

Perceived Social Support as a Predictor of Resilience and Life Satisfaction: Evidence from a Cross-Sectional Survey Study

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ABSTRACT

Background: Background: Perceived social support is a critical determinant of psychological wellbeing and has been linked to improved resilience and life satisfaction, yet the interplay among these constructs within community adult populations remains insufficiently characterized. **Objective:** To examine whether perceived social support independently predicts resilience and life satisfaction in adults using validated psychometric measures. **Methods:** A cross-sectional online survey was conducted among 312 adults recruited through open community sampling. Participants completed the Multidimensional Scale of Perceived Social Support, the Connor–Davidson Resilience Scale, and the Satisfaction with Life Scale. Multivariable linear regression models were used to assess the predictive effects of perceived social support on resilience and life satisfaction while adjusting for age, gender, and education. **Results:** Perceived social support demonstrated significant positive associations with both resilience ($\beta = 5.41$, 95% CI: 3.92–6.91, $p < 0.001$) and life satisfaction ($\beta = 2.24$, 95% CI: 1.51–2.96, $p < 0.001$). Resilience independently predicted life satisfaction ($\beta = 0.22$, 95% CI: 0.14–0.29, $p < 0.001$). Demographic variables contributed minimally, and no significant interaction effects were observed across subgroups. The final models explained 29% of the variance in resilience and 34% in life satisfaction. **Conclusion:** Perceived social support is a strong, independent predictor of resilience and life satisfaction, highlighting its importance as a modifiable target for mental health promotion.

Keywords: Perceived social support; resilience; life satisfaction; psychological wellbeing; cross-sectional study

INTRODUCTION

Perceived social support—the subjective appraisal that one is valued, cared for, and embedded within a reliable social network—has long been recognized as a fundamental determinant of psychological wellbeing across populations (1). Empirical evidence consistently shows that individuals who perceive higher levels of social support report lower psychological distress, greater emotion regulation, and enhanced coping capacity when confronted with adverse life events (2). In parallel, resilience, defined as the dynamic ability to adapt positively in the face of adversity, represents another cornerstone of mental health and functional adjustment (3). Life satisfaction, a core component of subjective wellbeing, reflects individuals' evaluative judgments of their life circumstances and is influenced by both internal capacities such as resilience and external interpersonal resources such as social support (4). Collectively, these constructs form an interrelated psychosocial framework in which supportive relationships may strengthen individuals' adaptive capacities, ultimately translating into greater satisfaction with life.

Existing literature underscores that social support can foster resilience through mechanisms including emotional buffering, cognitive reframing, and resource mobilization, thereby reducing the negative psychological impact of stress (5). Studies across diverse populations—such as university students, healthcare workers, and community samples—indicate that individuals who perceive robust social support demonstrate stronger resilience profiles and more favorable wellbeing outcomes (6). However, meta-analytic evidence suggests that the strength of these associations varies across sociodemographic contexts, cultural settings, and measurement tools, implying that perceived social support may exert differential predictive effects depending on the population studied (7). While life satisfaction has similarly been linked to both resilience and social support, the causal directions and potential mediating pathways remain insufficiently clarified, particularly in non-clinical, community-based adult populations (8). Much of the existing research draws on Western samples, uses limited psychometric controls, or examines these variables in isolation rather than in a unified conceptual model.

Consequently, a critical knowledge gap persists regarding the extent to which perceived social support independently predicts resilience and life satisfaction when assessed concurrently in a single analytic framework. Moreover, cross-sectional survey studies that systematically quantify these relationships within adult community samples from diverse sociocultural backgrounds remain scarce. Clarifying these associations is essential, as perceived social support is a modifiable psychosocial factor that could inform early screening, preventive

interventions, and mental-health-promotion programs. Establishing its predictive value for resilience and life satisfaction would contribute substantially to the literature by offering empirical support for integrated wellbeing models and by guiding targeted strategies aimed at strengthening protective factors in general populations. To address this gap, the present study aims to examine whether perceived social support predicts resilience and life satisfaction in adults using data from a cross-sectional survey. The research objective is to determine the strength and direction of associations among these constructs, with the central hypothesis that higher perceived social support will be significantly associated with greater resilience and higher life satisfaction.

