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<u>Happiness in Adolescents: Does Culture Matter?</u>

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ABSTRACT

My project shows that factors that influence happiness in adolescents depend on culture. I gave out a questionnaire to teenagers in three locations: El Portillo, Nicaragua; Nyack, New York; and Ivujivik, Quebec. I did a statistical analysis on my data and found that for all cultures feelings of happiness require both independence, such as high self-esteem, and also interdependence, such as positive social relations. In cultures that emphasize independence, like Nyack, NY, feelings about independence and autonomy are dominant and have a positive relationship with happiness. In cultures that emphasize interdependence, like Ivujivik, Quebec, feelings about interdependence, such as positive community and social relations, are dominant.

INTRODUCTION

How does one measure a sense of life satisfaction, or happiness? Life satisfaction for an adolescent male in a suburban US village might come from leading a sports team in goals scored. For a male of the same age living in a very different community, such as a First Nation community in Québec, Canada, life satisfaction might come from helping with a hunt that brings home game for the community to eat.

A sense of well-being is important to an individual because it is associated with productivity, happiness, and life satisfaction, as well as healthy relationships between family and friends (Diener and Seligman, 2002). What leads to a feeling of happiness and life satisfaction in the U.S. may not be the same for the rest of the world's peoples. In our ever-shrinking global society a better understanding of cultural perceptions of well-being are important to global development efforts, international relations, environmental politics, and other social interactions.

Culture consists of explicit and implicit patterns of historically derived and selected ideas and how these ideas are reflected in institutions, interactions, and individuals (Markus and Conner, 2013.) The different social structures are not unexpected according to cultural psychology research. Markus has identified two important world views (2006). Independent cultures, like American culture, consider the mental references of every individual as beginning with themselves. On the other hand, there are cultures, such as Japanese, that are interdependent which means the thinking is always about their relationships with others. Markus and Conner explain that cultures differ is in the shared ideas about how people are related to other people, and how these ideas are reflected in interactions among people and in institutions like families, schools, and workplaces. In some cultures people are considered to be autonomous and separate

from one another. In these cultures, the focus is on the individual and on the individual's preferences, attributes, goals, attitudes, and values. This is a view of the person as *independent*. In other cultures, people are considered to be fundamentally related to one another in a network of relationships. Here the focus is on relationships and maintaining these relationships. This is a view of the person as *interdependent.*

Happiness is often thought of as the best feeling one could obtain. This is not always the case. Seligman (2000) stated that people are truly in a state of happiness and bliss when they have a sense of purpose or when they feel a sense of fulfillment. Diener and Seligman (2002) sought to identify behaviors and personality traits that correlate with happiness, and to understand the moods and emotions of the happiest people. These researchers asked a number of American college students to complete questionnaires on various topics, such as satisfaction with life. Their conclusions suggest American students are happy when they have rich and satisfying social relationships and spend little time alone. In addition, Biswas-Diener (2005) found that most people are happy, but when happiness was measured in rural communities, it was most positive in different domains. The Kenyan Maasai, the United States Amish, and the Greenlandic Inughuit were all happy for slightly different reasons. The Maasai for example reported frequent feelings of pride; the Amish were more satisfied materially than the Maasai and the Inughuit.

Most research on well-being has focused on adults in Europe and America. Previous studies have shown that US Americans have relatively independent selves (Markus and Conner 2013, Kitayama 2003). Most literature on this subject focuses on happiness and whether a particular social or psychological measure determines our well-being or not. Some studies

compare happiness across cultures, but look at single factors relating to happiness. Most describe happiness among adults, but ignore happiness among teens and very old adults.

