

# The Association Between Sensation Seeking and Well-Being Among College-Attending Emerging Adults

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*Sensation seeking is a known risk factor for unsafe and reckless behavior among college students, but its association with well-being is unknown. Given that exploration plays an important psychosocial role during the transition to adulthood, we examined the possibility that sensation seeking is also associated with psychological well-being. In a large multisite US college sample (N = 8,020), scores on the Arnett Inventory of Sensation Seeking were positively associated with risk behavior, psychological well-being, and eudaimonic well-being. When sensation seeking dimensions were examined separately, well-being was found to be associated with high novelty seeking but with low intensity seeking.*

Sensation seeking has been conceived as a dimension of personality that motivates individuals to seek novel, complex, and intense experiences (Zuckerman, 1979). Sensation seeking is an individual-difference construct that is thought to be biologically based (Zuckerman & Kuhlman, 2000), although its expression may be influenced by environmental factors (Arnett, 1994a). Individuals high in sensation seeking are thought to satisfy their desire for new stimuli through various means

that can include substance use, gambling, and various other risky and reckless activities and behaviors (Roberti, 2004). Sensation seeking is thought to peak sometime between the late teens and the early twenties and then to decline into adulthood (Zuckerman, 1979).

## SENSATION SEEKING AND RISK BEHAVIOR

From the time of its introduction, sensation seeking has typically been framed within a risk-taking framework, with individuals high in sensation seeking characterized by a willingness “to take physical, social, legal, and financial risks for the sake of such experience” (Zuckerman, 1994, p. 27). Accordingly, the relationship between sensation seeking and a wide range of risk-taking behaviors (e.g., substance use, reckless driving, and risky sexual behavior) has been well established (Arnett, 1996; Zuckerman, 2007).

From this risk-focused perspective, sensation seeking might be seen as a hindrance to well-being. However, researchers have demonstrated that a disposition toward novel and intense experiences may be expressed

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in ways other than health-compromising behaviors, including occupational choice (Musolino & Hershenson, 1977) and involvement in recreational activities (Joireman, Fick, & Anderson, 2002). Therefore, it may be inaccurate to assume that sensation seeking leads to outcomes that are unidimensionally maladaptive and harmful.

The Arnett Inventory of Sensation Seeking (AISS; Arnett, 1994a) was developed to measure two aspects of sensation seeking: novelty and intensity. *Novelty sensation seeking* refers to a tendency to approach and investigate unfamiliar and novel stimuli and situations (Zuckerman, 1990), with AISS items on that subscale measuring the respondent's degree of desire for new experiences such as traveling to strange and unknown places. *Intensity sensation seeking* refers to a tolerance to and a preference for high levels of stimulation (Zuckerman, 1990), with AISS items on that subscale measuring the respondent's preference for intense experiences such as loud music and fast amusement park rides.

High sensation seeking, as measured by the AISS, has been found to be associated with a number of the health-compromising behaviors (e.g., reckless driving, binge drinking, substance use, and risky sexual behaviors) that peak between adolescence and adulthood and are responsible for harmful consequences (Arnett, 1994a, 2005; Bradley & Wildman, 2002; Ravert et al., 2009); however, the potentially adaptive dimensions and consequences of sensation seeking during the transition to adulthood have gone largely unstudied. As such, the purpose of this study was to examine whether some aspects of sensation seeking might also be associated with personal growth and well-being.

### Exploration as a Developmental Task

Some degree of willingness to remain open to experience and expose oneself to uncertainty

or risk might be considered normative and necessary to master the developmental tasks of transitioning from adolescence to adulthood in contemporary society. Such openness is linked with identity exploration, which provides a vehicle for experimenting with and considering options that one might wish to pursue later on (Luyckx, Goossens, & Soenens, 2006). Exploration plays a key role in modern industrialized societies and cultures that allow for a period of *emerging adulthood*, in which entry into adult responsibility is postponed and young people meaningfully examine future possibilities (Arnett, 2000). Seeking and exploring new relationships, roles, and ways of thinking are examples of developmental tasks that are not without risk (Lapsley, 2003). College students have described engaging in purposeful experimentation as a means of self-growth, and this exploration may include risky behaviors (Dworkin, 2005). Thus, sensation seeking during emerging adulthood might be adaptive and constructive in some ways and dangerous in others—and indeed, different dimensions of sensation seeking might predict adaptive (i.e., psychological well-being and self-fulfillment) versus dangerous (e.g., substance misuse, unsafe sex) outcomes.