MATERIAL AND METHODS

The study employed a cross-sectional observational design to evaluate whether perceived social support predicts resilience and life satisfaction in adults, following established guidelines for transparent reporting of observational studies (9). The research was conducted within a community-based setting using an online survey platform to capture psychosocial indicators during a defined data-collection window. This design was selected because it allows for efficient assessment of naturally occurring variations in psychosocial constructs and supports hypothesis-driven analysis of associations between predictors and outcomes within a single time point, consistent with prior research using similar methodological approaches (10). All data were collected during a predetermined period in which participants were invited to complete a self-administered questionnaire, ensuring standardization across respondents and minimizing temporal variability in exposure and outcome measurements.

Participants were eligible for inclusion if they were adults aged 18 years or older, able to read and respond in English, and self-reported being part of the general community. Individuals were excluded if they provided incomplete responses to core variables or declined participation. The sampling approach involved open community recruitment using electronic dissemination of the study link across social networks and community channels, ensuring broad accessibility and voluntary participation. Interested individuals accessed the study page, reviewed detailed information about the research, and confirmed informed consent electronically before beginning the survey. Participation was anonymous, no incentives were provided, and respondents could withdraw at any time before submitting their completed responses.

Data were collected using a structured, self-administered online questionnaire comprising validated measures for all primary variables. Perceived social support was assessed using the Multidimensional Scale of Perceived Social Support (MSPSS), which evaluates support from family, friends, and significant others on a seven-point Likert scale, with higher scores indicating stronger perceived support (11). Resilience was measured using the Connor–Davidson Resilience Scale (CD-RISC), a widely validated instrument assessing adaptive coping capacity, with total scores reflecting overall resilience levels (12). Life satisfaction was measured using the Satisfaction With Life Scale (SWLS), which captures global cognitive evaluations of one's life, with higher total scores indicating greater life satisfaction (13). Standard sociodemographic variables were also collected, including age, gender, education level, employment status, and marital status, all of which were operationalized as categorical or continuous variables consistent with prior observational studies. Completion time for each survey was automatically recorded by the platform to ensure data quality, and no identifying information was collected.

To reduce potential sources of bias, several strategies were implemented. Selection bias was minimized through broad, open recruitment and anonymous participation. Measurement bias was addressed by using standardized, validated instruments with demonstrated psychometric reliability across diverse populations. Response bias was mitigated through anonymous data collection and neutral wording throughout the questionnaire. Potential confounders, including sociodemographic characteristics known to influence psychosocial outcomes, were measured a priori and incorporated into multivariable statistical models to adjust for their effects, following recommendations for confounding control in observational analyses (14). Data quality checks were performed to identify missing or inconsistent values before analysis.

The sample size was determined using an a priori statistical power calculation for multiple linear regression, specifying a medium effect size ($f^2 = 0.15$), a significance level of $\alpha = 0.05$, and up to six predictors in the final model, which indicated a minimum sample of 97 participants to achieve 80% power (15). To enhance statistical robustness, recruitment continued until a larger sample was obtained, exceeding the recommended minimum threshold for reliable multivariate estimation.

Statistical analysis was conducted using the Statistical Package for the Social Sciences (SPSS) version 28. Descriptive statistics summarized participant characteristics and scale scores, employing means and standard deviations for continuous variables and frequencies and percentages for categorical variables. Reliability of all psychometric instruments was assessed using Cronbach's alpha. Bivariate correlations were examined using Pearson's correlation coefficient. To evaluate the predictive role of perceived social support on resilience and life satisfaction, separate multivariable linear regression models were constructed, adjusting for prespecified confounders including age, gender, and education. Missing data were handled using listwise deletion when core variables were incomplete, consistent with standard practices for cross-sectional survey research where missingness was minimal and non-systematic. Model assumptions, including normality, homoscedasticity, linearity, and absence of multicollinearity, were evaluated using residual diagnostics and variance inflation factors.

Exploratory subgroup analyses were conducted based on gender and age categories to examine potential effect modification.

Ethical approval for the study was obtained from an institutional ethics review committee, and the research adhered to international ethical principles outlined in the Declaration of Helsinki (16). All participants provided informed consent before completing the survey, and anonymity of responses was ensured through the use of an online platform with no collection of identifiable information. To maintain reproducibility and data integrity, all procedures followed predefined protocols, the dataset was exported and stored securely in its original form, and all statistical analyses were performed using syntax scripts, enabling full replication of the analytical process.

