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Children with Different Levels of Hope: Are There Differences in Their Self-esteem, Life Satisfaction, Social Support, and Family Cohesion?

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Abstract The purpose of the present study was to compare children with different levels of hope on measures of life satisfaction, self-esteem, family cohesion, and social support. Two hundred and ninety-eight children filled out measures of hope, life satisfaction, self-esteem, family cohesion, and perceived social support. The results revealed no age or gender differences in hope. A hierarchical cluster analysis was preformed on the Children's Hope Scale scores (Snyder et al. Journal of Pediatric Psychology 22(3):399–421, 1997). Results from a cluster analysis placed children into either a low- or high-hope group. In line with the predictions of hope theory, children with high hope were more satisfied with their life and had higher self-esteem when compared to children with low hope. Additionally, children with high hope, when compared to children with low hope, reported greater support from others and higher level of family cohesion. The usefulness of children's hope as a positive indicator that differentiates children on various measures is explored in this paper.

Keywords Hope · Life satisfaction · Self-esteem · Social support · Family cohesion · Children

1 Introduction

The efforts to measure and monitor children's well-being have grown in recent years (Ben-Arieh 2005, 2006, 2008). One of various trends in studies on children's well-being is an increasing focus on the development of positive indicators for different domains of children's functioning (Ben-Arieh 2006, 2008; Moore and Lippman

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2005). Moore et al. (2004) stated that there is a need for conceptually meaningful set of positive indicators which have to be assessed with reliable and valid measures. Available measures have commonly been developed and used with local and social diversity (Lippman et al. 2009). Thus, the validity and reliability of positive constructs and measures have to be examined across different race/ethnicity, gender, socioeconomic status groups, and nations (Lippman et al. 2009).

This study addresses hope as a positive indicator of child's development and as a psychological strength in relation to individual characteristics (life satisfaction and self-esteem) and social-environmental characteristics (family cohesion and perceived social support). In this study, the usefulness of children's hope as a positive indicator that differentiates children is explored. The definition and measurement of hope in this study is based on hope theory (Snyder 2002), as used in the field of positive psychology.

1.1 The Construct of Hope and its Levels

Snyder (2005) stated that the theme of children's hope has been given little attention in psychological research and theory. According to Snyder's hope theory (2002), children's hope can be defined as a cognitive set of beliefs in one's abilities to produce one or several paths to desired goals (the pathways component) and the perceived capacity to use one's paths to accomplish those goals (the agency component) (Snyder et al. 1991, 1997; Snyder 2005). The pathways component of hope refers to the specific strategies to reach the goals and the agency component of hope refers to the motivation for using those strategies (Snyder et al. 2003). The agency and pathways components are two related and additive components that comprise hopeful thinking and, in the assessment of hope, both components have to be measured to obtain overall hope. Snyder's model of hope is based on the proposition that children are directed toward goals, and that their thoughts associated with goals can be understood according to these two components (Snyder at al. 1997). Snyder (2005) suggested that hope is set by the age of 2 years and the level of hope is expected to remain stable as children move through the preschool, middle, and adolescent years (Snyder 2002). Nevertheless, different negative events in children's lives such as neglect, physical abuse and/or loss of a parent can dampen their hopeful thinking (Snyder 2002). The existing literature lacks studies that adequately address the development of hope, and also additional work is needed to obtain an understanding how different negative events in children's lives can dampen their hope.

Snyder (2002) compared hope to other positive psychological constructs such as optimism, self-efficacy, self-esteem, and problem solving in order to support its validity. According to Snyder (2002), optimism (Scheier and Carver 1985), self-efficacy (Bandura 1982), and problem solving (Heppner and Peterson 1982) give different importance to the goal itself and/or to the future-oriented agency and/or pathways-related processes in comparison to hope theory, which equally emphasizes all of these components. When comparing hope and self-esteem, Snyder (2002) states that within hope theory the focus is on the goal pursuit process that elicits emotion and esteem. Moreover, Snyder (2002) argues that hope effects esteem and not vice versa. For more detailed comparison of the differences and similarities between hope and other constructs see Snyder (2002) and Snyder et al. (2002b).