### Well-Being

College students typically describe themselves as somewhere between adolescence and adulthood (Arnett, 1994b). During this period of emerging adulthood, key developmental tasks revolve largely around exploring life possibilities and relationships, and establishing a sense of identity, autonomy and purpose (Arnett, 2000; Chickering, 1993; Erikson, 1968). Psychological well-being during this time of life might therefore be conceptualized as a multidimensional construct that involves maintaining a sense of purpose, personal growth, connection, and mastery (Ryff & Keyes, 1995). Another dimension of well-

being is *eudaimonic well-being*: reflecting a sense of reaching towards one's best and fullest potential, and especially relevant for the study of emerging adults due to its close connection to self-discovery and identity formation (Waterman et al., 2010).

## THE CURRENT STUDY

The purpose of this study was to examine how sensation seeking was associated with well-being in a large, multiethnic sample of college-attending emerging adults. Given that openness to experience may be a central aspect of personal growth and psychological well-being (Keyes, Shmotkin, & Ryff, 2002), and that exploration and experimentation are often considered an important and functional aspect of the transition to adulthood (Arnett, 2000; Chickering, 1993; Erikson, 1968), novelty sensation seeking was expected to be associated with well-being. In contrast, having a desire or need for intense experiences per se seems unlikely to facilitate personal growth or achievement of developmental tasks, and therefore was not expected to be associated with well-being. Rather, we expected that intensity seeking might predispose individuals toward risky behaviors. In the current study, we consider two related but separate indices of well-being in our analyses: (a) eudaimonic well-being, reflecting a sense of developing one's full potential (Waterman, 2007), and (b) psychological well-being as conceptualized in Ryff's multidimensional model of psychological wellness (i.e., "doing well" in life; Ryff & Keyes, 1995).

In the only published study that reported on scores from both the AISS and well-being, Waterman et al. (2010) found a small, positive correlation between sensation seeking and eudaimonic well-being in a large sample of college students. However, those analyses were based on the overall total sensation seeking

score, and as such, the associations for the novelty and intensity subscales were not evaluated independently.

We analyzed the novelty and intensity dimensions independently to evaluate our hypotheses that aspects of sensation seeking may have differential correlates. Doing so is supported by previous findings that intensity sensation seeking, compared to novelty sensation seeking, is substantially stronger as a predictor of risk behavior (Arnett, 1994a; Desrichard, Vos, Bouvard, Dantzer, & Paignon, 2008). Discerning whether, and which, aspects of sensation seeking are associated with well-being will help to extend theory and research concerning the role that exploration plays in college student development.

In order to isolate the effects of the novelty versus intensity dimensions of sensation seeking on risk taking and well-being, we chose to control for three potentially confounding variables. First, *depressive symptoms* have been linked with a range of risk-taking behaviors (Katon et al., 2010) and with low psychological well-being (Ryff & Keyes, 1995; Wood & Joseph, 2010). Participant gender and age were also included as covariates because both sensation seeking (Arnett, 1994a) and well-being (Ryff & Keyes, 1995; Waterman et al., 2010) have been found to differ by age and across gender.

## Hypotheses

We expected to replicate previous findings that overall sensation seeking would be positively associated with engagement in risk behaviors, with intensity sensation seeking emerging as a stronger predictor than the novelty dimension (Arnett, 1994a). Additionally, we examined the hypothesis that novelty sensation seeking would be positively associated with eudaimonic and psychological well-being. No significant associations between intensity sensation seeking and well-being were expected, nor between novelty sensation seeking and risk behaviors.