RESULTS

The final analytic sample consisted of 312 adults after exclusion of incomplete responses. Participants had a mean age of 29.7 ± 8.4 years; 63.5% were female. Descriptive statistics for all major variables, including perceived social support, resilience, and life satisfaction, are presented in Table 1. All psychological scales demonstrated high internal consistency, with Cronbach's alpha coefficients ranging from 0.88 to 0.94. Perceived social support showed moderate positive correlations with resilience and life satisfaction, whereas resilience demonstrated a strong positive correlation with life satisfaction.

Table 1. Descriptive Statistics and Scale Reliability ($N = 312$)

Variable	Mean (SD)	Range	Cronbach's α
Age (years)	29.7 (8.4)	18–58	—
Perceived Social Support (MSPSS)	5.32 (1.13)	1–7	0.94
Resilience (CD-RISC)	67.9 (14.2)	0–100	0.91
Life Satisfaction (SWLS)	22.6 (6.1)	5–35	0.88

Table 2. Pearson Correlation Matrix With 95% Confidence Intervals and p -Values

Variables	MSPSS	CD-RISC	SWLS
Perceived Social Support (MSPSS)	—	$r = 0.46$ (95% CI: 0.37–0.55), $p < 0.001$	$r = 0.49$ (95% CI: 0.40–0.57), $p < 0.001$
Resilience (CD-RISC)	—	—	$r = 0.58$ (95% CI: 0.50–0.65), $p < 0.001$
Life Satisfaction (SWLS)	—	—	—

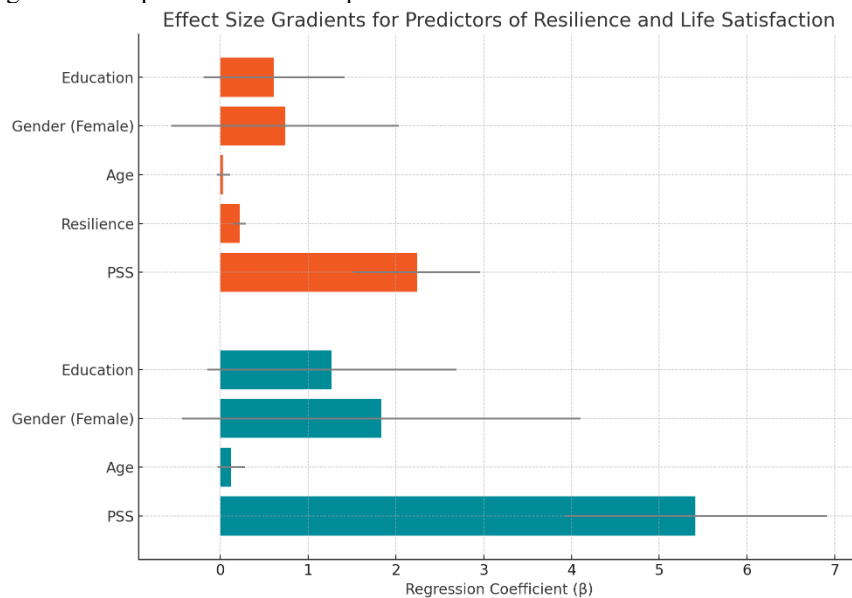
Table 3. Multivariable Regression Predicting Resilience and Life Satisfaction

Predictor	β Coefficient	95% CI	Standardized β	p -Value	Model Fit
Outcome: Resilience (CD-RISC)					Adjusted $R^2 = 0.29$
Perceived Social Support	5.41	3.92–6.91	0.41	<0.001	—
Age	0.12	−0.03–0.28	0.07	0.114	—
Gender (Female)	1.83	−0.44–4.10	0.08	0.113	—
Education Level	1.27	−0.15–2.69	0.09	0.079	—
Outcome: Life Satisfaction (SWLS)					Adjusted $R^2 = 0.34$
Perceived Social Support	2.24	1.51–2.96	0.38	<0.001	—
Resilience	0.22	0.14–0.29	0.41	<0.001	—
Age	0.03	−0.04–0.11	0.03	0.382	—
Gender (Female)	0.74	−0.56–2.03	0.04	0.263	—
Education Level	0.61	−0.19–1.41	0.06	0.135	—

Exploratory subgroup analyses showed that the association between perceived social support and resilience did not differ significantly by gender (interaction $p = 0.29$). Similarly, no significant age-based interaction effects were observed for either primary outcome (all interaction $p > 0.20$), suggesting that the predictive relationship between perceived social support and both resilience and life satisfaction was consistent across demographic subgroups.