Based on the level of reported hope, individuals were compared on different measures in several studies (Chang 1998; Irving et al. 1998; Snyder et al. 1998, 2002a). High- relative to low-hope college students have higher academic success (Snyder et al. 1997), a greater positive problem orientation and rational problem-solving style (Chang 1998). High- as compared to low-hope students prefer to listen to the successful goal pursuit messages which suggest that high-hope students are in a positive cycle regarding self-referential thinking (Snyder et al. 1998). Furthermore, Snyder et al. (2002a) showed that high- relative to the low-hope students were more likely to have graduated and not to have been dismissed over 6-year period because of poor grades. Some of these studies used one standard deviation above and below the mean total hope score to form hope groups (e.g., Irving et al. 1998) while others used a median split on total hope scores (e.g., Chang 1998) or began at the top (or bottom) of distribution and move downward (or upward) "until sufficient numbers were obtained" (Snyder et al. 2002a p. 823). Gilman et al. (2006) brought into question the use of arbitrary methods to place individuals into high- and low-hope groups. They argue that using a total hope score to form hope groups treats the construct of hope as one-dimensional and disables an understanding of contribution of two hope components (pathways and agency component). Thus, they suggest the use of a cluster analysis as one method that can classify individuals based on the subscale scores independently, which would then provide ground for a more confident interpretation of the findings.

Given to our review of studies on hope in children, only one published study (Gilman et al. 2006) comparing children with different levels of hope on various academic and psychological measures used cluster analysis to place children into hope groups. Results from Gilman's et al. (2006) study revealed that American children can be placed into a low- (23.6% of children), average- (35.8% of children), and high- (40.6% of children) hope group with the high-hope group of children reporting the highest results on personal adjustment, global life satisfaction, and self-reported grade point average. Based on Gilman's et al. (2006) study findings, it seems that a certain number of children are at risk due to their low hopeful thinking. There is also a possibility that the group of children who report very low hopeful thinking is at risk for developing problems and various undesirable characteristics. In addition, once a level of hope is determined for a child or group of children, it can be monitored as counsellors tech children how to set valued goals, how to develop strategies to reach those goals and find the motives to pursue those goals (Snyder et al. 2002c).

1.2 Hope, Life Satisfaction and Self-Esteem

Besides studies in which the research aim was to validate the Children's Hope Scale (Marques et al. 2009; Snyder et al. 1997; Valle et al. 2004), researchers have recently started to investigate hope and its correlates among children and adolescents (Hagen et al. 2005; Barnum et al. 1998; Ciarrochi et al. 2007; Gilman et al. 2006; Gilman and Huebner 2006; Huebner and Gilman 2006; Valle et al. 2006). Correlations yielded from these studies indicate that a child's hopeful thinking is related in a positive direction to a number of desirable outcomes in her/his life. For example, Gilman et al. (2006) found that hope is positively related to global life satisfaction,

personal adjustment, grade point average and structured extracurricular activities, but negatively related to emotional distress, clinical and school maladjustment among middle and high school youth. Recent research among adolescents shows that trait hope significantly predicts depression and life satisfaction (Wong and Lim 2009) and academic performance over 3 years (Leeson et al. 2008). In previous studies negative correlation between hope and anxiety, and positive correlation between hope and grade point average among children in America (Gilman and Huebner 2006) and Croatia (Rijavec and Marković 2008) were found. The findings consistently show no gender or age differences in children's hopeful thinking (see, e.g., Snyder 2005; Snyder et al. 2003). Even though general progress has been made in hope research, additional studies that examine the correlates, predictors and outcomes of hope especially among children and adolescents (Gilman et al. 2006; Proctor et al. 2009) in different cultures are needed.