TABLE 1.  
Items Retained in the Novelty and Intensity Sensation Seeking Scales

AISS <sup>a</sup> Item	Novelty	Intensity
I can see how it would be interesting to marry someone from a foreign country.	.591	.008
I would like to travel to places that are strange and far away.	.808	-.112
I would have enjoyed being one of the first explorers of an unknown land.	.660	.329
If it were possible to visit another planet or the moon for free, I would be among the first in line to sign up.	.608	.412
I like a movie where there are a lot of explosions and car chases.	.296	.517
It would be interesting to see a car accident happen.	-.034	.731
I like the feeling of standing next to the edge of a high place and looking down.	.142	.648
I can see how it must be exciting to be in a battle during a war.	.012	.810

Note. These loadings were obtained using principal component analysis (with varimax rotation).

<sup>a</sup> AISS = Arnett Inventory of Sensation Seeking.

## METHOD

### Participants

Participants were 8,020 undergraduate students (mean age = 20 years, age range = 18–29 years, 74% women) recruited from courses in psychology, family studies, sociology, and education at 27 U.S. colleges and universities. Representing 19 states, study sites included large state universities, smaller state universities, and private colleges and universities. In terms of ethnicity, 65.6% of participants identified as White, 14.8% as Hispanic, 9.0% as Black, 6.4% as Asian, and 3.4% as other ethnicity; less than one percent (0.8%) did not provide data on their ethnic background. Data from 66 cases were deemed to be invalid due to extreme responses and were excluded from analysis.

Participants were invited to participate through classroom and e-mail announcements, and received course credit for their participation. At all data collection sites, campus IRB approval was obtained prior to recruitment. Students were provided with a link to a web-based survey, and those who decided to participate read a consent form and checked a

box indicating their consent before beginning the survey. Identifying information, in the form of student IDs, was collected in order to provide course credit to respondents, but these identifiers were separated from participants' data to ensure confidentiality.

### Measures

*Sensation Seeking.* Participants completed the Arnett Inventory of Sensation Seeking (AISS; Arnett, 1994a). This 20-item scale consists of a 10-item novelty subscale and a 10-item intensity subscale. Respondents reported how well each item described them using a 4-point Likert-type scale ranging from 1 (*Does Not Describe Me At All*) to 4 (*Describes Me Very Well*). AISS scores have been found to be moderately associated with Zuckerman's SSS-V sensation seeking measure, with correlations ranging from  $r = .41$  (Arnett, 1994a) to  $r = .72$  (Ferrando & Chico, 2001). Disattenuated correlation estimates, conducted to account for inter-item reliability, have indicated that the two scales measure the same dimension within the 18–30 age group (Carretero-Dios &

Salinas, 2008). A correlation of  $r = .57$  has also been found between scores on the AISS and Zuckerman impulsive unsocialized sensation seeking (ImpSS) scale (Donnellan, 2010).

In this study, reliability (Cronbach's alpha) was calculated as  $\alpha = .64$  for the entire AISS,  $\alpha = .46$  for the 10 novelty items, and  $\alpha = .50$  for the 10 intensity items. To address the low subscale reliability ratings, we chose to utilize a modified AISS scale, as several previous researchers have done (e.g., Haynes, Miles, & Clements, 2000; Roth, 2003). The process involved removing items with lowest item-scale correlations until the alpha coefficient was maximized, then utilizing principal components analysis (varimax rotation) to verify that the two-dimensional structure of the measure was retained. The procedure resulted in two components (eigenvalues 2.67 and 1.42) that accounted for 51.1% of the total variance (see Table 1), and included a 4-item novelty scale ( $\alpha = .64$ ) and a 4-item intensity scale ( $\alpha = .66$ ). Examination of the shortened subscales suggested strong face validity and were consistent with the theoretical conceptualizations of the two types of sensation seeking.