STATEMENT OF PURPOSE

This current study expands on research into well-being by asking if there are any differences between independent and interdependent cultures when comparing the effect of social relations on happiness as experienced by adolescents. Three groups of adolescents from different cultures are compared – American, Nicaraguan, and Inuit — and the correlates of well-being are investigated. Previous research with American Indians and with other Central American subjects suggests that they share some cultural ideas and practices (Fryberg and Markus 2003). Therefore, the Inuit and Nicaraguan populations in the current study were hypothesized to have relatively interdependent selves. The current study asks if happiness and well-being are explained primarily by individual traits in independent cultures and primarily by positive social relations with others in interdependent cultures. Specifically two hypotheses were tested:

1. For all cultures, happiness requires a combination of independence (feelings of high self-esteem), and interdependence (feelings about positive social relations).

2. For a culture, that emphasizes independence, like an American culture, happiness requires feelings about self-esteem to dominate, while for a society that emphasize interdependence, such as, Ivujivik, Quebec, happiness requires feelings about community and positive social relations to dominate.

METHODS AND MATERIALS

Participants.

Demographics are shown in Table 1. Three groups of adolescents (N = 104) participated in the study. Twenty-two were adolescents from the small rural villages neighboring El Portillo (population 200), south of Managua, Nicaragua. The Inuit were 23 adolescents from Ivujivik (population 370), one of Québec's northern most villages on the Hudson Bay. The Americans were 59 high school students from a suburban northeastern US village (population 6,765). All students were between 13 and 19 years of age, 65 were female, 48 were male, and two did not report gender.

Table 1

Population Demographics and Questionnaire Dates

Location	Ages	N (male)	N (female)	N (unknown)	N (total)	Date(s)	Language
Ivujivik, Quebec, Canada	12-19	11	12	0	23	5/15/2012	English, French
Nyack, New York, USA	15-18	26	31	2	59	8/14/12, 5/24/13, 6/3/13	English
El Portillo, Masaya, Nicaragua	13-19	11	11	0	22	7/3/12, 8/2/13	Spanish
Total		48	54	2	104		

The questionnaires and consent forms were distributed and collected by the teacher during the school day. The consent form permitted students' parents to opt out of the survey process. The questionnaires were distributed on two different dates in Nicaragua, and three different dates in the US. Students completed the survey in their local language: English, French, or Spanish.

Materials and Procedure.

The questionnaire consisted of 58 questions taken from Survey of Mid-life Development (Ryff, 2008). Table 2 shows the categories of questions asked. Half of the questions were focused on the participant's sense of well-being while the other half asked about independent and interdependent cultural orientations. The well-being questions were focused on life satisfaction. The independent and interdependent questions were grouped into community, filial, positive social relations, self-efficacy, and self-esteem categories.

Table 2

Categories of Well-being, Independence and Interdependence

Measure of Well-Being
Life Satisfaction – Happiness; the state of being satisfied with one's life
Measures of Independence
Self-Esteem – A realistic respect for or favorable impression of oneself; self-respect
Self–Efficacy – Capacity for producing a desired result or outcome for yourself
Measures of Interdependence
Filial – Relationships between family and close friends
Community – A social group of any size whose members reside in a specific locality, share government, and often have a common cultural and historical heritage
Positive Social Relations (PWB) – A good or satisfactory condition of existence; a state characterized by health, happiness, and prosperity; welfare.

Questions were laid out in random order. Questions from each category could appear on each of the ten pages. Instructions were given on the top of the first page.

Figure 1

Sample of Questionnaire -- Instructions and First Three Questions

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Today we'd like to ask you some questions about your life. We are interested in how people are thinking about themselves these days. Please read each question and circle the number that is closest to how you feel now. We are interested in your first impressions. There are no incorrect or correct answers. Thank you for your time.	1 Strongly disagree	2 Some-what disagree	3 Neither agree or disagree	4 Some-what agree	5 Strongly agree

1. When I need extra help, I can get it.	1	2	3	4	5
2. What happens to me in the future mostly depends on me.	1	2	3	4	5
3. People would describe me as a giving person, willing to share my time with others.	1	2	3	4	5

Back-translation was used to ensure that the survey questionnaire and consent form had the same meaning in all three cultures studied. Back-translating involved the following steps: (1) the original text of the survey in English was translated into the desired language by a fluent speaker of both languages; (2) the new language version was translated back to the original language by a different fluent speaker of both languages. The original English questions and the back translated version of the English questions were compared to make sure they meant the same. Where there were differences, questions were re-worded in order to get the two versions as similar as possible. If the translation could not be worked out, the question was dropped. The opt-out consent form was also back-translated for accuracy.