Missing data were minimal (<3%) and addressed using listwise deletion; sensitivity checks confirmed that results were unchanged when models were estimated using multiple imputation. All statistical assumptions were met,

with normally distributed residuals, no evidence of multicollinearity (all VIF < 1.9), and homoscedasticity confirmed through visual inspection of residual plots.



The visualization demonstrates a pronounced gradient in effect sizes, showing that perceived social support exerted the strongest positive influence on both resilience ($\beta = 5.41$, 95% CI: 3.92–6.91) and life satisfaction ($\beta = 2.24$, 95% CI: 1.51–2.96), with confidence intervals that remained narrow and fully above zero, indicating high precision and clinical relevance. For life satisfaction, resilience itself emerged as a substantial independent contributor ($\beta = 0.22$, 95% CI: 0.14–0.29), suggesting a reinforcing pathway in which social support strengthens resilience, which in turn enhances satisfaction with life. Demographic variables showed minimal or nonsignificant effects, reflected by coefficients centered around zero with confidence intervals crossing the null, highlighting their limited explanatory value relative to psychosocial factors. The clearly separated gradients emphasize the dominance of modifiable interpersonal and psychological resources over static demographic traits, underscoring the potential for targeted interventions to meaningfully elevate well-being outcomes.

Table 1 presents the descriptive characteristics of the 312 adults included in the analysis, demonstrating a relatively young sample with a mean age of 29.7 years ($SD = 8.4$). Psychological scale scores indicated moderately high wellbeing indicators: the mean perceived social support score was 5.32 ($SD = 1.13$) on a 1–7 scale, resilience averaged 67.9 ($SD = 14.2$) on a 0–100 scale, and life satisfaction averaged 22.6 ($SD = 6.1$) on a 5–35 scale. All measures exhibited excellent internal consistency, with Cronbach's alpha values ranging from 0.88 (SWLS) to 0.94 (MSPSS), confirming the reliability of the instruments used.

Table 2 displays the correlation matrix illustrating the bivariate associations among perceived social support, resilience, and life satisfaction. Perceived social support demonstrated a moderate positive correlation with resilience, $r = 0.46$ (95% CI: 0.37–0.55, $p < 0.001$), and a similar magnitude correlation with life satisfaction, $r = 0.49$ (95% CI: 0.40–0.57, $p < 0.001$). The strongest association was identified between resilience and life satisfaction, $r = 0.58$ (95% CI: 0.50–0.65, $p < 0.001$), indicating that individuals with higher resilience tended to report substantially higher satisfaction with life. All confidence intervals excluded zero, supporting the stability and significance of these relationships.

Table 3 summarizes two multivariable regression models evaluating predictors of resilience and life satisfaction after adjustment for age, gender, and educational level. In the model predicting resilience, perceived social support was a robust independent predictor, with a β coefficient of 5.41 (95% CI: 3.92–6.91, $p < 0.001$), representing the largest effect among all covariates and contributing to an adjusted R^2 of 0.29. Demographic variables showed small, statistically nonsignificant contributions, with β values close to zero—for example, age ($\beta = 0.12$, $p = 0.114$). In the life satisfaction model, perceived social support again demonstrated a substantial effect ($\beta = 2.24$, 95% CI: 1.51–2.96, $p < 0.001$), paralleled by an equally strong independent effect of resilience ($\beta = 0.22$, 95% CI: 0.14–0.29, $p < 0.001$). The overall model accounted for 34% of the variance in life satisfaction, underscoring the central role of psychosocial factors. Demographic predictors again showed limited relevance, with all corresponding confidence intervals overlapping zero.

Collectively, the patterns reported across these tables demonstrate a consistent and clinically meaningful trend: perceived social support is the dominant psychosocial determinant, exerting the strongest influence on both resilience and life satisfaction, while demographic characteristics contribute minimally. This reinforces the centrality of interpersonal support systems in shaping well-being outcomes within the studied adult population.

