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Youth Perceptions of a Caring Climate, Emotional Regulation, and Psychological Well-Being

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The purpose of this study was to examine the meditational effect of perceived affective self-regulatory efficacy on the relationship between youth sport participants' perceived caring climate and their mental well-being. Three hundred and 95 participants (mean age = 11.80 ± 1.54) from a National Youth Sport Program were recruited for the study. Participants completed a battery of questionnaires including demographic information, the Caring Climate Scale, the Affective Self-Regulatory Efficacy measure, and measures of psychological well-being (i.e., depression, hope, sadness, and happiness). Results from the structural equation model analysis of the proposed mediational model revealed that both positive and negative affective self-regulatory efficacy mediated the relationship between the perceived caring climate and mental well-being. Findings from this study call attention to the importance of creating a caring climate in youth sport programs to foster positive mental well-being in young athletes via their affective self-regulatory efficacy.

Keywords: caring climate, mental well-being, youth sports, affective self-regulatory efficacy

Positive youth development is centered on helping adolescents develop a combination of dispositions and skills needed to optimally steer their lives (Larson, 2000). Current work suggests that promoting positive youth development can enhance both the physical and mental health of adolescents (Miller, Gilman, & Martens, 2008). The relevance of and need for examining factors associated with positive youth development is made clear when one considers the alarming statistics on the state of youth. Researchers estimate that 25% of youngsters are not on track to become healthy, thriving, productive adults (Benson, 2006). The

Centers for Disease Control and Prevention (CDC, 2010) documents that between 20 and 30% of adolescents report experiencing depressive symptoms at clinically significant levels, and over six percent of U.S. high school youth attempt suicide each year.

Notwithstanding the importance of these statistics, a recent focus on positive psychology has occurred which contends that the absence of pathology (e.g., depression, sadness) within individuals does not automatically suggest that they are well-adjusted, thriving, and self-fulfilled individuals (Seligman & Csikzentmihalyi, 2000). At the same time, more positive-affective indicators of psychosocial well-being are associated with health and wellness. For example, hope has been linked to better physical health and psychological adjustment (see Rand & Cheavens, 2009, for a review). Hope is a motivational concept that reflects individuals' cognitions that they are capable of both choosing meaningful goals to pursue (i.e., agency) and have the ability to make plans to achieve these

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goal pathways. Hope reflects a positive belief that individuals can sustain activity to meet meaningful goals they choose in their lives. Hope has been positively associated with academic performance, positive thinking, and adaptive coping methods. In a similar vein, happiness refers to the extent that individuals perceive that they are in broad general terms a more happy or unhappy person (Snyder et al., 1991). Happiness has been positively associated with individuals reporting greater self-esteem, health, energy, and social skills, and less depression (Lyubomirsky, King, & Diener, 2005; Pavot & Deiner, 2008).

Although these positive indexes such as hope and happiness are sometimes identified as goals in youth programs, they are rarely used as indicators of program success or incorporated in research on positive youth development. For this reason, when examining outcomes of youth development programs it becomes important to also incorporate variables that assess positive psychological well-being (Larson, 2000; Stagner & Zwiig, 2007) to strengthen these programs and further the goals of helping young people reach their potential. The inclusion of indicators of positive well-being into program evaluation and research on youth development can help institutions and all those involved with youth ascertain a more accurate health profile, based on both its positive and negative aspects. In other words, it may not be enough to know that a child is not anxious or depressed without also knowing that he or she is happy, well-adjusted, and displays an adaptive pattern of all those indices.

Benson (2006) has identified 40 developmental assets needed by youth to maximize their physical and psychological well-being. These assets are divided into two categories, that is, internal and external. The internal assets focus on the “commitments, passions and competencies” young people need to live healthy, productive lives that contribute to society (p. 48). These internal assets are supported by external assets, which are the positive developmental experiences a community provides to support and nourish young people. Two of these external assets relate to youth interacting with caring adults outside their family who spend quality time with them, and youth having positive peer-to-peer interactions. However, according to Benson, only 43% of middle and high school students, report having three or more adults outside their family who care about them. Adolescents need to spend time with caring adults who

strive to create a nurturing environment where youngsters feel safe, respected, and supported by one another. For this reason caring has received much attention over the last decade.

Noddings (2005) initiated interest in this area with her philosophical contributions on the value of caring and has argued that educational settings are neglecting the important aim of creating caring and supportive environments for youth. She believes that the main goal of schools should be to promote the development of healthy and able students with strong character. Further, she contends that caring relationships will result in positive experiences for youngsters during and beyond the schools years. In other words, the benefits of creating caring climates will have long-term rippling effects.

Research in schools has demonstrated caring to be a relevant goal for students to optimally develop their physical, emotional, and psychological well-being (Battistich, Schaps, Watson, Solomon, & Lewis, 2000). Less is known about the potential role that a caring environment plays in out-of-school youth settings, such as the physical activity domain. Children’s involvement in these settings is influenced by many factors (e.g., skill levels, peer interactions, and quality of adult leadership), which mediate the quality and gains of their experience. Millions of children participate in sport programs each year (Hilgers, 2006), and promoting caring climates in these settings is an important line of inquiry that can enhance youngsters’ physical and psychological development (Hellison, 2003; Fry & Gano-Overway, 2010).