*Risk Behavior.* Participants were asked how often they had participated in the following behaviors: (a) engaged in binge drinking, (b) used marijuana, (c) took prescription drugs to get high, (d) drove when at least a little bit drunk, "buzzed," or "tipsy," (e) rode with a driver who was drunk or high, (f) engaged in sex without using a condom, and (g) engaged in sex while drunk or high. A single risk behavior score was generated as the mean across responses from these behaviors. For binge drinking, women reported their frequency of having "4 or more drinks on one occasion" and men reported their frequency of having "5 or more drinks on one occasion," in the past year, on a response scale from 0 (*Never*) to 4 (*Daily/Almost Daily*). All other risk items

asked how often the respondent had engaged in the behavior in the last 30 days, and were measured using a 5-point scale of 0 (*Never*), 1 (*Once or Twice*), 2 (*3–5 Times*), 3 (*6–10 Times*), 4 (*More than 10 Times*); Cronbach's alpha was .71. To adjust for a high degree of positive skew and kurtosis, a logarithmic ( $\log_{10}$ ) transformation was applied to mean risk scores, and these transformed scores were used in analysis.

*Well-Being.* Well-being was assessed in terms of two related but distinguishable components (Waterman, 2007): eudaimonic well-being and psychological well-being. Eudaimonic well-being, reflecting a sense of developing one's potentials and finding enjoyment in participating in personally meaningful and expressive activities, was measured using Waterman et al.'s (2010) Questionnaire on Eudaimonic Well-Being. Respondents rated a set of 21 statements on a scale from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). Sample items from the scale include, "I can say that I have found my purpose in life" and "I feel best when I'm doing something worth investing a great deal of effort in." Cronbach's alpha was .86.

Psychological well-being was measured using the Scales for Psychological Well-Being (Ryff & Keyes, 1995). This instrument consists of 18 items that assess 6 dimensions of well-being (autonomy, environmental mastery, growth, self-acceptance, relationships, and purpose in life). Participants rate a series of statements on a scale from 1 (*Strongly Disagree*) to 6 (*Strongly Agree*). Because the 6 dimensions belong to single domain (Ryff & Keyes, 1995), a single psychological well-being score was generated as the mean across all 18 items. Cronbach's alpha was .85.

*Depressive Symptoms.* The Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977) was used to assess depressive symptoms. The CES-D includes 20

TABLE 2.  
Correlation Matrix ( $N = 3,974$ )

	Age	Gender	CES-D	SS	Nov SS	Int SS	Risk Beh	Eud WB	PWB
Age	—	-.017	-.068***	-.075***	.004	-.092***	.086***	.100***	.043*
Gender		—	.043*	-.164***	-.049**	-.364***	-.058***	.104***	.127***
CES-D			—	.182***	.021	.214***	.098***	-.333***	-.428***
SS				—	.671***	.653***	.087***	.081***	-.002
Nov SS					—	.315***	.036*	.223***	.164***
Int SS						—	.124***	-.158***	-.211***
Risk Beh							—	-.153***	-.129***
Eud WB								—	.621***
PWB									—

Notes. For gender: 1 = male, 2 = female; CES-D = Center for Epidemiological Studies Depression Scale; Risk Beh = Risk behavior; Nov SS = novelty sensation seeking; Int SS = intensity sensation seeking; Eud WB = eudaimonic well-being; PWB = psychological well-being.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

items that respondents rate using a scale from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). Sample items include “I felt like crying this week,” and “This week, I felt lonely, like I didn’t have friends.” Cronbach’s alpha was .86.

## ANALYSIS

Descriptive statistics, correlations, principal components analysis and scale reliabilities were generated using SPSS (version 17.0). The SPSS random-split data set function was applied to the full data set in order to create two randomly selected data sets of approximately equal size. The first data set ( $n = 4,050$ ) was used for psychometric analyses including principal factor analysis and assessment of scale reliabilities. The second data set ( $n = 3,970$ ) was used to generate a correlation matrix and to conduct a series of hierarchical multiple regression analyses. In these regression analyses, age, gender, and depressive symptoms were entered in the first step as control variables, and sensation seeking variables were entered as separate steps. One

set of analyses utilized total AISS scores, and a second set utilized separate novelty and intensity subscales as described previously in the sensation seeking measures section. These regression analyses were conducted using Mplus 5.1 (Muthén & Muthén, 2007). The sandwich estimator (Kauermann & Carroll, 2001) in Mplus was used to adjust the standard errors in order to account for the multilevel nesting of students within schools.

