





Empirical Article

Core self-evaluations and perceived classmate support: Independent predictors of psychological adjustment

CAROLINA YUDES,¹  MARÍA TERESA CHAMIZO-NIETO,²  MARÍA ANGELES PELÁEZ-FERNÁNDEZ³  and NATALIO EXTREMERA³ 

¹Department of Developmental and Educational Psychology, University of Malaga, Malaga, Spain

²Department of Personality, Assessment and Psychological Treatment, University of Malaga, Malaga, Spain

³Department of Social Psychology, Social Work and Social Services, and Social Anthropology, University of Malaga, Malaga, Spain

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Introduction

The main aim of this research was to explore the contribution of both core self-evaluations (CSE) and classmate support as unique predictors of positive and negative psychological adjustment among adolescents.

Methods

In a cross-sectional study, 2,293 Spanish adolescents ($M_{\text{age}} = 14.07$) completed the Core Self-Evaluations Scale, the Classmate Support subscale, the Satisfaction with Life Scale, the Depression, Anxiety, and Stress Scales and the Frequency of Suicidal Ideation Inventory. Pearson correlations among assessed variables were examined, and three hierarchical regression analyses were conducted to examine the predictive role of CSE and classmate support on life satisfaction, depressive symptomatology, and suicidal ideation.

Results

Both CSE and classmate support were positively related to life satisfaction and negatively related to depressive symptoms and suicidal ideation. Hierarchical regression analyses identified CSE and classmate support as independent predictors of both positive and negative psychological outcomes in this sample. These results indicated support for a comprehensive model involving CSE and classmate support as additive predictors of both positive and negative outcomes among adolescents.

Conclusion

These findings underscore the unique and additive role of both individual (i.e., CSE) and, to a lower degree, social factors (i.e., classmate support) to augment the prediction model of positive and negative psychological adjustment among adolescents. Practical implications are discussed, focusing on preventive programs that include strategies to increase positive self-appraisals and create a supportive classroom climate.

Key words: Core self-evaluations, life satisfaction, perceived classmate support, depression, suicidal ideation.

Carolina Yudes, Department of Developmental and Educational Psychology, University of Malaga, Malaga, Spain. E-mail: cyudes@uma.es

INTRODUCTION

Adolescence is a complex developmental period characterized by several biopsychosocial changes. Neurodevelopmental research has established that these rapid and discontinuous changes might constitute a risk factor for impulsive behaviors (Ballard & Pao, 2022), greater emotional intensity and instability (Reitsema, Jeronimus, van Dijk & de Jonge, 2021), and increased reactivity to emotional and social cues (Casey, Heller, Gee & Cohen, 2019). Thus, along with their still-limited access to coping strategies, adolescents may experience compromised development that increases their vulnerability to mental health problems (Ogden & Hagen, 2018). Therefore, the identification of risk and protective factors for psychological well-being is essential, but the research on this topic for younger populations is still limited.

In the context of positive psychology, most studies regarding adolescents' psychological well-being have focused on life satisfaction, the cognitive component of this construct. *Life satisfaction* is defined as a stable indicator of positive psychological adjustment that appraises whether one's quality of life corresponds to internal standards of success (Diener, Lucas & Oishi, 2018). Longitudinal and cross-country studies suggest that

the largest decline in global life satisfaction occurs during adolescence, with the lowest point in middle puberty (Marquez & Long, 2021). This cognitive component is highly associated with subjective happiness and negatively linked to symptoms of psychological distress, such as depression (Freire & Ferreira, 2020). Indeed, prior research has emphasized that high levels of dissatisfaction in adolescents have been related to higher levels of internalizing disorders (Aymerich, Cladellas, Castelló, Casas & Cunill, 2021). Regarding this, research has consistently identified the relationship between depressive symptomatology and suicidal ideation in younger populations (Jeong, Kim, Choi, *et al.*, 2020). Both are significant indicators of negative psychological adjustment. Depression accounts for a substantial percentage of illness and disability (World Health Organization, WHO, 2022) and represents a heightened risk for suicidal ideation (Runcan, 2020). In fact, suicide ranks as the leading cause of death among 15–19-year-olds (WHO, 2022). This complex phenomenon is influenced by biological, psychological, and social factors (Wasserman, Carli, Iosue, Javed & Herrman, 2021). However, according to the interpersonal-psychological theory of suicide (Joiner, 2005), two major risk factors, also observed in the

adolescent population (Stewart, Eaddy, Horton, Hughes & Kennard, 2017), are the lack of social connection and feelings of burdensomeness.