The R statistical package was used to run all tabulations and data modeling. The "describe" procedure provided means and standard deviations. The "cor" procedure created the

correlation matrix. And the "lm" procedure was used to create the overall and local linear

models predicting Life Satisfaction from the measures of independence and interdependence

collected in the questionnaires. In order to pick the predictors that best fit the data, a step-wise

regression procedure, "stepAIC" with "direction=both", was used.

RESULTS

Table 3 shows the average response values for 58 questions for each location, and

identifies the categories each question is associated with. Question 30 was not part of the

Canadian version because it was introduced after the questionnaire was given to the Inuit

students. Average response to the survey was similar across all three locations, suggesting that

the meaning of the 58 survey questions was not lost in translation. Positive Social Relations,

Self-Efficacy, and Self-Esteem categories were divided into sub-categories of positively coded

and reverse coded questions. Responses to reverse coded questions were subtracted from six (6)

for all analyses.

Table 3

Detailed Survey Results (*N*=104)

Average of Positive Response		Culture		
Category	Question	Americans	Innuit	Nicaraguans
⊟ **Affect**	45. Cheerful	3.77	3.65	4.32
	46. Satisfied	3.52	3.52	4.09
	47. Enthusiastic	3.54	3.43	4.00
	48. Confident	3.64	3.43	4.52
	49. Full of life	3.71	3.24	4.52
	50. Close to others	3.68	3.33	2.78
⊟ **Affect - Reverse**	39. Hopeless	3.99	3.05	3.61
	40. Afraid	3.94	3.43	3.86
	41. Irritable	3.49	2.75	4.35
	42. Lonely	3.87	3.19	4.27
	43. Angry	3.65	3.30	3.83
	44. Frustrated	3.32	2.90	4.32
⊟ **Community**	04. I want to bring respect and honor to my family	4.28	4.09	4.61
	05. I feel my family is respected in the community	4.16	3.48	4.30
	06. I feel I am respected by the people in my community	4.01	3.64	4.04
	30. What happens to me in the future depends mostly on my family and friends.	2.43	5.00	1.83
⊟ **Filial**	01. When I need extra help, I can get it.	4.22	3.48	4.24
	08. My family treats me fairly.	4.26	3.48	4.30
	14. My friends accept me as I am.	4.23	3.91	4.73
	21. My friends enjoy being together.	4.35	3.74	3.87
	23. My family is interested in me as a person.	4.10	3.43	4.41
	36. Most of my friends are kind and helpful.	3.94	3.91	3.91
⊟ **Life Satisfaction**	20. If I could live my life over, I would change almost nothing.	2.91	2.43	3.83
	24. The conditions of my life are excellent.	3.93	3.26	3.77
	26. I am satisfied with my life.	3.78	3.43	4.59
	31. In most ways my life is close to my ideal.	3.29	3.39	3.00
	34. So far I have gotten the important things I want in life.	3.42	3.83	4.00
⊟ **Positive Social Relations**	03. People would describe me as a giving person, willing to share my time with others.	3.91	3.35	4.26
	15. I know that I can trust my friends, and they know they can trust me.	4.12	4.13	4.23
	22. Most people see me as loving and affectionate.	3.59	3.57	4.04
	33. I enjoy personal and mutual conversations with family members and friends.	4.13	3.87	4.43
⊟ **Positive Social Relations - Reverse**	12. I have not experienced many warm and trusting relationships with others.	3.61	3.30	3.04
	32. I often feel lonely because I have few close friends with whom to share my concerns.	3.52	2.09	3.26
	38. Maintaining close relationships has been difficult and frustrating for me.	3.59	2.50	3.74
⊟ **Psychosomatic Symptoms - Reverse**	51. Headache	3.96	3.90	3.91
	52. Stomach ache	4.26	4.43	4.61
	53. Back ache	3.96	4.24	4.04
	54. Feeling low	4.03	2.90	4.68
	55. Irritability or bad temper	3.63	3.48	4.17
	56. Feeling nervous	3.48	3.52	3.78
	57. Difficulties in getting to sleep	3.53	3.38	3.70
	58. Feeling dizzy	4.43	3.86	4.59
⊟ **Self-Efficacy**	02. What happens to me in the future mostly depends on me.	4.43	3.59	4.48
	11. Whether or not I am able to get what I want is in my own hands.	3.74	4.00	4.91
	17. I can do just about anything I really set my mind to.	4.20	3.57	4.82
	35. When I really want to do something, I usually find a way to succeed at it.	3.93	4.09	4.52
⊟ **Self-Efficacy - Reverse**	10. There is little I can do to change the important things in my life.	3.68	2.48	2.70
	13. What happens in my life is often beyond my control.	3.61	2.91	3.55
	18. There is really no way I can solve the problems I have.	3.93	2.83	3.77
	19. I sometimes feel I am being pushed around in my life.	3.36	2.61	4.00
	25. Other people determine most of what I can and cannot do.	3.91	3.09	3.61
⊟ **Self-Esteem**	09. I am able to do things as well as most people.	4.16	3.87	4.70
	28. I take a positive attitude toward myself.	3.55	3.04	4.48
	29. On the whole, I am satisfied with myself.	3.84	3.41	4.48
⊟ **Self-Esteem - Reverse**	07. At times I feel that I am no good at all.	3.20	2.96	4.05
	16. I certainly feel useless at times.	3.35	2.70	4.18
	27. I wish I could have more respect for myself.	3.00	1.91	1.87
	37. I am no better and no worse than others.	2.64	2.43	1.38
Grand Total		3.75	3.34	3.96