## RESULTS

### Zero-Order Correlations

Table 2 presents correlations among all variables used in our analyses. The correlation between novelty and intensity sensation seeking was  $r = .32$ ,  $p < .001$ . Novelty and intensity sensation seeking were positively associated with risk behavior,  $r = .04$ ,  $p < .05$ , and  $r = .12$ ,  $p < .001$ , respectively. Positive correlations were also found between novelty sensation seeking and both well-being measures: eudaimonic well-being,  $r = .22$ ,  $p < .001$ ; psychological well-being,  $r = .16$ ,



$p < .001$ . Negative correlations were found between intensity sensation seeking and both well-being measures: eudaimonic well-being,  $r = -.16$ ,  $p < .001$ ; psychological well-being,  $r = -.21$ ,  $p < .001$ . Although the correlations were small, preliminary correlational analyses supported the study hypotheses.

### Regression Analyses: Sensation Seeking, Risk Behavior, and Well-being

Eight separate regression analyses were conducted, each accounting for the nesting of participants within schools. As shown in Table 3, high risk behavior scores were associated with being older, increased depressive symptoms, and high overall sensation seeking. In an analysis assessing the contributions of the

two sensation seeking dimensions separately (controlling for age, gender, and depression scores), risk behavior scores were associated with high intensity, but not novelty sensation seeking scores.

Eudaimonic and psychological well-being were both associated with being female and with low levels of depressive symptoms. Eudaimonic well-being was also associated with being older. In all analyses involving well-being, adding sensation seeking scores in subsequent steps resulted in significant, although small, increases in variance accounted for by the model. High overall sensation seeking scores were associated with high eudaimonic and psychological well-being. In analyses considering sensation seeking dimensions

TABLE 3.  
Regression Model for Risk Behavior Score

Step/Variable		$\Delta R^2$	Unstandardized Coefficient (SE)	Standardized Coefficient <sup>a</sup>	Sig.
(Using Full AISS Scores)					
Model 1	Step 1: Control Variables	.02			.001
	(Constant)		.315 (.067)		< .001
	Age		.013 (.003)	.09	< .001
	Gender		-.034 (.019)	-.05	.073
	CESD – Depression		.003 (.000)	.11	< .001
	Step 2: Sensation Seeking	.01			< .001
	Sensation Seeking (Overall AISS Score)		.002 (.001)	.07	< .001
(Using Reduced AISS Sub-Scale Scores)					
Model 2	Step 1: Control Variables	.02			.001
	(Constant)		.315 (.067)		< .001
	Age		.013 (.003)	.09	< .001
	Gender		-.034 (.019)	-.05	.073
	CESD – Depression		.003 (.000)	.11	< .001
	Step 2: Novelty Sensation Seeking	.00			.061
	Novelty Sensation Seeking (4 items)		.002 (.001)	.03	.061
	Step 3: Intensity Sensation Seeking	.01			< .001
Intensity Sensation Seeking (4 items)		.009 (.001)	.11	< .001	

<sup>a</sup> Standard errors are adjusted for the nesting of participants within schools.