Nevertheless, negative psychological adjustment does not always occur during adolescence, and most adolescents successfully cope with difficulties, challenging situations, and stressors (Núñez-Regueiro & Núñez-Regueiro, 2021). Therefore, there is a strong interest in identifying factors that can help adolescents maintain an optimal state of emotional and behavioral well-being, thereby reducing their psychological vulnerability (Hirsch, Chang & Kelliher, 2018).

A review of the literature identified one promising predictor of subjective well-being specifically termed *core self-evaluations* (CSE). This high-order personality construct refers to the individual's appraisal of their worth, competence, and capabilities in relation to the environment (Judge, Van Vianen & De Pater, 2022). CSE are composed of four highly related personality traits, including self-esteem, generalized self-efficacy, emotional stability, and locus of control (Judge, Erez, Bono & Thoresen, 2003). Studies with adolescents have documented the link between positive CSE and subjective well-being (Chen, Yang & Luo, 2022), as well as the negative association with depressive symptoms (Dou, Wang, Bin & Liu, 2016) or suicidal ideation (Quintana-Orts & Rey, 2018). Individuals with positive CSE tend to express themselves as having the ability to control their own lives, having a higher ability to successfully manage their environment, and experiencing less distress in the face of negative events (Elliott, Kaliski, Burrus & Roberts, 2013). Based on the existing literature, there appears to be solid evidence to support the notion of CSE as a dispositional factor for predicting positive and negative psychological outcomes across situations.

Nonetheless, according to the ecological system theory (Bronfenbrenner, 1979), the individual's development is the result of a dynamic and complex social ecology, in which significant microsystems (family, friends, peers, teachers) contribute to psychological adjustment. Hence, when considering mental health problems and psychological adjustment during adolescence, domains of the social context (e.g., school, family, or peer group, among others) should be considered along with the above-mentioned individual variables (i.e., CSE). From this perspective, the classroom context is considered a microsystem that complements the family in its role of building social beings and positive individual relationships (Kilday & Ryan, 2024). Social support influences adverse health disorders through cognitive mechanisms and personality factors (Liu, Li, Ling & Cai, 2016). Generally, *perceived social support* is defined as a subjective perception of the helpfulness and availability of emotional and instrumental support from the social network (Sarason, Levine, Basham & Sarason, 1983). Within this scope, a significant milestone in adolescence involves a transformation in social dynamics, as peers become the primary source of interaction (Lamblin, Murawski, Whittle & Fomito, 2017). Adolescents spend a large amount of time socializing, and they are particularly susceptible to peers' and friendships' influence on either healthy or risky behaviors, habits, or ideology (Montgomery, Donnelly, Bhatnagar, Carlin, Kee & Hunter, 2020). Supportive classmate relations are a robust and significant predictor of optimal subjective well-being within school

environments (Soylu, Sağkal & Özdemir, 2022; Tian, Zhao & Huebner, 2015). Recent research indicates that the impact of peer social support extends beyond adolescence, with effects observed even into adulthood (Letkiewicz, Li, Hoffman & Shankman, 2023). To our knowledge, most of the research has predominantly focused on examining the impact of the school-related and individual factors on mental health separately. However, there is a gap in the literature regarding studies that explore their unique and additive role.

Therefore, following the previously mentioned ecological system theory approach, the present study examined both individual and school-related social factors to better understand the optimal psychological adjustment during adolescence. The main objectives were threefold: (1) to analyze the pattern of relationships between CSE, classmate support, and three measures of positive (i.e., life satisfaction) and negative (i.e., depressive symptoms and suicidal ideation) psychological adjustment, (2) to examine the unique and additive contribution of both CSE and classmate support as predictors of these positive and negative psychological outcomes, and (3) to explore the potential interactive role of classmate support in the relationship between CSE and all the positive and negative psychological outcomes.