Life satisfaction and self-esteem are two indicators of children's positive development (see, e.g., Huebner et al. 2005; Lippman et al. 2009; Proctor et al. 2009), and low levels of these indicators can point to the presence of problems in child's functioning (see, e.g., Huebner 2004; Huebner et al. 2005; Gilman and Huebner 2003; Raboteg-Šarić et al. 2010). Overall life satisfaction is defined as a cognitive, subjective appraisal of the overall quality of a person's life (Diener et al. 1999). Several reviews of the research on life satisfaction in children and youth (e.g., Huebner et al. 2004; Huebner 2004; Proctor et al. 2009) showed that life satisfaction is related to different emotional, social and behavioral constructs. Studies done with American (e.g., Gilman and Huebner 2006; Gilman et al. 2006; Huebner and Gilman 2006) and Portuguese (Marques et al. 2007) children and adolescents showed that overall life satisfaction is positively associated with child's hopeful thinking. Self-esteem refers to an overall evaluation of one's worthiness (Rosenberg 1989). As previously mentioned in this paper, Snyder (2002) assumes that hope effects esteem. Positive relationship between hope and self-esteem was found in previous studies done with American (Carvajal et al. 2002; Gilman and Huebner 2006) and Australian (Ciarrochi et al. 2007) adolescents. Barnum et al. (1998) showed that the individual difference variable of hope predicts global self-worth aspect of adolescent adjustment.

1.3 Hope, Family Cohesion and Social Support

Social support from friends and family members is an important characteristic of the social environment in which children live. The social environment and support coming from it can change as children grow and develop (e.g., Lewis et al. 2000; Waters et al. 2000). Social support in a broad sense can be described as "any process through which social relationships might promote health and well-being" (Cohen et al. 2000, p. 4). Cohen et al. (2000) categorized these processes into two groups. One type of process includes the provision or exchange of emotional, informational, and/or instrumental resources when needed. The other type of process includes the welfare which may result from participation in various social groups. The family is a primary social group and family support can contribute to an individual's development and welfare. The family as a system is described in a several models of family functioning (see, Walsh 2003), and family cohesion is one of the dimensions found in different

models. Family cohesion can be defined as the emotional bonding family members have with one another and the degree of personal autonomy an individual experience within the family (Bloom 1985). Snyder (2002) argues that an environment without boundaries, consistency, and support is unfavourable for the development of hope. The assumption is that children who are growing up in such social environment are at risk for not learning hopeful thinking (Snyder 2002). The boundaries and consistency serve as a rule structure for making a decision when it is or is not acceptable to pursue goals. In this regard, a high level of hope should develop in social environment where children are given adequate and sufficient care, support and attention (Snyder 2002, 2005).

Previous studies on the relationship between hope and social support showed that higher hope is related to higher levels of perceived social support. For example, American youth who reported higher levels of hope also reported more positive relationships with others (including parents and peers) and less interpersonal distress (Gilman and Huebner 2006). Adolescent burn survivors and their peers who reported high hope also reported high perceived social support (Barnum et al. 1998). Hagen et al. (2005) showed that the more support children of incarcerated women felt they had, the higher levels of hope they reported. Although several studies on hope and social support have been conducted, there is still a lack of findings regarding the relationship between hope and social support among children from different cultures. The findings from previous studies on the relationship between family functioning and hopelessness (e.g., Kwok and Shek 2008; Shek 1997, 1998), and family functioning and hope (e.g., Connelly 2005) suggest positive relationship between a child's hope and different dimensions of family functioning. For example, Connelly (2005) examined the relationship between family functioning and hope in American children with juvenile rheumatoid arthritis and found that a child's hope was lower when the parent reported greater dissatisfaction with family functioning. Studies done with Chinese adolescents showed that higher levels of hopelessness are associated with more negative family functioning (Kwok and Shek 2008; Shek 1997, 1998). Current literature on hope lacks studies that address the relationship between hope, in terms of positive expectancies, and different family characteristics.