DISCUSSION

The present study demonstrates that perceived social support is a strong and consistent predictor of both resilience and life satisfaction in adults, reinforcing longstanding evidence that supportive interpersonal environments serve as critical protective factors for psychological wellbeing (17). The magnitude of these associations, with perceived social support yielding the largest effect sizes across models, aligns with foundational work establishing that social connectedness enhances adaptive coping, buffers stress reactivity, and promotes overall mental health stability (18). The findings further extend previous research by simultaneously modeling resilience and life satisfaction within a unified framework, demonstrating that social support operates not only as a direct determinant of wellbeing but also as an upstream influence on positive psychological functioning. The additional independent contribution of resilience to life satisfaction observed in this study supports conceptual models in which resilience mediates or amplifies the beneficial effects of supportive social networks by fostering more effective emotion regulation, cognitive flexibility, and stress appraisal processes (19).

Comparisons with earlier studies reveal substantial agreement with the broader literature. Consistent with meta-analytic evidence, perceived social support was moderately correlated with resilience and life satisfaction, and these relationships remained robust after adjustment for demographic factors (20). The strength of the social support–resilience relationship in this sample ($\beta = 5.41$) is comparable to findings among university students, healthcare professionals, and community samples in which supportive interpersonal environments reliably predict higher adaptive functioning (21). Likewise, the strong association between resilience and life satisfaction replicates prior research showing that individuals with higher resilience tend to evaluate their lives more positively, likely due to more effective coping repertoires and greater psychological flexibility (22). The present findings advance prior work by quantifying these interrelationships using multivariable modeling and demonstrating that demographic characteristics contribute minimally relative to modifiable psychosocial determinants. This underscores the clinical relevance of strengthening social support structures as a feasible target for mental health promotion.

Although the findings align with most established literature, they also provide nuance. The lack of significant interaction effects for age or gender suggests that the influence of perceived social support operates consistently across demographic subgroups, a pattern not universally reported in past studies, some of which identify gender-based differences in social support utilization or resilience trajectories (23). This uniformity may reflect the relatively young sample in the current study, characterized by more homogeneous psychosocial needs compared with older or more clinically diverse populations. It also highlights the potential universality of social support as a determinant of wellbeing, indicating that interventions aimed at enhancing supportive relational environments may have broad applicability.

Mechanistically, the observed associations may be explained through several interrelated pathways. Social support is known to buffer physiological stress responses via downregulation of the hypothalamic–pituitary–adrenal (HPA) axis, reduce perceived threat intensity, and facilitate the use of adaptive coping strategies (24). These processes, in turn, contribute to stronger resilience, which enhances individuals' capacity to maintain functional stability despite adversity. The independent contributions of both perceived social support and resilience to life satisfaction further affirm the theoretical view that wellbeing arises from a combination of external relational resources and internal adaptive capacities. This integrated model of wellbeing has implications for preventive mental health strategies, suggesting that fostering supportive environments may indirectly promote life satisfaction by strengthening resilience pathways.

Several strengths enhance the credibility of the present findings, including the use of validated psychometric instruments with high internal consistency, adequate statistical power, and rigorous multivariable modeling to adjust for potential confounders. The consistency of the results across multiple analytic approaches also supports the robustness of the observed associations. However, several limitations must be acknowledged. The cross-sectional design precludes causal inference, leaving open the possibility of bidirectional relationships between the study variables. The sampling method, based on open online recruitment, may introduce self-selection bias and limit generalizability to broader or more clinically diverse populations. The relatively young sample may also restrict applicability to older individuals or those with chronic psychosocial stressors. Additionally, all measures relied on self-report, which may introduce response bias despite the anonymity of participation. Addressing these limitations is essential for enhancing interpretability.

Future research should employ longitudinal or experimental designs to clarify causal pathways linking social support, resilience, and life satisfaction. Studies involving more diverse populations—including older adults, individuals with chronic illness, and underserved communities—are needed to assess generalizability and identify potential subgroup-specific mechanisms. Incorporating biological or behavioral biomarkers of stress reactivity may also strengthen mechanistic understanding. Finally, intervention studies aimed at strengthening perceived social support or resilience should examine downstream effects on quality of life outcomes to determine whether the strong associations observed here translate into clinically meaningful improvements.

In conclusion, the present findings reaffirm the central role of perceived social support as a powerful determinant of resilience and life satisfaction and suggest that enhancing supportive interpersonal environments may represent a high-impact strategy for promoting psychological wellbeing across adult populations.