Caring has recently begun to receive empirical attention in the physical domain. Newton, Fry, and colleagues (2007) developed a measure of the caring climate appropriate for use in physical activity settings.¹ They defined a caring climate as “the extent to which individuals’ perceive a particular setting to be interpersonally inviting, safe, supportive, and able to pro-

¹ This study is part of a larger project, data from which has been published in two previous studies. The reader should note that data on the CCS in this study was combined with data from another study to test the psychometric properties of the scale (Newton, Fry, et al., 2007). In addition, the data on the CCS and ASRE in this study were previously published (Gano-Overway et al., 2009) in a study examining the relationship between a caring climate, empathic self-efficacy, and prosocial and antisocial behavior. The current study adds 4 dependent variables and a mediating construct.

vide the experience of being valued and respected.” (p. 70). Across several studies (Gano–Overway et al., 2009; Newton, Watson, et al., 2007), researchers have shown that perceptions of a caring climate in the context of a summer sport camp were associated with participants’ intending to continue their participation in the program, as well as reporting more empathic concern for others. In addition, perceptions of a caring climate were also found to be associated both with affective self-regulatory efficacy (ASRE; i.e., positive and negative) and empathic self-efficacy (ESE). In other words, a caring climate appears to help adolescents monitor, manage, and control their positive and negative emotions, and heighten their compassion for others who may be struggling. The ability to temper one’s emotions, feel empathy, share with, comfort, and support others is reflective of a mature and psychologically adaptive approach to life (Noddings, 2006; Seligman, 2006).

Noddings (2006) proposes that youngsters who experience a caring environment will reap many benefits including greater happiness and psychological well-being. To date, research in the physical domain has not explored the relationship between youngsters’ perceptions of a caring climate and their mental health and/or the mechanisms which account for this potential link. One such mechanism may be that the relationship between these types of climates and diverse indexes of health/well-being is mediated by youngsters’ ability to regulate their emotional responses (Bandura, 1999). In a caring climate, youngsters and leaders together help create an environment where individuals perceive that their best interests are considered, where leaders are trying to be fair to every child, and where youth can relax and be themselves. If this occurs, logic would suggest that in a caring climate, youth are more likely to express joy when good things happen and keep negative emotions in check. In contrast, in a less-caring environment, youngsters may be more braced to experience negative interactions with others, less likely to trust others or feel that peers and leaders are in their corner. In less-caring climates, then, youth might be more reticent to express their positive emotions and find it more challenging to control their negative emotional responses.

Recent research has explored the link between emotional self-regulation efficacy and

psychological well-being in youth. Bandura, Caprara, Barbaranelli, Gerbino, and Pastorelli (2003) examined how affective self-regulation influences adaptive emotional, cognitive, and behavioral responses. Regardless of gender, when adolescents perceive they have the ability to experience their positive emotions they are more likely to engage in prosocial behavior and, in the case of females, those who lack confidence in their ability to handle their negative emotions report higher depressive symptoms. The ability to express one’s positive emotions (e.g., liking of others, joy) and to monitor one’s negative emotions (e.g., refrain from overreacting to situations eliciting anger, frustration, rejection, or embarrassment) may be critical in predicting parameters of psychological well-being. For example, it’s possible that the ability to monitor emotional responses ensures that individuals spend less effort and time being angry, frustrated, and dissatisfied, which may in turn reduce their chances of experiencing sadness and depression. In a similar vein, if individuals feel comfortable around people and can easily express joy when good things happen in their day, they should be more likely to report greater hope and happiness in their lives.

Therefore, the purpose of this study was to examine if the influence of youngsters’ perceptions of a caring climate in a summer sport-camp program are mediated by their perceived ability to regulate positive and negative emotions, which in turn would predict indicators of psychological well-being (see Figure 1). It was hypothesized that when youngsters perceive a caring climate they would express greater efficacy relative to positive and negative emotional control. Thus, they would be better able to express the positive emotion they experience and to buffer or handle the negative emotions that they encounter. It was also hypothesized that affective self-regulatory efficacy would mediate the relationship between a caring climate and psychological well-being. Specifically, those youngsters who could better deal with their emotional states (i.e., both positive and negative) would be more likely to report greater psychological well-being in terms of more happiness and hope, and less sadness and depression.