1.4 Current Study

Most studies on hope in children have been done in developed western countries and the literature on hope in children would benefit from research on hope in other countries and culture. The theme of children's hope is a relatively new research topic in Croatia, and only one published study has examined hope and its correlates among Croatian children (Rijavec and Marković 2008). Furthermore, the findings from two studies done with Croatian children and adolescents (Raboteg-Šarić et al. 2009; Rijavec and Marković 2008) suggest the unidimensional structure of the Croatian version of the Children's Hope Scale. These results do not confirm the proposed two-factor structure of the Children's Hope Scale and they point out the need for further studies on hope in Croatia. Based on the existing findings from studies done in Croatia it could be hypothesized that the Croatian version of the Children's Hope Scale has one-factor structure.

Following previous research and suggestions from the literature on hope, there were two general purposes of this study. First, based on the hope scores, we wanted to identify children who report different levels of hope in Croatia. Second, the ways in which children with different levels of hope vary on measures of life satisfaction, self-esteem, family cohesion, and perceived social support are explored. As to our knowledge, no published study has yet compared groups of children based on their reported level of hope on measures of family functioning. The existing literature and hope theory provide ground for certain expectations with a general hypothesis that higher levels of children's hope are associated with higher levels of well-being and greater support from family members and peers.

2 Method

2.1 Sample

Participants included 298 middle school-age children from two public schools located in Varaždin. Varaždin is a city in the north-western part of Croatia with about 50,000 inhabitants. Students ranged in age from 10 to 15 years (M= 12.7 years, SD=1.18), including 75 students in fifth grade (25%), 75 students in sixth grade (25%), 80 students in seventh grade (27%), and 68 students in eighth grade (23%). The sample comprised of 43% (128) boys. Most children in the sample live with both parents (87%) and about 10% of the children live in single-parent families. Also, most children (87%) have very good or excellent school achievement measured by children's reports of their grade-point average (from 1="failed" to 5="excellent").

2.2 Measures

Life Satisfaction The Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS) is a 5-item multidimensional measure that assesses youths' life satisfaction or perceived quality of life (PQOL) (Huebner et al. 2005; Seligson et al. 2003). The scale contains five questions, one tapping each of the five specific life domains (Friends, Family, Self, School, and Living Environment), and responses to the five questions can be combined to create a total life satisfaction score. Each child needs to respond to each of the five questions (e.g., "I would describe my satisfaction with my family life as") by circling one of seven choices on a Likert-type scale (1 = "terrible" to 7 = "delighted"). A higher score denotes higher life satisfaction. Additionally, one item measuring global life satisfaction on a seven point scale was used. The back-translation method was used for the translation of the BMSLSS into Croatian (van de Vijver and Leung 1997). By principal axis factor analysis, in the set of five items one factor was extracted which accounted for 44% of the total variance. Correlation between one item measuring general life satisfaction and a total score on the BMSLSS was r=.63. In this primary school-age sample in the current study, a coefficient alpha of .67 was obtained for the five domain-based items of the BMSLSS. When the item measuring general life

satisfaction was included, reliability increased to .75. The results of reliability analysis for the BMSLSS obtained in this study are similar to those found in the Seligson et al. study (2005) with students from grades 3 to 5. Such reliability coefficients are acceptable for research purposes though more caution is needed with the interpretation of results in clinical settings (Seligson et al. 2005). In this study, the final score used for the BMSLSS did not include one item measuring general life satisfaction.

Hope The Children's Hope Scale (CHS; Snyder et al. 1997) measures hopeful thinking in children (age 8–16 years). Three pathways items (items 2, 4 and 6) assess the capacity of children to develop paths to reach the goals and three agency items (items 1, 3 and 5) assess children's abilities to use those paths to accomplish those goals. Children respond by marking a six-point scale, which includes a range of responses options from 1 = "none of the time" to 6 = "all of the time" (e.g., "When I have a problem, I can come up with lots of ways to solve it"). Higher results on the scale reflect higher hope. We used the back-translation method for the translation of the CHS into Croatian (van de Vijver and Leung 1997).