Based on prior research (e.g., Chen, Yang & Luo, 2022; Elliott, Kaliski, Burrus & Roberts, 2013; Letkiewicz, Li, Hoffman & Shankman, 2023), we expected that CSE and classmate support would positively correlate with life satisfaction and negatively correlate with depressive symptoms and suicidal ideation. We also expected that both CSE and classmate support would be significant predictors of positive and negative psychological outcomes. Specifically, we hypothesized that CSE would be a robust and significant predictor of all positive and negative psychological adjustment outcomes. Additionally, considering the evidence on the importance of the sense of connection with peers and school belonging during adolescence, we hypothesized that classmate support would add further additional variance in predicting these psychological adjustment outcomes. Furthermore, we tested the potential interactive role of CSE and classmate support to explain significant variance in the three psychological adjustment outcomes.

MATERIALS AND METHODS

Participants

The sample was composed of 2,293 adolescents (1,217 female, 1,049 male, 2 transgender, 5 non-binary, 20 unreported), aged 12 to 18 years ($M_{\text{age}} = 14.07$, $SD = 1.41$), in the seventh through 12th grades. Participants were recruited from 15 educational centers in southern Spain. Of the total sample, 88.92% were Spanish.

Procedure

Head teachers and management board members were informed about the methodology and signed a written informed consent to participate. The educational centers notified and informed students' parents or legal tutors. In seven centers, families gave a passive consent, while in eight centers, families signed a written informed consent. Adolescents voluntarily and anonymously completed a battery of questionnaires with paper and pencil. This research was endorsed by the Ethical Committee of the University of Malaga (169-2023-H) and followed the Declaration of Helsinki (2013).

Measures

Core self-evaluations. The Spanish version of the Core Self-Evaluations Scale (CSES-SP; Beléndez, Gómez, López & Topa, 2018) was used. The scale is composed of 12 items that assess self-esteem, generalized self-efficacy, neuroticism, and locus of control (e.g., “When I try, I generally succeed”). Items are scored on a five-point Likert scale (1 = *Strongly disagree*; 5 = *Strongly agree*). The scale previously obtained good reliability in an adolescent sample ($\alpha = 0.71$; Yudes, Rey & Extremera, 2021). In this study, the scale had a Cronbach’s alpha coefficient of 0.73.

Perceived classmate support. The Teacher and Classmate Support Scale (TCSS; Torsheim, Wold & Samdal, 2000) was adapted into Spanish, following international guidelines (International Test Commission, 2017). The classmate subscale presents four statements referring to perceptions of support from classmates (e.g., “Other students accept me as I am”) with a five-point Likert scale (1 = *Completely disagree*; 5 = *Completely agree*). This scale has been used in previous studies with international adolescent samples, including those from Spain (e.g., Maor, Riki, Ariela, et al., 2024). The original version obtained good psychometric properties for the classmate subscale ($\alpha = 0.75$; Torsheim, Wold & Samdal, 2000). In this study, Cronbach’s alpha coefficient for the classmate subscale was 0.74.

Satisfaction with life. The Spanish version of the Satisfaction with Life Scale (SWLS; Atienza, Pons, Balaguer & García-Merita, 2000) was used. This five-item scale measures overall satisfaction with life (e.g., “I am satisfied with my life”) with a seven-point Likert scale (1 = *Completely disagree*; 7 = *Completely agree*). This scale obtained good reliability in an adolescent sample ($\alpha = 0.84$; Atienza, Pons, Balaguer & García-Merita, 2000). In this study, the scale had a Cronbach’s alpha coefficient of 0.83.

Depressive symptomatology. The subscale for depression from the Spanish version of the Depression, Anxiety, and Stress Scales (DASS; Bados, Solanas & Andrés, 2005) was used. Participants indicate the frequency with which seven items occurred during the past week (e.g., “I did not enjoy anything”) with a four-point Likert scale (0 = *Never happened to me*; 3 = *Applied to me very much, or most of the time*). The depression subscale obtained good reliability in an adolescent sample ($\alpha = 0.89$; Tamarit, de la Barrera, Mónaco, Schoeps & Montoya-Castilla, 2020). In this study, the subscale had a Cronbach’s alpha coefficient of 0.89.

Suicidal ideation. The Spanish version of the Frequency of Suicidal Ideation Inventory (FSII-S; Sánchez-Álvarez, Extremera, Rey, Chang & Chang, 2020) was used. This inventory contains five items that assess the frequency with which individuals have had suicidal thoughts (e.g., “Over the past 12 months, how often have you thought about hurting yourself?”) with a five-point Likert scale (1 = *Never*; 5 = *Most every day*). This scale obtained good reliability in a previous adolescent sample ($\alpha = 0.92$; Chamizo-Nieto & Rey, 2023). In this study, the scale had a Cronbach’s alpha coefficient of 0.92.