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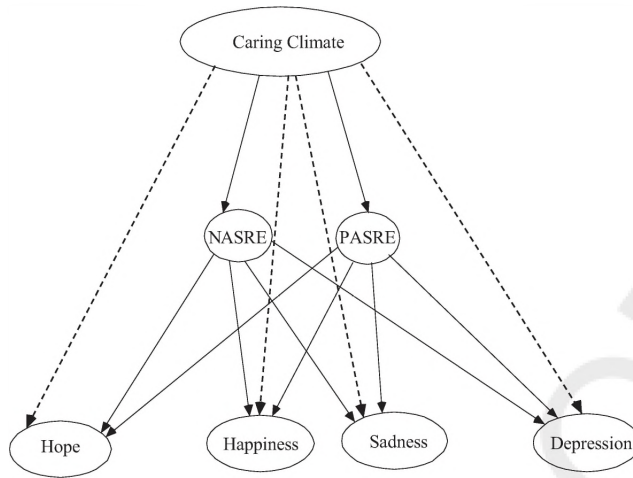


Figure 1. The proposed model in relation to caring climate and mental well-being. NASRE = negative affective self-regulatory efficacy. PASRE = positive affective self-regulatory efficacy. Dashed lines = direct links; solid lines = indirect links.

Method

Participants

Participants ($N = 395$; 198 girls and 197 boys) ranged from 9–16 years old ($M_{age} = 11.80 \pm 1.54$) and were enrolled in two National Youth Sport Programs (NYSP)² The sample represented myriad ethnic/racial groups (61% African American, 26% Hispanic Americans, 4% White Americans, and 10% did not designate or were other race or ethnicities). The children were primarily from low-income families, given that NYSP program funding eligibility stipulates that 90% of participants be from underserved populations.

NYSP is a federal program established in 1970 that provides a 5-week sport camp to underserved children, in a number of cities across the nation. The goals of NYSP are to provide positive programming to children, including exposure to a variety of sports (swimming is required) and educational topics (i.e., academic and social skills). Children are bussed from their neighborhoods to college and university campuses for the day camp. NYSP programs typically recruit instructors (i.e., from the universities and local schools) who have training in sport and physical education. The camper–leader ratio is approximately 15–1.

Measures

Caring Climate Scale (CCS). The CCS is a 13-item measure that assesses individuals' perceptions of caring within a specific context (Newton, Fry, et al., 2007). The scale focuses on how supportive and receptive the group members and leaders are within the context and how much individuals feel valued and accepted by other members. Participants were encouraged to think about what their NYSP group and group leader were typically like. Participants indicated on a 5-point Likert scale (1 = *strongly disagree* to 5 = *strongly agree*) how much they agreed with each statement (e.g., “In NYSP, the leaders try to help kids”). Items are summed and divided by 13 to achieve a mean score for each individual. Previous research has supported the

² This study is part of a larger project that is being published in separate manuscripts due to the quantity and diversity of constructs measured, and space limitations within a single article. See footnote 1 for details of the other publications stemming from this project.

³ Data on the CCS (See Newton, Fry, et al., 2007; Gano–Overway et al., 2009) and positive and negative ASRE were previously published (Gano–Overway et al., 2009), but are also included in the current paper to explore the relationships between these constructs to four parameters of psychological well being.

factor structure and validity of the CCS (Newton, Fry, et al., 2007).

ASRE. The ASRE is a 13-item measure examining individuals' capability to manage both negative and positive emotional states (Bandura, Caprara, Barbaranelli, Gerbino, & Pastorelli, 2003). The measure has two subscales, positive affective self-regulatory efficacy (PASRE) and negative affective self-regulatory efficacy (NASRE). Participants indicated their capacity to experience positive (e.g., "In NYSP, I can express joy when good things happen to me") and manage negative emotions (e.g., "In NYSP, I can get over feeling irritated quickly for wrongs I have experienced") on a 5-point scale (1 = *not at all capable* to 5 = *totally capable*). Mean scale scores were computed for the campers. The ASRE has demonstrated high internal consistency (Bandura et al., 2003).

Children's Hope Scale. The Children's Hope Scale was employed to measure children's feelings of hope about their lives (Snyder et al., 1997). This 6-item scale focuses on how young people think about hope in general terms (e.g., "I think I am doing pretty well" or "I can think of many ways to get the things in life that are most important to me"). Using a 6-point rating scale (1 = *none of the time* to 6 = *all of the time*), participants indicate how much each item personally describes them, and an average score is calculated. This scale has demonstrated adequate reliability and validity (Snyder et al., 1997).

Subjective Happiness Scale. The Subjective Happiness Scale is a 4-item measure that assesses general perceptions of global happiness (Lyubomirsky & Lepper, 1999). A sample item is, "In general, I am . . ." on a 7-point rating scale with 1 = *not a very happy person* to 7 = *a very happy person*. An average score is calculated for each participant. Reliability and validity for this instrument have been well established with adolescents and adults (Lyubomirsky & Lepper, 1999).

Depression. The Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1991), composed of 20 items, was utilized to measure depressive symptoms among participants. Although the CES-D consists of four subscales (i.e., Depressive Affect; Positive Affect; Somatic and Retarded Activity, and Interpersonal Difficulties), it can also be used as a single scale. In this study, the overall scale was

used as a measure of general symptoms of depression. Using a 4-point scale [0 = *rarely (less than one day)* to 3 = *most of the time (or 5-7 days)*] the participants indicated how often they felt or behaved in that way during the past week (e.g., "I felt lonely"), and their average score across the items is calculated. Radloff (1991) provided evidence for the reliability of the CES-D.

