSCE, of NWE and PWE, and of NHPAE and PHPAE). The rationale for such specification was that similar item wording (e.g., usage of the term ''friends'') may contribute to the correlation between the residual variances of these variables (Little, 1997).

The CFA model approached an acceptable level of fit ($\chi^2 = 374.93$, $df = 45$, $P < 0.01$; NNFI $= 0.87$, CFI $= 0.91$; IFI $= 0.91$; RMSEA $= 0.9$). Of the six residual correlations specified, only three were significant. Removal of these non-significant residual correlations did not reduce model fit ($\Delta\chi^2 = 1.31$, $df = 2$, n.s.). Additionally we identified two additional correlated residuals (NPEE with NHPAE and PPEE with PHPAE) whose estimation substantially improved model fit ($\Delta\chi^2 = 116.85$, $df = 2$, $P < 0.01$). The rationale for such specification was that similar item wording (e.g., usage of the term ''friends'' may contribute to the correlation between the residual variances of these variables (cf. Little, 1997).

The fit of this final model, which is presented in Fig. 1, was good ($\chi^2 = 259.39$, $df = 45$, $P < 0.01$; NNFI $= 0.92$, CFI $= 0.94$; IFI $= 0.94$; RMSEA $= 0.8$). As presented in the figure, all indicators loaded on their respective latent variables in expected ways, and the two higher order factors (POS and NEG) were mildly intercorrelated ($r = 0.14$, $P < 0.01$).

Using Little's (1997) guidelines, multi-group analyses were conducted to test whether the factor structure was maintained across gender and grade. The factor structure was maintained across all groups as evidenced by equivalence in the factor loadings of the parceled indicators (ΔNNFI $= -0.01$ for gender; ΔNNFI $= -0.02$ for grade) and the latent paths ($\Delta\chi^2 = 0.64$, $df = 3$, n.s. for gender; $\Delta\chi^2 = 6.11$, $df = 6$. n.s. for grade).
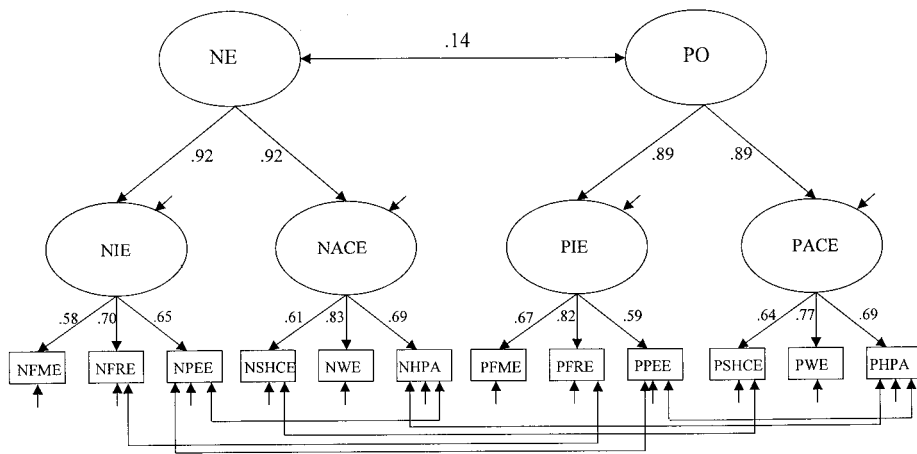
FIGURE 1   Results of the Confirmatory Factor Analysis (CFA) of the BALES.

These findings support the psychometric validity of the BALES for boys and girls and for students in seventh, eighth, and ninth grade.

Next, we conducted three multiple regression analyses on scale scores of the BALES. In the first analysis, we regressed CDI scores onto the NIE, NACE, PIE and PACE indicators. We found that each of these indicators predicted CDI scores in expected ways ($\beta = 0.28$, $P < 0.001$; $\beta = 0.14$, $P < 0.001$; $\beta = -0.15$, $P < 0.001$; and $\beta = -0.09$; $P < 0.05$; respectively). In the second analysis, we regressed CDI scores onto the composite NEG and POS indicators. These indicators predicted CDI scores in expected ways ($\beta = 0.40$, $P < 0.001$; $\beta = -0.22$, $P < 0.001$; respectively).