Analytic approach. All data analyses were performed using IBM SPSS (version 23). First, descriptive statistics (means and standard deviations), reliability with the Cronbach’s alpha coefficient, and Pearson’s correlations among the study measures were calculated. Then, we aimed to verify the unique and additive role of CSE and classmate support in relation to the positive and negative psychological adjustment outcomes after controlling for the effects of gender and age. Moreover, we also explored the potential interactive effect of CSE \times classmate support. For this purpose, we performed three independent hierarchical regression analyses for life satisfaction, depressive symptomatology, and suicidal ideation as dependent variables. In the three analyses, age and gender (coded 1 = male, 2 = female, 3 = transgender, and 4 = non-binary) were included in Step 1 as covariables, CSE was entered in Step 2, and classmate support was included in Step 3. Finally, the interaction of CSE \times classmate support was included in Step 4.

RESULTS

Descriptives and correlational analyses

Correlations, means, and standard deviations for all study measures are presented in Table 1. Correlations were interpreted as small (<0.30), moderate ($0.30\text{--}0.49$) or large (>0.50), following Cohen (1988).

As shown in Table 1, the correlations were significant in the expected pattern. The analyses revealed that CSE and classmate support were positively correlated with each other ($r = 0.23$; $p < 0.001$). Moreover, CSE was positively associated with life satisfaction ($r = 0.52$; $p < 0.001$) but negatively with depressive symptomatology ($r = -0.53$; $p < 0.001$) and suicidal ideation ($r = -0.51$; $p < 0.001$). Similarly, classmate support was positively associated with life satisfaction ($r = 0.36$; $p < 0.001$) and negatively with both depressive symptomatology ($r = -0.19$; $p < 0.001$) and suicidal ideation ($r = -0.25$; $p < 0.001$).

Hierarchical regression analyses

Results of conducting the hierarchical regression analyses are presented in Table 2. The results showed that the total regression model explained 35.4% of the variance in life satisfaction ($R^2 = 0.354$, $F_{[5, 2,251]} = 246.593$, $p < 0.001$), 29.7% of the variance in depressive symptomatology ($R^2 = 0.297$, $F_{[5, 2,251]} = 190.649$, $p < 0.001$), and 30.6% of the variance in suicidal ideation ($R^2 = 0.306$, $F_{[5, 2,251]} = 198.125$, $p < 0.001$).

CSE was found to significantly account for the variance in life satisfaction ($\beta = 0.513$, $\Delta R^2 = 0.253$, $p < 0.001$), depressive symptomatology ($\beta = -0.513$, $\Delta R^2 = 0.252$, $p < 0.001$), and

Table 1. Descriptive statistics and Pearson’s correlations among the variables

	1	2	3	4	5
1. CSE					
2. Classmate support	0.23***				
3. Life satisfaction	0.53***	0.36***			
4. Depressive symptomatology	-0.53***	-0.19***	-0.46***		
5. Suicidal ideation	-0.51***	-0.25***	-0.51***	0.59***	
Mean	3.21	3.73	4.72	0.96	1.82
Standard deviation	0.58	0.84	1.37	0.82	1.01
Minimum–Maximum	1–5	1–5	1–7	0–3	1–5

Note: CSE = core self-evaluation.

*** $p < 0.001$.

Table 2. Results of the hierarchical regression analyses showing the amount of variance in positive (life satisfaction) and negative (depressive symptomatology, suicidal ideation) psychological outcomes accounted for by gender, age, CSE, and classmate support