TABLE 4.  
Regression Model for Psychological Well-Being

Step/Variable		$\Delta R^2$	Unstandardized Coefficient (Beta)	Standardized Coefficient <sup>a</sup>	Sig.	
(Using Full AISS Scores)						
Model 1	Step 1: Control Variables	.21				
	(Constant)		97.910 (2.34)		< .001	
	Age		0.102 (.103)	.02	.318	
	Gender		4.270 (.569)	.15	< .001	
	CESD – Depression		–0.470 (.021)	–.44	< .001	
	Step 2: Sensation Seeking	.02				
	Sensation Seeking (Overall AISS Score)		0.173 (.026)	.12	< .001	
(Using Reduced AISS Sub-Scale Scores)						
Model 2	Step 1: Control Variables	.21				
	(Constant)		97.910 (2.34)		< .001	
	Age		0.102 (.103)	.02	.318	
	Gender		4.270 (.569)	.15	< .001	
	CESD – Depression		–0.470 (.021)	–.44	< .001	
	Step 2: Novelty Sensation Seeking	.03				
		Novelty Sensation Seeking (4 items)		0.697 (.083)	.18	< .001
	Step 3: Intensity Sensation Seeking	.02				
		Intensity Sensation Seeking (4 items)		–0.619 (.068)	–.17	< .001

<sup>a</sup> Standard errors are adjusted for the nesting of participants within schools.

separately, eudaimonic and psychological well-being were both associated with low intensity sensation seeking and high novelty sensation seeking (see Tables 4 and 5).

## DISCUSSION

Sensation seeking has been widely studied as a risk factor for various potentially hazardous behaviors, and the current findings replicate that well-established association. However, scholars have noted that this body of research does not “fully capture the richness” of the sensation seeking construct (Joireman et al., 2002, p. 510). Thus, researchers have been encouraged to evaluate correlates of sensation seeking other than risk-taking

(e.g., Arnett, 1994a, p. 294). Accordingly, beyond replicating the connection between sensation seeking and risk behaviors, in this study we make an original contribution to the literature by identifying a positive association between sensation seeking and various aspects of well-being among college-attending emerging adults. Further, the two dimensions of sensation seeking we measured were differentially associated with risk behavior and well-being. Intensity sensation seeking was associated with low eudaimonic and psychological well-being and high levels of risk behavior. In contrast, novelty sensation seeking was positively associated with both measures of well-being, but was not significantly associated with risk behavior.



Our findings indicate that different aspects of sensation seeking may play unique roles with regard to risk behavior and well-being. Future research might consider whether these two dimensions reflect a single underlying need for arousal that individuals channel differentially into the novelty or intensity forms, or whether these two dimensions reflect largely separate dispositions. Considering that the two dimensions of sensation seeking carry different associations with risk behavior and well-being, a better understanding of what biological or environmental factors lead individuals to hold high degrees of novelty versus intensity sensation seeking might have valuable implications for scholars and practitioners who work with emerging adults.

Importantly, given the internal consistency issues with the AISS, future research should examine whether sensation seeking scores using measures other than the AISS are also associated with wellbeing.

One intriguing finding was the positive relationship between sensation seeking and depressive symptoms. Although it seems counter-intuitive that high sensation seeking could predict both depressive symptoms and well-being, our results are consistent with prior findings suggesting positive associations between depression and openness to experience in college samples (Chioqueta & Stiles, 2005; Wolfenstein & Trull, 1997). One possible explanation is that individuals high in openness may tend to experience both

TABLE 5.  
Regression Model for Eudaimonic Well-Being

Step/Variable		$\Delta R^2$	Unstandardized Coefficient (Beta)	Standardized Coefficient <sup>a</sup>	Sig.	
(Using Full AISS Scores)						
Model 1	Step 1: Control Variables	.13			< .001	
	(Constant)		77.900 (1.91)		< .001	
	Age		0.420 (.076)	.08	< .001	
	Gender		2.766 (.422)	.12	< .001	
	CESD – Depression		-0.278 (.015)	-.33	< .001	
	Step 2: Sensation Seeking	.03				
	Sensation Seeking (Overall AISS Score)		0.212 (.019)	.18	< .001	
(Using Reduced AISS Sub-Scale Scores)						
Model 2	Step 1: Control Variables	.13			< .001	
	(Constant)		77.900 (1.91)		< .001	
	Age		0.420 (.076)	.08	< .001	
	Gender		2.766 (.422)	.12	< .001	
	CESD – Depression		-0.278 (.015)	-.33	< .001	
	Step 2: Novelty Sensation Seeking	.06				
		Novelty Sensation Seeking (4 items)		0.722 (.055)	.24	< .001
	Step 3: Intensity Sensation Seeking	.02				
	Intensity Sensation Seeking (4 items)		-0.422 (.050)	-.14	< .001	