In the third analysis, we regressed CDI scores onto NEG and POS, as well as onto a multiplicative term denoting an interaction between these two indicators. Following the recommendations of Aiken and West (1991), we centered the NEG and POS indicators prior to computing this multiplicative interaction term. Consistent with Shahar and Priel (in press), we anticipated a small but statistically significant interaction between the two centered indicators, suggesting that positive events buffer the adverse effects of negative events on distress. Controlling for the main effects of these events, we found a small but statistically significant interaction effect ($\beta = -0.09$, $p < 0.001$). Probing this interaction using the Aiken and West's (1991) recommendations, we found that the effect of negative events on distress was statistically significant at both high and low levels of positive events (as determined by a standard deviation above and below the mean, respectively). But this effect was significantly stronger in the context of low levels of positive events ($\beta = 0.49$, $p < 0.001$), than in the context of high levels ($\beta = 0.33$, $p < 0.001$). Thus, positive events appear to buffer the effects of negative events on distress.

DISCUSSION

We confirmed a relatively intricate factor structure of the Brief Adolescent Life Event Scale (BALES). This structure reflected the relative independent contribution of risk

and protective factors to participants' well being (Seligman and Csikszentmihalyi, 2001) by identifying two second-order factors designating negative and positive life events.

The BALES addresses a frequent bias present in the life event literature toward sampling interpersonal life events in comparison to achievement-related ones (e.g. Bartelstone and Trull, 1995). As suggested by Shahar and Priel (in press), this bias may attenuate results obtained in previous studies, in which interpersonal events were shown to be more important to participants' well being than achievement related events (Zuroff *et al.*, 1990). However, in equally representing interpersonal and achievement-related events, we found that the effects of the former were comparable to the effects of the latter.

Other advantages of the BALES include item wording that is consistent with action theory perspectives (Lerner, 1983; Brandstädter, 1998; Little, in press; Little, Hawley *et al.*, in press; Shahar, 2001), as well as with conceptualizations of stress in terms of conservation of resources (Hobfall, 1988, 1989).

Yet another advantage, perhaps the most central one, is the scale's brevity. This quality of the BALES was made possible by selection and wording of items based on clear theoretical formulations, but also, and predominantly, by relying on recent statistical developments. Particularly, recent findings as to the optimal selection of indicators (Little *et al.*, 1999), and the employment of theoretically informed parceling procedures (Little, Cunningham *et al.*, in press) might inspire other researchers to develop other brief measures of stress and coping constructs.

Despite these advantages, we would like to reiterate that in developing the BALES, we did not intend to replace other well-established measures of adolescent life events. Previously developed and lengthier measures of adolescent life events are perhaps better suited than the BALES for studies in which adolescent stress in the predominant target construct. However, employment of the BALES is recommended in studies with an extensive assessment protocol, in which the researcher is predominantly interested in assessing other constructs besides life events, but would still like to capture the upheavals and uplifts associated with negative and positive events during adolescence. In sharing the BALES with the stress-research community, we hope to facilitate further validations by other researchers who will find the BALES applicable to their needs.

References

Aiken, L.S. and West, S.G. (1991). *Multiple Regression: Testing and Interpreting Interactions*. Sage, Newbury Park.

Bartelstone, J.H. and Trull, T.J. (1995). Personality, life events and depression. *Journal of Personality Assessment*, **64**, 279–294.

Beck, A.T., Ward, C.H., Mendelsohn, M., Mock, J. and Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry*, **4**, 892–989.

Blatt, S.J. and Blass, R.B. (1996). Relatedness and self-definition: a dialectic model personality development. In: Noam, G.G. and Fischer, K.W. (Ed.), *Development and Vulnerabilities in Close Relationships*, pp. 309–338. Erlbaum, Hillsdale, N.J.

Blatt, S.J. and Zuroff, D.C. (1992). Interpersonal relatedness and self-definition: two prototypes of depression. *Clinical Psychology Review*, **12**, 527–562.

Brandstädter, J. (1998). Action perspectives on human development. In: Damon, W. and Lerner, R.M. (Eds.), *Handbook of Child Psychology*, pp. 807–863. John Wiley and Sons, New York.

Cohen, L., McGowan, J., Fooskas, S. and Rose, S. (1984). Positive life events ans social support and the relation between life stress and psychological disorder. *American Journal of Community Psychology*, **12**, 567–587.

Compas, B.E. (1987). Coping with stress during childhood and adolescence. *Phychological Bulletin*, **101**, 393–403.

Compas, B.E., Davis, G.E., Forsythe, C.J. and Wagner, B. (1987). Assessment of major and daily stressful events during adolescence: the adolescence perceived events scale. *Journal of Consulting and Clinical Psychology*, **57**, 732–740.