DV = Life satisfaction		β	t	95% CI	R^2	ΔR^2	F
Step 1	Gender	-0.162***	-7.870	-0.537, -0.323	0.045	-	53.003***
	Age	-0.135***	-6.552	-0.169, -0.091			
Step 2	CSE	0.513***	28.478	1.130, 1.297	0.298	0.253	318.372***
Step 3	Classmate support	0.241***	13.836	0.335, 0.446	0.353	0.055	306.819***
Step 4	CSE \times classmate support	-0.034*	-2.009	-0.087, -0.001	0.354	0.001	246.593***
DV = Depressive symptomatology		β	t	95% CI	R^2	ΔR^2	F
Step 1	Gender	0.169***	8.196	0.207, 0.337	0.039	-	45.488***
	Age	0.099***	4.789	0.034, 0.082			
Step 2	CSE	-0.513***	-28.323	-0.789, -0.684	0.291	0.252	308.505***
Step 3	Classmate support	-0.068***	-3.743	-0.102, -0.032	0.296	0.004	236.217***
Step 4	CSE \times classmate support	0.044*	2.489	0.007, 0.062	0.297	0.002	190.649***
DV = Suicidal ideation		β	t	95% CI	R^2	ΔR^2	F
Step 1	Gender	0.242***	11.849	0.398, 0.556	0.062	-	74.141***
	Age	0.055**	2.680	0.011, 0.068			
Step 2	CSE	-0.473***	-25.846	-0.894, -0.768	0.276	0.215	286.724***
Step 3	Classmate support	-0.143***	-7.878	-0.215, -0.129	0.296	0.019	236.385***
Step 4	CSE \times classmate support	0.101***	5.661	0.062, 0.129	0.306	0.010	198.125***

Note: DV = dependent variable; β = standardized coefficients; CI = confidence interval; CSE = core self-evaluations.

* $p < 0.05$;

** $p < 0.01$;

*** $p < 0.001$.

suicidal ideation ($\beta = -0.473$, $\Delta R^2 = 0.215$, $p < 0.001$). Classmate support accounted for a significant variance in life satisfaction, depressive symptomatology, and suicidal ideation ($\beta = 0.241$, $\Delta R^2 = 0.055$, $p < 0.001$; $\beta = -0.068$, $\Delta R^2 = 0.004$, $p < 0.001$; $\beta = -0.143$, $\Delta R^2 = 0.019$, $p < 0.001$, respectively). Finally, a significant effect of CSE \times classmate support was found on life satisfaction ($\beta = -0.034$, $\Delta R^2 = 0.001$, $p < 0.05$), depressive symptomatology ($\beta = 0.044$, $\Delta R^2 = 0.002$, $p < 0.05$), and suicidal ideation ($\beta = 0.101$, $\Delta R^2 = 0.010$, $p < 0.001$). Despite these significant interaction effects of CSE \times classmate support on positive and negative psychological outcomes, their effect sizes were quite marginally small (ΔR^2 between 0.1% and 1%), endorsing the unique additional role of CSE and classmate support more than their interactive effect.

In sum, the hierarchical regression analyses indicated that both CSE and classmate support were significant additive predictors of positive (i.e., life satisfaction) and negative (i.e., depressive symptomatology and suicidal ideation) psychological adjustment outcomes. To further corroborate the centrality of CSE in the prediction model, we conducted post hoc analyses by reversing the order of the predictors (that is, scores on classmate support were entered first, followed by scores on CSE in the next step). Interestingly, these results emphasized the centrality of CSE, independent of classmate support, in all positive and negative psychological outcomes. Specifically, beyond classmate support and socio-demographic variables, CSE still accounted for a significant 19.1% of additional variance in life satisfaction, an additional 22.5% of the variance in depressive symptomatology, and an additional 17.6% of the variance in suicidal ideation (all $ps < 0.001$).

DISCUSSION

Research on the contribution of dispositional and social factors to positive and negative psychological outcomes in adolescence is still scarce. This study examined the relationships between CSE, classmate support, and positive (i.e., life satisfaction) and negative (i.e., depressive symptomatology and suicidal ideation) psychological adjustment indicators. The major focus was to explore the unique and additive contribution of CSE and classmate support in explaining these psychological outcomes among Spanish adolescents.

First, the associations among the study variables were consistent with expectations. Regarding individual factors, adolescents with positive CSE reported higher classmate support and life satisfaction scores as well as lower levels of depressive symptoms and suicidal ideation. These results support prior research that emphasizes the significant link between this high-order personality construct and adolescent mental health (e.g., Dou, Wang, Bin & Liu, 2016; Zou, Song, Tan, *et al.*, 2022; Zuo, Zhang, Wen & Zhao, 2020). Regarding school-related social factors, and consistently with previous findings, classmate support positively correlated with overall life satisfaction (Bi, Stevens, Maes, *et al.*, 2021) but negatively with depressive symptoms (Lekiewicz, Li, Hoffman & Shankman, 2023) and suicidal ideation (Madjar, Walsh & Harel-Fisch, 2018). However, in our study, these associations were weaker compared with CSE, particularly for psychological maladjustment outcomes.