<sup>a</sup> Standard errors are adjusted for the nesting of participants within schools.

positive and negative emotions more intensely compared to individuals who are less open (Chioqueta & Stiles, 2005; McCrae & Costa, 1991). Wolfenstein and Trull (1997) noted uncertainty regarding the direction of the depression–openness association, given that openness could lead to depression, or vice versa (p. 627). Our findings suggest that the relationship between sensation seeking and depressive symptoms might be best explained by the intensity dimension of sensation seeking, but the study design does not permit us to go further in explaining the causal direction and reciprocal nature of that relationship. It is important for future research to do so using a longitudinal design.

### Limitations and Future Directions

These results should be interpreted in light of some important limitations. First, the cross-sectional design that we used is not able to directly address issues of directionality or developmental change over time. Nonetheless, this study represents a first attempt at establishing a relationship between sensation seeking and well-being as well as identifying the types of outcomes with which novelty and intensity sensation seeking are most closely related. Second, although we were able to obtain a diverse sample in terms of recruitment sites and ethnic composition, we chose to limit our sample to a higher education cohort. Although emerging adults in college and those who are not are similar in many ways, caution should be used before generalizing from college-based samples to the larger population (Tanner, 2006). Further, given that opportunities for exploration during the transition to adulthood are influenced by historical, cultural, and economic factors (Arnett, 2000; Côté & Bynner, 2008), our findings regarding sensation seeking and well-being might not generalize beyond US college students. Additionally, novelty and intensity

were measured with a more homogeneous set of items than used in the original AISS scale, increasing reliability but also limiting direct comparison with other studies that used the original measure.

Finally, we acknowledge that the effect sizes that we found attributable to sensation seeking were modest. Nonetheless, the importance of the findings lie not so much in the degree to which they explain risk behavior and well-being as the demonstration that sensation seeking is not an unequivocal, maladaptive risk factor; rather, sensation seeking appears to be a multi-faceted construct that holds certain associations with well-being, at least for college students. Specifically, we found a disposition toward novelty sensation seeking to be associated with high eudaimonic well-being, in terms of reaching towards one's best and full potential, and also with a broader multidimensional expression of psychological well-being. We propose that some facets of sensation seeking are compatible with the developmental tasks of the college years.

Experimentation undoubtedly plays an important role in the relatively high degree of reckless and health-compromising behaviors found among college students; however, the potentially adaptive functions and mechanisms of exploration and “venturesomeness” (Chickering, 1967) appear to be understudied in the college student development literature. Research on sensation seeking behaviors during the college years might be extended with regard to their potentially adaptive role in navigating salient developmental tasks and personal growth. Such an approach would be consistent with a growing interest in considering young peoples' resilience and strengths (Lerner, Almerigi, Theokas, & Lerner, 2005).

Certainly, the idea of an adaptive side to sensation seeking is not new. Zuckerman and Kuhlman (2000) suggest that from an evolutionary perspective a sensation

seeking disposition characterized by both a willingness to approach novel stimuli and an ability to cope in intense situations might have been adapted for survival at some point. Strengths of high sensation seekers may include an ability to stay on task in the face of distraction and a propensity for innovation and creativity (Zuckerman, 1994). Arnett (1994a, p. 294) points out that sensation seeking has the potential to be an asset, if such energies are manifested in positive ways such as leadership, divergent thinking, or high achievement in certain occupations. Still, literature on sensation seeking in adolescence and emerging adulthood has tended to

approach sensation seeking as a risk factor. Our results suggest that it would be worthwhile to expand the treatment of sensation seeking to investigate a broader range of outcomes and within the scope of developmental tasks that accompany the transition to adulthood. Doing so might eventually lead to a better understanding of how sensation seeking might be channeled towards healthy rather than health-compromising outcomes.

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