Sadness. The Differential Emotions Scale IV (Izard, Libero, Putnam, & Haynes, 1993) measures 12 different emotional responses. For the purposes of this study only the three-item state sadness subscale was utilized (e.g., "How often did you feel unhappy, blue, downhearted?"). Participants were asked to indicate how often they experienced the feelings described over the past week and to respond on a 5-point rating scale (1 = *rarely or never* to 5 = *very often*). Average scores across the items are calculated. Acceptable internal reliability for this subscale has been reported (Izard et al., 1993; Kotsch, Gerbing, & Schwartz, 1982).

Procedure

Approval for the study was obtained from the researchers' internal review board, and parental consent and participant assent was obtained for each camper. During the final week of camp, participants completed a multisection survey, including demographic information (age, gender, ethnicity/race, and birthplace), the CCS, ASRE, and psychological well-being measures (i.e., hope, happiness, depression, and sadness).

Statistical Analysis Procedures and Proposed Model

The proposed model. Figure 1 illustrates the proposed model. The first segment of the model indicates the influence of the perceived caring climate to youngsters' sense of efficacy to regulate positive and negative affect. Although the perception of a caring climate can directly correspond to indicators of mental well-being, it was hypothesized that most of its influence would be mediated through ASRE. It was assumed that when youngsters perceived a caring climate they would feel greater control of both positive and negative emotions, which in turn would help them experience greater psy-

chological well-being. The meditational role of ASRE was determined by examining the significance of direct and indirect links and by evaluating the sampling variability of estimates of the indirect effects (Shrout & Bolger, 2002). Bandura and his colleagues claimed that positive and negative self-regulatory efficacy scales are positively associated (Bandura et al., 2003). Thus, error terms of these variables were allowed to correlate in the current model. In addition, error terms between the two positive well-being measures (i.e., Hope and Happiness) and between the two negative well-being scales (i.e., Depression and Sadness) were also allowed to correlate due to their conceptual similarity.

Data analysis. Structural Equation Model (SEM) analysis was conducted to test the goodness of fit of the proposed model utilizing AMOS 6.0 (Arbuckle, 2003). Following analytic procedural suggestions in the SEM literature (Hoyle, 1995), the validity of all questionnaires was first tested using confirmatory factor analysis. Then, to enhance the variable to sample size ratio and to minimize complexity of testing the full measurement and structural models, random item parceling was employed for the Caring Climate, PASRE and NASRE, Hope, and Depression scales (Hagvet & Solhaug, 2005). Following the creation of the parcels the measurement and structural models were tested.

Bandalos and Finney (2001) contended that item parceling in SEM can enhance more stable parameter estimates and proper solutions of model fit by condensing the dimensionality and number of parameters estimated. Considering all measures were unidimensional, item parcels were created by randomly combining items within the scale.

Guided by the literature on testing mediation (Baron & Kenny, 1986; Hoyle & Smith, 1994), the direct effects model was tested that examines the relationships between perceptions of the caring climate and indicators of psychological well-being. The proposed mediational structural model (unconstrained model) was then tested.

The fit of the model was determined by several fit indices (Hu & Bentler, 1999; Marsh, Hau, & Wen, 2004) including the goodness of fit index (GFI), Tucker-Lewis Index (TLI), comparative fit index (CFI), root mean square

error of approximation (RMSEA) with 90% confidence interval (CI), and standardized root mean squared residual (SRMR). The GFI, TLI, and CFI can range from 0.0 to 1.0 with values near .95 or higher considered desirable. An RMSEA value of .06 and an SRMR near to .08 indicate a close fit.

Results

Preliminary Analyses

Reliability analyses. Prior to testing the measurement model, the reliability of each of the scales was explored. Consistent with prior studies using the measures, all the scales demonstrated adequate reliability ($<.70$), with the exception of happiness ($\alpha = .51$; See Table 1).

One negatively worded item of this scale showed marginal item to total correlation ($r = -.07$), and its removal resulted in an increased alpha level. This item was therefore excluded from further analysis, and the internal consistency of the final revised happiness scale was considered acceptable (See Table 1).

Although the reliability was adequate for the depression scale ($\alpha = .85$), five items were deemed appropriate to be removed from further analysis. Consistent with previous work using this measure (Edman et al., 1999) four items were found to be problematic (i.e., poor corrected item to total correlations). The fifth item (i.e., "Everything is an effort") revealed a weak item-to-total correlation. Researchers have explained this by suggesting that adolescents may perceive the term "effort" as a positive aspect of being goal oriented (Dick, Beals, Keane, & Manson, 1994). After the removal of these items the internal reliability for the revised 15-item measure was deemed adequate (See Table 1).

Testing statistical assumptions. Results from the normality check for both the direct and mediational models revealed that the participants' responses violated normality assumptions. Data were skewed and presented with statistically significant levels of kurtosis. To remedy the nonnormality of the data the bootstrapping approach was employed (Byrne, 2001). No violation of the multicollinearity and linearity conditions was found.