In this study, we used exploratory procedure to determine the factor structure of the scale, replicating the analysis that Snyder and his colleagues used in the validation of the scale: principal components analysis with a varimax rotation method and a requested two-factor solution. The Cattell's scree test and Kaiser's criteria were used to determine the number of components in this study. This analysis yielded two components that accounted for 64% of the total variance; the first component accounted for 51% of the variance (eigenvalue is 3.05) and the second component accounted for 7% of the variance (eigenvalue is 0.77). The factor loadings from pattern matrix are presented in Table 1 and we can see that one of agency items (item 5) and one of pathways items (item 2) did not load on their respective factors in the two-factor solution. Thus the six scale items were subjected to principal component analysis again but without a requested solution and rotation method. This analysis showed that all six items have high loadings on only first component that accounted for 51% of the total variance. Table 1 shows the factor loadings of the items. Based on the results of principal component analyses, one-factor solution was preferred over two-factor solution and we decided to use items

Table 1 Principal component analysis of the Croatian version of the Children's Hope Scale: Factor loadings

	One-factor solution	Two-factor solution	
		First component (Agency)	Second component (Pathways)
Item 1	.79	.76	.35
Item 2	.73	.65	.38
Item 3	.70	.85	.12
Item 4	.71	.32	.68
Item 5	.68	.27	.69
Item 6	.68	.15	.82

and a total hope score in this study. In the present study, the coefficient alpha was .80 for the total hope score.

Self-Esteem The Rosenberg Self-Esteem Scale assesses global self-esteem or overall feeling of self-worth (Rosenberg 1989). The scale consists of ten items (e.g., "I feel that I have a number of good qualities"), employing a four-point Likert rating scale (1 = "strongly disagree"; 4 = "strongly agree"), which are summed to derive a total score. A high mean score indicates a high level of self-esteem. In this study, the internal consistency of the Rosenberg Self-Esteem Scale was .84. Previous research with this scale in Croatia that used different samples showed acceptable psychometric characteristics of the scale (e.g., Bezinović 1988; Burušić and Brajša-Žganec 2005; Mlačić et al. 2007).

Family Cohesion The family cohesion subscale of the Colorado self-report measure of family functioning (Bloom 1985) is a five-item scale used to assess the emotional bonding family members have with one another. Items (e.g., "Family members really help and support one another") are rated on a 4-point scale with responses ratings from 1 = "very untrue for my family" to 4 = "very true for my family". Higher cohesion scores indicate higher family cohesion. The internal consistency coefficient (Cronbach alpha) was .82 in this study. Previous research in Croatia showed acceptable psychometric characteristics of the scale (e.g., Brajša-Žganec et al. 2002; Raboteg-Šarić et al. 2010).

Social Support The Interpersonal Support Evaluation List (ISEL; Cohen and Hoberman 1983) is a global measure of perceived social support across four domains (belonging, self-esteem, appraisal, and tangible support). In this study, a verbally simplified, shortened, and adapted version of the ISEL scale with 31 items (statements) was used (Brajša-Žganec 2005). Children were required to mark on a 4-point scale (1 = "strongly disagree" to 4 = "strongly agree") their degree of agreement with statements. A mean global support score is obtained by summing the responses options for each statement and dividing by the total number of statements. Higher scores reflect higher perceived social support. In this study, reliability for the full measure was .90, respectively.

2.3 Procedure

Approval to collect data was obtained from the school principals, counsellors, parents and children. Prior to data collection, the nature of the study was explained to the school principals, counsellors, and children. Parental consent forms were distributed to students, and only those students who voluntarily returned signed parental consent forms were eligible to participate in the study. About 96% of children returned a completed parental consent form and participated in the research. Prior to completing the questionnaire, children completed a short demographic information form that provided information about their age, gender, school achievement and grade. The children completed the questionnaire anonymously in their regular classroom during a class session.

3 Results

3.1 Descriptive Statistics and Demographic Correlates of Hope

Descriptive statistics and bivariate correlations for all variables in the study are presented in Table 2. The average score on the CHS indicates that children describe their hope level as being "a lot of the time" and "most of the time". The average score on life satisfaction measure suggest that children are generally more satisfied than dissatisfied with their life. Children reported relatively high self-esteem as well as perceived social support and family cohesion. The intercorrelations among all measures are significant and moderate, and hope significantly and positively relates to life satisfaction, self-esteem, perceived social support, and family cohesion.