Previous studies support the correlations between CSE and positive and negative psychological adjustment outcomes in young samples, showing that lower identity and emotional

stability, along with higher depressive symptoms, are related to reduced life satisfaction (Morales-Vives & Dueñas, 2021). Additionally, as noted earlier, adolescence is characterized by the highest levels of life dissatisfaction (Marquez & Long, 2021).

Consequently, we examined the potential additive effects of CSE and classmate support for all positive and negative psychological outcomes using separated hierarchical regression analyses. The results showed that CSE consistently predicted life satisfaction, depressive symptomatology, and suicidal ideation, beyond and above age and gender. Subsequently, classmate support was included in the prediction models, and it was found to contribute a significant additional percentage of variance, particularly in life satisfaction, with small increases in the two negative psychological adjustment outcomes. Thus, effect sizes remained in the small range but consistently contributed to the prediction model. Although the interactive effect between CSE and classmate support was significant, it added minimal incremental validity to the prediction of psychological adjustment, with relatively small effect sizes (0.1% for life satisfaction; 0.2% for depressive symptomatology, and 1% for suicidal ideation). Therefore, these findings do not provide empirical evidence to support the significant joint interaction between personal and social factors to predict psychological adjustment outcomes among adolescents. Contrarily, our results point to more an additive effect in which CSE and classmate support are consistently and uniquely involved in life satisfaction and, to a lesser degree, in suicidal ideation and depressive symptoms, respectively. These findings corroborate past research regarding the positive influence of these variables on subjective well-being in adolescence (Liu, Li, Ling & Cai, 2016; Moreira, Yunes, Nascimento & Bedin, 2021) but do not provide support for the third aim of the present study regarding the potential interactive role of classmate support in the relationship between CSE and psychological adjustment.

The research field of adolescents' mental health and well-being is known to be quite broad and includes not only personal and social antecedents, of which CSE and classmate support are only two of them, but also a large amount of proximal and distal determinants that may influence the outcomes (Bonino, Cattellino & Ciairano, 2005). For example, the current study does not examine the perceived social support from other sources or its long-term impact. Indeed, in a specific domain such as learning, it has been observed that the influence of support provided by teachers or peers on life satisfaction or stressors disappears after a 6-month period, with only family support maintaining its effect (Lyons & Jiang, 2019). Therefore, while, according to the ecological system theory (Bronfenbrenner, 1979), the school microsystem could potentially exert a substantial positive impact on psychological well-being, the effects observed in this study were not sufficiently strong to argue that this impact could be due to the interaction with certain individual variables. Thus, consideration of other factors within the school context, such as other social relationships or indicators of academic success, would be important to understand the weak, yet significant, interaction between CSE and this source of support.

Nevertheless, our results suggest a promising line of research, that is, considering a model in which the unique and additive contribution of each factor in predicting adolescent psychological

adjustment becomes particularly relevant. On the one hand, CSE explained a substantial amount of the variability in all the models related to psychological adjustment. On the other hand, classmate support added a significant amount of variance in life satisfaction, but a small amount in measures of negative psychological outcomes. Interestingly, its impact was more pronounced on suicidal ideation scores compared with depression symptoms. Taken together, this pattern of results underscores the potential preventive role of social support in mental health when there is already existing risk. This effect could be explained by the strong relationship between CSE and mental health (Chen, Yang & Luo, 2022). Empirically, it has been observed that individuals with positive CSE have a facilitative attributional style (Judge, Van Vianen & De Pater, 2022). They exhibit self-confidence in their ability to successfully manage different contexts, so, according to the approach/avoidance motivational framework, adolescents would have a strong approach motivation (Judge, Erez, Bono & Thoresen, 2003); they evaluate themselves as more capable, worthy, and in control of their lives (Judge, Van Vianen & De Pater, 2022). This positive appraisal influences the way they perceive and react to stressful events, helping them cope with difficulties and thus enhancing their mental adaptation (Chen, Yang & Luo, 2022). The literature also indicates that individuals who report a positive self-worth exhibit resilience to negative stimuli, perceive greater safety in different contexts, and develop social adaptation. All of this would mitigate the negative effects of stressors and promote increased levels of life satisfaction (Liu, Li, Ling & Cai, 2016; Yang, Li & He, 2021). Conversely, adolescents with negative CSE might exhibit a reduction in the perception of their own self-worth, believing that their inability leads to failure (Judge, Van Vianen & De Pater, 2022). These beliefs can determine non-coping with specific life experiences perceived as threatening and uncontrollable (Zuo, Zhang, Wen & Zhao, 2020), such as those related to new social expectations and relationships during adolescence. This avoidance is problematic since actively facing life's experiences allows adolescents to construct their identity (Hards, Ellis, Fisk & Reynolds, 2020). Hence, this self-reinforcing loop will negatively affect feelings of effectiveness, capability, and worthiness that define CSE, thus increasing the vulnerability to psychological maladjustment. Negative beliefs about oneself are common among depressed adolescents (Runcan, 2020). However, social support can mitigate this effect and provide protection against stressors, enhancing individuals' self-esteem and sense of social value (Liu, Jiang, Li & Yang, 2021).