Table 1
Simple Correlations and Descriptive Statistics

Variables	Simple correlations						
	1	2	3	4	5	6	7
1. Caring climate	1.00						
2. Negative affective SRE	.51	1.00					
3. Positive affective SRE	.57	.53	1.00				
4. Hope	.48	.46	.50	1.00			
5. Happiness	.36	.36	.48	.52	1.00		
6. Depression	-.19	-.17	-.23	-.18	-.14	1.00	
7. Sadness	-.17	-.22	-.27	-.17	-.16	.58	1.00
Mean	3.86	3.41	4.17	4.61	5.24	13.60	1.93
SD	.77	.81	.73	.94	1.36	9.95	1.08
Min-Max	1-5	1-5	1-5	1-6	1-7	0-45	1-5
Alpha	.91	.73	.73	.75	.67	.85	.79

Note. SRE = Self-Regulatory Efficacy measure. All correlation coefficients were significant at $p < .01$.

Descriptive Statistics

The descriptive statistics of the observed variables are presented in Table 1. Overall, the participants reported relatively high levels of hope and happiness, and low levels of depression and sadness. Further, participants perceive the climate to be moderately caring, and they indicated high confidence in their ability to regulate their negative affective responses and moderate efficacy in their ability to regulate their positive emotional responses.

Results from the simple correlations were in the expected directions as hypothesized (see Table 1). Youth perceptions of a caring climate displayed positive associations with affective self-regulatory efficacy (both positive and negative). Both PASRE and NASRE, and caring climate showed positive relationships with hope and happiness and negative associations with depression and sadness.

Testing Hypothesized Mediation Model

Measurement models. The results of the measurement models for both direct and mediational models demonstrated a good fit. Specifically, the direct effects measurement model revealed good fit indices of $\chi^2(80) = 133.12$, $p < .001$, GFI = .96, CFI = .98, TLI = .97, RMSEA = .04, CI = (.03 - .05), and SRMR = .03. The mediational measurement model also demonstrated acceptable fit indices, $\chi^2(168) = 249.2$, $p < .001$, GFI = .94, CFI = .98, TLI =

.97, RMSEA = 0.04, CI = (.03 - .04), and SRMR = .03.

Results of the direct effects model. The direct effects model (which included direct paths between the perceived caring climate to mental well-being variables) resulted in acceptable indices of fit, $\chi^2(84) = 141.03$, $p < .001$, GFI = .96, CFI = .98, TLI = .97, RMSEA = 0.04, CI = (.03 - .05), and SRMR = .05. Path coefficients showed that the children's perceived caring climate was positively linked to both hope and happiness and negatively associated to feelings of sadness and depression (see Figure 2).

Results of the mediational model. The SEM results of the mediational model test demonstrated acceptable fit indices, $\chi^2(172) = 249.6$, $p < .001$, GFI = .94, CFI = .98, TLI = .97, RMSEA = .03, CI = (.04 - .02), and SRMR = .03, with strong support of the proposed mediational model. According to Baron and Kenny (1986), mediational effects occur when the indirect effect of the predictors through the mediators significantly reduces the predictor's direct effect. As shown in Figure 3, the direct paths from the perceived caring climate to mental well-being variables were substantially reduced and insignificant. Furthermore, the indirect effects, using bootstrapping techniques with 90% CI, were significant for all mental well-being variables [Hope = .42, CI = (.29 to .59); Happiness = .48, CI = (.32 to .68); Sadness = -.32, CI = (-.48 to -.17); Depression = -.26, CI = (-.40 to -.13)] at $p < .001$.

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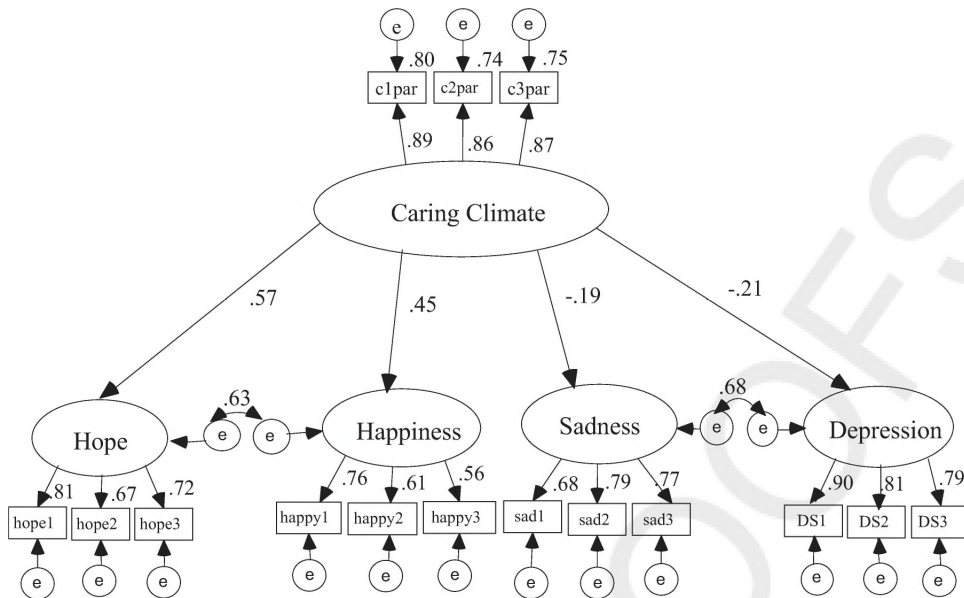


Figure 2. Direct model between caring climate and mental well-being indicators.