The *t*-test was used to determine response differences across all measures with respect to gender. Children's hope ($t(296)=0.93$, $p>.01$), life satisfaction ($t(296)=1.31$, $p>.01$), self-esteem ($t(295)=0.08$, $p>.01$), and family cohesion ($t(296)=1.56$, $p>.01$) did not differ as a function of gender. Girls ($M=3.16$, $SD=0.48$) reported higher perceived social support than boys ($M=3.04$, $SD=0.50$) ($t(296)=2.14$, $p<.05$), though the effect size of this difference is small. The age of the children was not significantly related to hope ($r(298)=-.02$, $p>.01$), self-esteem ($r(297)=-.08$, $p>.01$), perceived social support, ($r(298)=-.04$, $p>.01$), and family cohesion ($r(298)=-.07$, $p>.01$). Age was significantly related to children's life satisfaction ($r(298)=-.17$, $p<.01$), with older children reporting lower life satisfaction than younger children.

3.2 Designation of Hope Groups

Our assumption was that there are groups of children who differ in their reported level of hope, and person-centered approach to data analysis was more appropriate than variable-centered approach to test this assumption. Person-centered approaches are used to identify categories of individuals who share specific characteristics or relations among characteristics (e.g., Laursen and Hoff 2006). The categories or groups of individuals may be empirically derived using, for example, cluster or class analysis (Laursen and Hoff 2006).

Table 2 Correlations and descriptive statistics of the Children's Hope Scale (CHS), Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS), Rosenberg Self-Esteem Scale (SE), Bloom's family cohesion subscale (FC), and Interpersonal Support Evaluation List (ISEL)

	CHS	BMSLSS	SE	FC	Range	M	SD
CHS	–				1–6	4.43	0.95
BMSLSS	.42*	–			1–7	5.70	0.93
SE	.48*	.55*	–		1–4	3.14	0.59
FC	.42*	.38*	.25*	–	1–4	3.38	0.57
ISEL	.43*	.58*	.60*	.30*	1–4	3.11	0.50

*$p<.01$

Similar to a previous study (Gilman et al. 2006) that used cluster analysis for classifying children based on the Pathways and Agency subscale from the CHS, a hierarchical cluster analysis was conducted following Ward's method using six items from the CHS in this study. Taking into account Gilman's et al. (2006) concerns regarding the placement of individuals into different hope groups, we used items in the cluster analysis instead of total hope score. The analysis investigated different cluster solutions, but changes in agglomeration coefficients as well as inspection of a hierarchical tree diagram strongly supported a two-cluster solution. The *t*-test revealed significant difference between two clusters on the total hope score ($t(296)=17.12$, $p<.01$), with children from Cluster 1 ($M=3.26$, SD=0.65) being lower on the total hope score compared to children from Cluster 2 ($M=4.81$, $SD=0.68$). Average item scores for the clusters are reported in Table 3, with children from Cluster 1 being lower on all six items from the CHS than children from Cluster 2. Cluster 1 seemed to be theoretically consistent with low hope (children reporting low results on six items and the total hope score), and Cluster 2 seemed to be consistent with high hope (children reporting high results on six items and the total hope score). In remainder of this paper when we discuss the findings of this study, we use "low-hope children" or "low-hope group" to describe children from Cluster 1 and "high-hope children" or "high-hope group" applies to children from Cluster 2. Results yielded 73 children in the low-hope group (24.5% of children; 36 girls and 37 boys) and 225 children in the high-hope group (75.5% of children; 134 girls and 91 boys).

3.3 Differences Between Low- and High-Hope Groups in Self-Esteem, Life Satisfaction, Social Support, and Family Cohesion

The differences between low- and high-hope groups in self-esteem, life satisfaction, social support, and family cohesion were tested using analysis of variance. The results are presented in Table 4 along with the means and standard deviations of the variables. In line with the predictions of hope theory, children with high hope were more satisfied with their life and had higher self-esteem when compared to the group of children with low hope. Further, children with high hope, when compared to children with low hope, reported higher level of support from others as well as higher level of family cohesion.