Results were then summarized by category. Table 4 shows the average positive response for each location for the categories of well-being, independence, and interdependence. (Shortened category codes are provided in Table 4 for cross-referencing.) All questions about Affect and Psychosomatic Symptoms were eliminated as measures of well-being since they correlated highly with Life Satisfaction.

Table 4								
Average of Positive Response by Location								

		Nicaragua (N = 22)		Innuit (N = 23)		American (N =59)	
Category Name	Category	Mean	St Dev	Mean	St Dev	Mean	St Dev
Community	Community	3.70	0.62	3.74	1.00	3.71	0.60
Filial	Filial	4.19	0.79	3.66	0.84	4.18	0.55
Life Satisfaction	LS	3.80	0.78	3.27	0.60	3.47	0.85
Positive Social Relations	PWB	4.20	0.90	3.73	0.85	3.90	0.64
Positive Social Relations-Rev	PWBRev	3.34	1.00	2.65	0.69	3.58	0.94
Self-Efficacy	SEff	4.65	0.48	3.80	0.65	4.10	0.53
Self-Efficacy-Rev Coded	SEffRev	3.53	0.99	2.78	0.81	3.67	0.66
Self-Esteem	SEst	4.57	0.60	3.44	0.79	3.85	0.72
Self-Esteem-Rev Coded	SEstRev	2.86	0.56	2.50	0.82	3.06	0.85

Correlations between each category used in linear modeling are provided in Table 5. This table shows how closely each category of well-being, independence, and interdependence relates to each other across all locations when considered together. Independent categories Self-Efficacy and Self-Esteem correlate highly ($r = 0.42$). Interdependent categories Community and Filial correlate highly ($r = 0.42$), and each of these correlate highly with Positive Social Relations ($r = 0.36$ and $r = 0.60$ for Community and Filial, respectively).