These significant indirect effects provide additional support that the indirect effects are significantly different from zero. Squared multiple correlation coefficients, (i.e., the proportion of variance in the latent variable accounted for by its predictors), indicated moderate effects for PASRE ($R^2 = .48$), NASRE ($R^2 = .40$), Happiness ($R^2 = .45$), and Hope ($R^2 = .50$), and low effects for Sadness ($R^2 = .15$) and Depression ($R^2 = .18$).

Overall, the results indicate that both PASRE and NASRE mediated the relationship between the perceived caring climate and mental well-being factors. The caring climate perceived by children was positively linked to both PASRE and NASRE which subsequently predicted children's mental well-being. PASRE was positively linked to higher hope in life and feelings of happiness and negatively associated with depression and sadness. NASRE was only significantly positively related to hope (See Figure 3).

Discussion

The purpose of this study was to extend current work on caring by examining whether children's perceptions of a caring climate directly predicts their psychological well-being (i.e., hope, happiness, depression, and sadness), and

whether the relationships are mediated by ASRE. Results were quite compelling in revealing both a direct and indirect significant relationship between perceptions of a caring climate and psychological well-being. The significance of the indirect model provides evidence that the route through which the caring climate influences youngsters' psychological well being is via the strengthening of their emotional efficacy.

The links (loadings) between caring climate to NASRE and PASRE were significant and quite strong, providing robust support for the first half of the model. In other words, perceptions of a caring climate are associated with youngsters' perceiving themselves more able to express and deal with their positive and negative emotions. Parents sometimes note that their children are often shy and quiet around people until they get to know them, at which time many children show a much greater range of emotions. In a caring climate everyone is treated with kindness and respect and an effort is made to make them feel like valued members of the group. It may be that a caring climate helps eradicate youngsters' fears that they will be put down, made fun of, and chided for their mistakes and/or weaknesses. If so, it is possible that this type of climate helps youngsters feel more

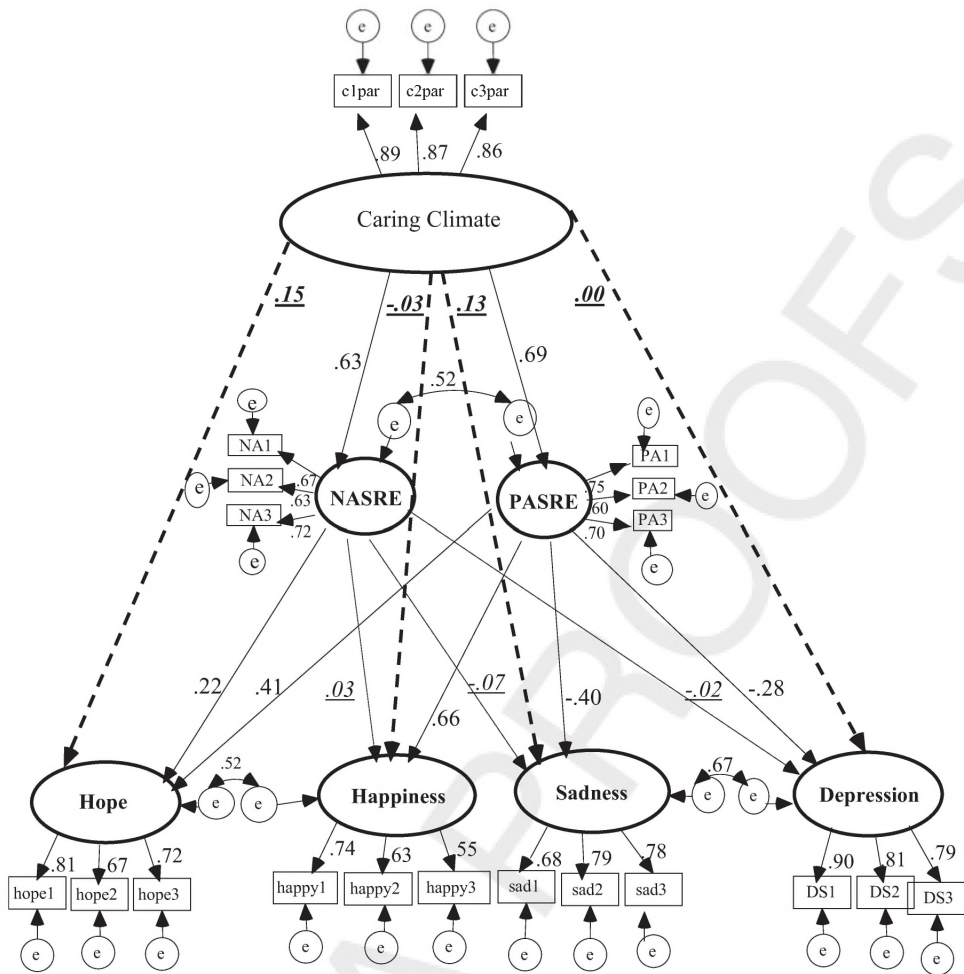


Figure 3. Mediation model in relation to caring climate and mental well-being. NASRE = negative affective self-regulatory efficacy. PASRE = positive affective self-regulatory efficacy. Bold dashed lines = direct links that are nonsignificant; dark solid lines = indirect significant links; light solid lines = indirect nonsignificant links.