Compas, B.E., Eye, S and Grant, K.E. (1994). Taxonomy, assessment and diagnosis of depression during adolescence. *Psychological Bulletin*, **114**, 323–344.

Gotlib, I.H., Lewinsohn, P.M. and Seeley, J.R. (1995). Symptoms versus a diagnosis of depression: Differences in psychosocial functioning. *Journal of Consulting and Clinical Psychology*, **63**, 90–100.

Hobfoll, S.E. (1988). *The Ecology of Stress*. Hemisphere, New York.

Hobfoll, S.E. (1989). Conservation of resources: a new attempt at conceptualizing stress. *American Psychologist*, **44**, 513–524.

Jöreskog, D. and Sörbom, D. (1996). *LISREL 8: User's Reference Guide*. Scientific Software International, Chicago, IL.

Johnson, J.H. and McCutcheon, S.M. (1980). Assessing life stress in older children and adolescents: preliminary findings with the life events checklist. In: Sarason, I.G. and Spielberger, C.D. (Ed.), *Stress and Anxiety*, pp. 111–125. Hemisphere, Washington, DC.

Kanner, A.D., Feldman, S.S. Weinberger, D.A. and Ford, M.E. (1991). Uplifts, Hussles, and adaptational outcomes in early adolescnents. In: Monet, A. and Lazarus, R.S. (Eds.), *Stress and Coping: An Anthology*, pp. 158–1820. Columbia University Press, New York.

Kishton, J.M. and Widaman, K.F. (1994). Unidimensional versus domain representative parceling of questionnaire items: an empirical example. *Educational and Psychological Measurement*, **54**, 757–765.

Kovacs, M. (1992). *Children's Depression Inventory: A Self-Related Depression Scale of School-Aged Youngsters*. Unpublished manuscript. University of Pittsburgh School of Medicine, Pittsburgh, PA.

Leadbeater, B.J., Kuperminc, G.P. Blatt, S.J. and Hertzog, C. (1999). A multivariate mode of gender differences in adolescent's internalizing and externalizing problems. *Developmental Psychology*, **35**, 1268–1282.

Lerner, R.M. (1983). Children and adolescents as producers of their own development. *Developmental Review*, **2**, 342–370.

Lewinsohn, P.M., Solomon, A., Seeley, J.R. and Zeiss, A. (2000). Clinical implications of "subthreshold" depressive symptoms. *Journal of Abnormal Psychology*, **109**, 345–351.

Little, T.D. (1997). Mean and covariance structures (MACS) analyses of cross-cultural data: Practical and theoretical issues. *Multivariate Behavioral Research*, **32**, 53–76.

Little, T.D. (in press). Agency in development. In: Silbereisen, R. and Hartup, W.H. (Eds.), *Expert Views on Human Development*, pp. 000–000. Psychology Press, East Sussex, England.

Little, T.D., Cunningham, W.A., Shahar, G. and Widaman, K.F. (in press). To parcel or not parcel: exploring the question, weighing the merits. *Structural Equation Modeling*.

Little, T.D., Hawley, P.H., Henrich, C.C. and Marsland, K. (in press). Three views of the agentic self: a development sysnthesis. In: Deci, E.L. and Ryan, R.M. (Eds.), *Handbook of Self-Determination Research*, pp. 000–000. University of Rochester Press, Rochester, NY.

Little, T.D., Lindenberger, U. and Nesselroade, J.R. (1999). On selecting indicators for multivariate measurement and modeling with latent variables: when "good" indicators are bad and "bad" indicators are good. *Psychological Methods*, **4**, 192–211.

Lopez, D.F. and Little, T.D. (1996). Children's action-control beliefs and emotional regulation in the social domain. *Developmental Psychology*, **32**, 299–312.

Seligman, M.E.P. and Csikszentmihalyi, M. (2001). Positive psychology: an introduction. *American Psychologist*, **55**, 5–14.

Shahar, G. (2001). Personality, shame, and the breakdown of social relations: The voice of quantitative depression research. *Psychiatry*, **64**, 228–239.

Shahar, G. and Priel, B. (in press). Positive life events and emotional distress in adolescence: in search for protective-interactive mechanisms. *Journal of Social and Clinical Psychology*.

Zuroff, D.C., Igreja, I. and Mongrain, M. (1990). Dysfunctional attitudes, dependency, and self-criticism as predictors of depressive mood states: a 12-month longitudinal study. *Cognitive Therapy and Research*, **14**, 315–326.

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