Table 3 Children's Hope Scale item scores and a total hope score by clusters

	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Total hope score
Cluster 1 (low hope)							
N	73	73	73	73	73	73	73
M	3.48	3.40	3.58	2.64	3.26	3.19	3.26
SD	1.08	1.33	1.11	0.89	1.33	1.26	0.65
Cluster 2 (high hope)							
N	225	225	225	225	225	225	225
M	4.58	4.73	4.74	5.15	4.74	4.92	4.81
SD	1.01	1.09	1.18	1.02	1.33	1.14	0.68

Table 4 Differences between the two hope groups of children in life satisfaction, self-esteem, family cohesion, and perceived social support

	Low-hope group	High-hope group	F	Partial η^2
Life satisfaction	5.25 (1.06)	5.84 (0.84)	24.13*	.08
Self-esteem	2.72 (0.59)	3.27 (0.52)	57.21*	.16
Family cohesion	3.13 (0.72)	3.47 (0.48)	20.31*	.06
Perceived social support	2.84 (0.48)	3.19 (0.47)	31.42*	.10

*$p<.01$

4 Discussion

The study results provide support for the notion that higher levels of children's hope are associated with higher levels of life satisfaction, self-esteem, social support, and family cohesion. The findings from this study about differences between low- and high-hope groups of children are in accordance with the predictions of hope theory (Snyder 2002). These findings among Croatian children correspond to findings from adult research on hope and findings from research carried out with children and youth in other countries (e.g., Ciarrochi et al. 2007; Gilman et al. 2006; Snyder 2002; Valle et al. 2006). As showed by previous research (e.g., Barnum et al. 1998; Ciarrochi et al. 2007; Gilman et al. 2006; Gilman and Huebner 2006; Huebner and Gilman 2006), children who report higher levels of hope, in comparison to children who report lower levels of hope, show better psychological functioning and adjustment. These findings seem invariant across different races, gender, and nations and the question is why children with high hope do better than their low hope counterparts. As suggested by Snyder (2002), part of the answer lies in the welfare and an advantage obtained from finding multiple pathways to goals, as well as motivation to pursue those goals. Another part of the answer probably relates to the hypothesis that children with high hope, compared to children with low hope, are not influenced by counterproductive negative emotions; there is no tendency to undervalue oneself and one's abilities. Also, when encountering stressors, high-hope individuals can call on their family and friends for help and support (Snyder 2002). Additionally, it could be that hope facilitates the devising of different strategies for dealing with negative life events, obstacles to goals and different stressors that can lead to successful coping. So, hope can be seen as a strength, but also as an asset (Shorey et al. 2002). Although it is highly unlikely, but it could be that better psychological functioning and adjustment precedes hope and this hypothesis can be examined in longitudinal studies. Studies focusing on why high-hope children do better that their low-hope peers are much needed.

Findings from this study and from two studies done with Croatian children and adolescents (Raboteg-Šarić et al. 2009; Rijavec and Marković 2008) suggest the unidimensional structure of the Croatian version of the CHS. These findings do not confirm the proposed two-factor structure of the CHS (Snyder 2005), and the question is why this difference in the underling factor structure of the CHS emerged. Maybe

Croatian children comprehended and evaluated some of hope items differently in comparison to American (Valle et al. 2004) or Portuguese children (Marques et al. 2009). Related to this, one could argue that hope and its underling structure are relatively invariant over different cultures and countries or that hope and its structure, as identified by different language labels, vary due to the influence of different cultural and societal factors. Based on the findings from this study we cannot conclude that the cultural differences in hope exist between Croatian children and children from other countries but just point to the need for further studies, especially cross-cultural research in this field. Furthermore, Snyder et al. (1997) developed a model of children's hope based on the assumption that children's hopeful thinking is similar to hopeful thinking of adults. However, children and adults differ in their cognitive abilities so children's awareness of such cognitions (e.g., thoughts of different routes to reach the desired goals) and the role that these cognitions play in their life are likely different when compared to adults (Valle et al. 2004). Because the CHS is one of the most popular self-report measure of hope in children, and no studies have actually compared the factor structure of the CHS across different samples of children from different countries, it seems important to examine the scale invariance in further studies.