confident “putting themselves out there,” allowing others to get to know them better, and setting them up to feel safe and comfortable about expressing their positive emotions and monitoring and dealing appropriately with their negative emotions. Although these links should be examined further in future research, the present results suggest that creating a caring climate for children and adolescents may be a critical variable in sport psychology and positive youth development research.

The links in the second half of the model were also quite strong revealing significant as-

sociations between NASRE and PASRE to parameters of psychological well-being. In the case of PASRE and as hypothesized, the loadings to both positive (i.e., hope and happiness) and negative (sadness and depression) well-being were significant, suggesting that youngsters’ ability to express positive emotion may help them experience greater beneficial mental health outcomes and circumvent more detrimental effects. Whereas sadness and depression are measured more temporally, hope and happiness are typically assessed as more stable measures. However, this difference in type of

assessment (state vs. trait) seemed to make little difference in the links of PASRE to the psychological well-being variables, with all of them being significant. The findings with regard to happiness are in line with those reported by Caprara, Steca, Gerbino, Paciello, and Vecchio (2006).

It is interesting that although significant links were hypothesized from NASRE to each of the psychological well-being outcomes, only the link to hope emerged as significant. It is unclear why the links to happiness, sadness, and depression did not emerge. Bandura et al., (2003), who also examined diverse spheres of psychosocial functioning of ASRE, found that a strong sense of NASRE, in particular, was directly and negatively linked to depression in Italian adolescents. In other words, these young people's abilities to handle the negative emotions they experience in life were more likely to protect them from pitfalls such as depression. Significant links between NASRE to happiness (Caprara et al., 2006) and life satisfaction have been previously reported. Results of the current study revealed no significant link between NASRE to depression or happiness. Instead, NASRE was positively linked to hope. This finding seems reasonable and suggests that when young people can deal with negative experiences in their lives, (i.e., dwell less on the negative, and avoid overreacting and catastrophizing when bad things happen), they may be more likely to keep the unfortunate circumstances in perspective and know that better times lie ahead. Bandura et al. (2003) did not test for a link between PASRE to depression, although Caprara and Steca, (2005) did report a direct positive association between NASRE and life satisfaction.

Although these initial studies examining the link of ASRE to psychological well-being have not revealed consistent associations to certain parameters of well-being, the results are in line with theoretical tenets and research hypotheses. That is, ASRE is hypothesized to be positively associated with positive parameters (i.e., hope and happiness) and negatively associated with negative well-being outcomes (e.g., depression). Because research in this area is only emerging, it is difficult to speculate on why the specific links to well-being that emerge across these few studies (i.e., positive association of NASRE to hope in the current study and negative association of NASRE to depression in

another study) may vary, but there are points worth noting. Bandura et al., (2003) and Caprara and colleagues (2005, 2006) studies were conducted with older Italian adolescents from very diverse socioeconomic backgrounds. The sample in the current study included younger, underserved youngsters. A number of factors could impact the results across these few studies including cultural, age, and socioeconomic differences among the participants. In addition, Bandura, Caprara and their colleagues have not examined the caring climate, and it is possible that the adolescents in their studies perceived a more- or less-caring climate than the youngsters in the current study, and this difference could impact the results.

The findings from the current study linking ASRE to psychological well-being are particularly relevant when one considers the numerous statistics that underscore how many young people live in circumstances and/or engage in behaviors that put their physical and psychological well-being at risk, thus, threatening their ability to live joyfully. For example, findings from the recent Youth Behavior Risk Surveillance Survey (CDC, 2010) revealed that in the previous month, 24% of high school students had drunk 5 alcoholic beverages within a 2-hr period, 18% had carried a weapon throughout the day, 32% had been in a physical fight (in the last 12 months), 14% had seriously considered suicide, and 6% had actually attempted suicide (in the last 12 months). The statistics on depression in adolescence are equally concerning. Researchers have revealed that about 20% of teens will experience depression prior to adulthood. Depressed teenagers are more likely to engage in risky sexual behaviors, be physically ill more often, struggle with school and relationships, and attempt suicide (Commission on Adolescent Depression & Bipolar Disorder, 2005). Amid all these data, results from this study suggest that a caring climate, via emotional self-regulation efficacy, may help youngsters feel more optimistic about their lives and buffer potentially negative states such as sadness and depression, which may serve to help them focus on the more positive aspects of their lives.