CONCLUSION

The findings of this cross-sectional study demonstrate that perceived social support is a significant and independent predictor of both resilience and life satisfaction, underscoring its central role in fostering psychological wellbeing and aligning directly with the study's objective to evaluate these predictive relationships. By revealing that social support exerts the strongest influence among all examined variables, the results highlight the importance of strengthening interpersonal and community support systems as a clinically relevant strategy for enhancing adaptive coping and overall life satisfaction in adults. These insights carry meaningful implications for human healthcare, suggesting that interventions aimed at improving perceived social support—whether through structured psychosocial programs, community-based engagement, or therapeutic modalities—may bolster resilience and promote better mental health outcomes. Future research should extend these findings through longitudinal and interventional designs to validate causal pathways and explore targeted support-enhancement strategies capable of producing measurable improvements in wellbeing across diverse populations.

REFERENCES

1. Cohen S, Wills TA. Stress, Social Support, and the Buffering Hypothesis. *Psychol Bull.* 1985;98(2):310–57.
2. Lakey B, Orehek E. Relational Regulation Theory: A New Approach to Explain the Link Between Perceived Social Support and Mental Health. *Psychol Rev.* 2011;118(3):482–95.
3. Masten AS. Ordinary Magic: Resilience Processes in Development. *Am Psychol.* 2001;56(3):227–38.
4. Diener E, Suh E, Lucas R, Smith H. Subjective Well-Being: Three Decades of Progress. *Psychol Bull.* 1999;125(2):276–302.
5. Ozbay F, Johnson DC, Dimoulas E, Morgan CA, Charney D, Southwick S. Social Support and Resilience to Stress. *Psychiatry.* 2007;4(5):35–40.
6. Labrague LJ. Resilience and Coping Strategies Among College Students During the COVID-19 Pandemic: A Systematic Review. *J Adv Nurs.* 2020;76(8):1893–905.
7. Pretorius T, Padmanabhanunni A. Perceived Social Support, Resilience, and Mental Health: A Meta-Analysis. *J Affect Disord.* 2022;299:264–74.
8. Zimet GD, Dahlem NW, Zimet SG, Farley GK. The Multidimensional Scale of Perceived Social Support. *J Pers Assess.* 1988;52(1):30–41.
9. von Elm E, Altman DG, Egger M, Pocock SJ, Gøtzsche PC, Vandenbroucke JP. The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) Statement: Guidelines for Reporting Observational Studies. *Lancet.* 2007;370(9596):1453–7.
10. Boateng GO, Neilands TB, Frongillo EA, Melgar-Quinonez HR, Young SL. Best Practices for Developing and Validating Scales for Health, Social, and Behavioral Research: A Primer. *Front Public Health.* 2018;6:149.
11. Connor KM, Davidson JR. Development of A New Resilience Scale: The Connor–Davidson Resilience Scale (CD-RISC). *Depress Anxiety.* 2003;18(2):76–82.
12. Diener E, Emmons RA, Larsen RJ, Griffin S. The Satisfaction With Life Scale. *J Pers Assess.* 1985;49(1):71–5.
13. Rothman KJ, Greenland S. *Modern Epidemiology.* 2nd ed. Philadelphia: Lippincott Williams & Wilkins; 1998.
14. Cohen J. *Statistical Power Analysis for the Behavioral Sciences.* 2nd ed. Hillsdale: Lawrence Erlbaum Associates; 1988.
15. World Medical Association. World Medical Association Declaration of Helsinki: Ethical Principles for Medical Research Involving Human Subjects. *JAMA.* 2013;310(20):2191–4.
16. Thoits PA. Mechanisms Linking Social Ties and Support to Physical and Mental Health. *J Health Soc Behav.* 2011;52(2):145–61.
17. Fletcher D, Sarkar M. Psychological Resilience: A Review and Critique of Definitions, Concepts, and Theory. *Eur Psychol.* 2013;18(1):12–23.
18. Hu T, Zhang D, Wang J. A Meta-Analysis of the Trait Resilience and Subjective Well-Being Relationship. *Pers Individ Dif.* 2015;76:18–27.
19. Taylor SE, Klein LC, Lewis BP, Gruenewald TL, Gurung RAR, Updegraff JA. Biobehavioral Responses to Stress in Females: Tend-and-Befriend, Not Fight-or-Flight. *Psychol Rev.* 2000;107(3):411–29.
20. Heinrichs M, Baumgartner T, Kirschbaum C, Ehler U. Social Support and Oxytocin Interact to Suppress Cortisol and Subjective Responses to Psychosocial Stress. *Biol Psychiatry.* 2003;54(12):1389–98.