In this way, the current study suggests some practical implications for school counselors, training designers, and material developers with the introduction and implementation of positive self-appraisal and supportive climate activities in the classroom. That is, considering that positive CSE involves higher levels of psychological well-being, and classmate support has an additive effect on this relationship, interventions to promote positive self-evaluations should be funded, since CSE or its sub-traits are malleable and can be improved through external support (Chen, Yang & Luo, 2022). Learning situations in classrooms and other school contexts should be designed to allow students to successfully participate, thereby promoting positive perceptions of competence, self-concept, and self-esteem in future

school-based preventive programs (Elliott, Kaliski, Burrus & Roberts, 2013). Moreover, considering that school is one of the primary sources of socialization during adolescence, specific school-based interventions should be designed to promote a positive school climate and prosocial behaviors. These interventions would facilitate experience connectedness, peer acceptance, and sense of belonging, among others benefits. Furthermore, a positive sense of oneself as “prosocial” is a base on which to build a more positive perception of oneself. Social support might have the potential to increase psychological well-being by improving CSE, given substantial evidence indicating that relationships with peers in the classroom influence both affective and academic engagement (Kilday & Ryan, 2024; León & Liew, 2017). Therefore, school counselors might consider the potential value of including together both positive self-appraisal and enhanced supportive social climate at school to complement current school-based intervention to promote adolescents’ mental health and well-being.

LIMITATIONS

This study has some limitations, and the results should be interpreted with caution. First, our study was cross-sectional, which precludes causal associations between study variables. Longitudinal studies within this area of research are required to ascertain whether the observed pattern persists over time (Kiuru, Wang, Salmela-Aro, Kannas, Ahonen & Hirvonen, 2020). Second, the data were collected through self-report questionnaires. Although the participants’ perceptions are pertinent to this study, it also may have led to reporting bias, such as social desirability. It is advisable to examine others-report information, including family or friends, to assess both perceived and received social support (Bottiani, Johnson, McDaniel & Bradshaw, 2020). Finally, these results may not be generalizable to clinical populations. Future research testing these moderation models in control and clinical adolescent samples would be needed to examine the extent of this source of support (Gallagher, Prinstein, Simon & Spirito, 2017).

CONCLUSION

The present research links the construct of core self-evaluation and one source of perceived support (classmate) to positive and negative psychological adjustment outcomes in a sample of Spanish adolescents. The results show that both CSE and classmate support are significant but primarily additive predictors of all these psychological adjustment outcomes, with CSE appearing to be the strongest predictor. These findings replicate existing work about the importance of dispositional factors, while emphasizing the unique contribution of social networks for adolescents. Since adolescence encompasses multiple elements of developmental growth and major social role transitions that can confer vulnerability to mental health problems, understanding the linkage between personal and social underlying factors that protect adolescents’ mental health is of critical importance to efforts that aim to optimize interventions based on developmental stage.

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CONFLICT OF INTEREST

The authors declare no conflicts of interest with respect to the research, authorship, and/or publication of this article. This research was conducted in the absence of any commercial or financial relationship that could be construed as a potential conflict of interest.

ETHICS STATEMENT

The Research Ethics Committee of the University of Malaga approved the study protocol for this research (169-2023-H). Informed consent from the centers and participants’ legal tutors were provided.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are openly available in a public repository of the corresponding author’s university (Institutional Repository of the University of Málaga, RIUMA): Yudes, C., Chamizo-Nieto, M. T., Peláez-Fernández, M. A. & Extremera, N. (2024, January 1). Dataset Core Self Psychological Wellbeing Classmate Support. [Data set]. Retrieved from <https://dx.doi.org/10.24310/riuma.29524>.

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