Particularly promising is that perceptions of a caring climate, as mediated by emotional self-regulation efficacy, was associated with not only less depression and sadness, which is important in its own right, but with greater hope

and happiness with their lives, suggesting that a caring climate may be an important foundation for helping youngsters make choices that help them thrive. As proponents of positive psychology suggest (Keyes, 2006; Seligman & Csikszentmihali, 2000), it is not enough for people to be void of negative parameters of psychological well-being. Their levels of positive indicators of well-being are of equal or greater importance, and provide evidence that youngsters are functioning in ways that help them make good choices in their lives. Although the findings of the present study would be of importance for all youngsters regardless of age, ability and background, they may be particularly relevant because they emerge from a sample of underserved children whose families have limited financial resources. Researchers suggest that children from these underserved populations may face even greater challenges than those from more financially secure backgrounds. For example, researchers have reported that underserved children are at greater risk for engaging in behaviors that might elicit depression and sadness and decrease happiness and hope (Crooks, 2005).

On the positive side, recent work by Vacik, Coyle, and Vera (2010) found that hope was a significant predictor of subjective well-being in low-income ethnic minority youth. In a similar vein, Roesch, Duangado, Vaughn, Aldridge, and Villodas (2010) found that for low-income minority youth, hope was positively related to greater problem solving, planning, positive thinking, and overall coping with stressful situations. So whereas "hope" may be perceived by some as one minor indicator, its implications for young people are relevant for those who plan and deliver positive youth-development programs. Because adolescence is a challenging period where many youth feel vulnerable, strengthening youngsters' hope for their lives is an important benefit of programs that foster a caring climate.

Like hope, happiness is a significant variable in the life of youth. Although research on happiness in adults is more prominent, research on happiness in younger populations is emerging. For example, Chaplin (2009) found that a major source of happiness for youngsters' is their high quality relationships with others (i.e., family members, friends, teachers, and pets). Similarly, Holder and Coleman (2009) reported that social

relationships (i.e., with parents and friends) significantly predicted children's happiness levels. Researchers have suggested that happiness may be contagious. Specifically, Strayer (1980) found that happier children seemed to evoke positive interactions with other children. Together, these studies suggest that happiness may be somewhat of a circular process. It is possible that when children perceive a positive and supportive environment they are more likely to report higher happiness, as evident in the current study's results. In turn, happier children may find it easier to nurture relationships with peers, which could further strengthen the caring climate. To date, happiness has received only minimal attention in the sport psychology literature, but it is important to recognize its potential as an indicator of the impact of youth physical activity programs.

Findings from this study provide a critical addition to the positive youth-development research in that they not only describe the associations between climate and well-being, but also and most significantly, they identify a mechanism by which these important outcomes occur. Though the aims of positive youth development programs often refer to promoting enhanced psychological well-being, little research has directly examined this link. Results suggest that equipping adults with strategies to create a positive and caring climate can reap significant rewards for young people with regard to their overall physical and psychological development.

This study had several limitations which should be noted. First, results with a sample of underserved children and adolescents from a summer sport camp cannot be generalized to other youngsters participating in a variety of sport programs that may include athletes with higher skill levels, greater commitment to sport, and who hail from varied socioeconomic backgrounds. A second limitation is that this study considered youngsters' perceptions of the intact climate in the program; no intervention was conducted to help increase the caring climate, and no observational aspect of the study considered the specific behaviors the leaders engaged in to foster a caring climate. The NYSP program was selected for this study because it is a nationally recognized program whose goal is to offer quality programming to youngsters in the summer. It was assumed that they would

strive to create a caring climate for these underserved youth. However, creating a caring climate is not per se part of the NYSP training, and the mean score for the caring climate in this study reveals room for improvement. Thus, examining the caring climate in diverse programs with diverse youngsters, examining the behaviors that leaders and children identify as effective strategies for fostering a caring climate, and employing interventions to help leaders create more-caring climates are all important areas for future research.

Despite these limitations, there is mounting evidence to suggest that a caring environment is beneficial to young people in physical activity settings. Perceptions of a caring climate have been associated with youngsters reporting greater effort, enjoyment, commitment, liking their coaches and teammates more, and further engaging in caring behaviors with their teammates and coaches (Fry & Gano-Overway, 2010). These findings are very important in terms of heightening youngsters' experiences in sport, but perhaps even more compelling is the link between perceptions of a caring climate to broader health outcomes, such as psychological well-being and ability to regulate ones' emotions. Results from this work add to the emerging literature suggesting that creating a caring climate in youth physical activity settings should become a priority. Helping adults develop a growing set of diverse strategies to foster a caring climate should be a focus of future research in the physical domain. Such a climate must be intentionally developed, but the great news is that fostering this type of caring environment is inexpensive and "do-able" across programs, leagues, and communities. Examples of specific strategies for youth sport coaches to employ to help establish a caring environment have recently been provided (Fry, 2010). Further research is needed to continue to identify effective strategies that heighten individuals' perceptions of a caring, positive, and supportive environment.

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