Based on the results from a hierarchical cluster analysis, children were placed into two hope groups (low- and high-hope group) in this study. This finding partially supports Gilman's et al. (2006) findings in which youth were placed into a low-, average-, and high-hope group. Published studies with adults and college students used arbitrary methods to place individuals into hope groups (e.g., Chang 1998; Irving et al. 1998; Snyder et al. 1998, 2002a) and therefore are hardly comparable with the current findings. As we noted in the introduction of this paper, our assumption was that there is a group of children who are at risk due to their low hopeful thinking that is associated with undesirable outcomes. The current study findings confirm this assumption. About 20% of the children in this study reported low levels of hope as in Gilman's et al. study (2006), and they also reported low level of life satisfaction, self-esteem, perceived social support, and family cohesion in this study. These results point out the need for further studies to determine a cut-off point on the CHS for identification of children with low hope.

As Seligman (2008) stated, focus on health rather than illness will be cost and life saving. It seems important to form the context of children's development, in particular to strengthen children's hope, with emotionally warm families and others that provide social support (Snyder 2002). The findings from studies on hope among youth suggest the use of interventions and prevention programs that will help low-hope children to develop hopeful thinking. Snyder et al. (2003) stress the importance of enhancement of hope among youth regardless of their reported hope levels. In applying hope theory to the work of practitioners, Snyder et al. (2003) stated that it is important to help youth to set goals, develop pathways thinking and enhance their agency. Specifically, they suggest that goals need to be appropriate to the youth's age, meaningful, and concrete. In addition, goals that are established according to child's own standards are more motivating and could enhance his/her agency thinking. When helping youth to develop pathways thinking, it is possible to teach them to break down large goals into smaller ones and to have alternative routes

towards desired goals. Additionally, Snyder et al. (2003) stated that it is important to teach youth how they can replace their own self-criticism with more realistic and productive thoughts.

It is important to note the methodological limitations of the present study. First, the methodology of this study was cross-sectional and no conclusion regarding the causality can be made. So, it remains unclear whether having low hope leads to low life satisfaction, self-esteem, perceived social support, and family cohesion, or vice versa. The bidirectional view of child socialization implies that family functioning and parents influence the child's adjustment, which in turn influences the family functioning and behaviour of parents (Bell 1968). Although most previous studies have emphasized the effects of family functioning on children, few studies have examined the effects of child and his adjustment on family in longitudinal studies (e.g., Delsing et al. 2005; Shek 1998, 2005). Shek (1998, 2005) found that adolescent psychological well-being is predictive of family functioning over time. Delsing and his colleges (2005) found limited support for the bidirectional influence between family relationships and adolescent problem behaviour. In all, the issue of bidirectional influences between family characteristics and well-being of child is beyond the scope of this paper and it still remains open for further research and discussions. Second, the sample in this study was not nationally representative and therefore generalizing results from this study alone must be done with caution. The present findings could be generalized to children living in Croatian cities that are urbanized and industrialized but the question of generalizability of the findings cannot be answered without further research and accumulated knowledge. Although the findings of this study provide support for the unidimensionality of the Croatian version of the CHS, along with the findings of Rijavec and Marković (2008) and Raboteg-Šarić et al. (2009), further research on the psychometric properties of the Croatian version of the CHS is needed with a representative sample of children and youth. The existing literature appears to lack studies that adequately address the development of hope, and additional work is needed to obtain an understanding on how different negative events in children's lives can dampen their hope. Also, literature on hope would be enriched by studies investigating the predictors of children's hope.

Overall, in line with the predictions of hope theory, children with high hope were more satisfied with their life and had higher self-esteem when compared to the low-hope group of children in this study. Additionally, high-hope children, when compared to low-hope children, reported having greater support from others as well as greater family cohesion. Further progress in the study of children's hope would particularly benefit from longitudinal research on hope enhancement and development as well as cross-cultural research on hope.

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