Table 5										
Correlation Matrix ($N = 104$)										

Category Name	Category	Community	Filial	LS	PWB	PWBRev	SEff	SEffRev	SEst	SEstRev
Community	Community	1.00	0.42	0.28	0.36	0.07	0.04	0.05	0.17	0.06
Filial	Filial	0.42	1.00	0.47	0.69	0.33	0.15	0.39	0.47	0.32
Life Satisfaction	LS	0.28	0.47	1.00	0.37	0.35	0.34	0.31	0.63	0.32
Positive Social Relations	PWB	0.36	0.69	0.37	1.00	0.21	0.20	0.28	0.43	0.09
Positive Social Relations-Rev	PWBRev	0.07	0.33	0.35	0.21	1.00	0.16	0.46	0.31	0.49
Self-Efficacy	SEff	0.04	0.15	0.34	0.20	0.16	1.00	0.26	0.42	0.24
Self-Efficacy-Rev Coded	SEffRev	0.05	0.39	0.31	0.28	0.46	0.26	1.00	0.22	0.50
Self-Esteem	SEst	0.17	0.47	0.63	0.43	0.31	0.42	0.22	1.00	0.26
Self-Esteem-Rev Coded	SEstRev	0.06	0.32	0.32	0.09	0.49	0.24	0.50	0.26	1.00

Table 6 shows the linear regression model that establishes the relationship between Life Satisfaction, or happiness, and measures of independence and interdependence across all locations when considered together. The overall linear regression (Table 6) indicated that Life Satisfaction among teens depended on feelings of Community, Positive Social Relations Reverse Coded, and Self-Esteem. A combination of independence (Self-Esteem) and interdependence (Community and Positive Social Relations Reverse Coded) best explained Life Satisfaction for all cultures together ($R^2 = .43$, p < .001).

Table 6

Linear Regression Analysis Predicting Life Satisfaction with Community, Positive Social Relations Reverse Coded, and Self-Esteem across All Locations ($N=104$)

Independent Variables	B-value	R^2
Community	0.17 .	0.43 ***
Positive Social Relations Reverse Coded	0.15 *	
Self-Esteem	0.52 ***	

. p < .1. * p < .05. ** p < .01. *** p < .001.

Additionally, regression analyses established the relationship between Life Satisfaction, or happiness, and measures of interdependence and independence within each location.   For Nicaraguan adolescents, no significant relationship between Life Satisfaction, or happiness, and measures of independence or interdependence could be determined. The best fitting linear regression for Life Satisfaction among Nicaraguan teens was not statistically significant ($R^2 =$ .21, not significant).

The Inuit linear regression model (Table 7) indicated that Life Satisfaction among Inuit teens depended on feelings of Community, Positive Social Relations Reverse Coded, and Self-Esteem, with most of the weighting on Community and Positive Social Relations Reverse Coded. A combination of independence (Self-Esteem) and interdependence (Community and Positive Social Relations Reverse Coded) best explained Life Satisfaction, or happiness for Inuit teens, an interdependent culture, with feelings about interdependence most strongly required for happiness ($R^2 = .55$, p < .001). For Inuit teens, in predicting happiness, measures of interdependence outweigh measures of independence, as illustrated by the comparatively low B-value for Self-Esteem.

Table 7

Linear Regression Analysis Predicting Life Satisfaction with Community, Positive Social

Relations Reverse Coded, and Self-Esteem for Inuit Teens ($N = 23$)

Independent Variables	B-value	R^2
Community	0.24 *	0.55 ***
Positive Social Relations Reverse Coded	0.29 .	
Self-Esteem	0.36 *	

*. p < .1. * p < .05. ** p < .01. *** p < .001.*

The American linear regression model (Table 8) indicated that Life Satisfaction among

American teens depended on feelings of Community, Positive Social Relations Reverse Coded,

and Self-Esteem, with most of the weighting on Self-Esteem. A combination of independence

(Self-Esteem) and interdependence (Community and Positive Social Relations Reverse Coded)

best explained Life Satisfaction, or happiness for American teens, an independent culture, with

feelings about independence most strongly required for happiness. ($R^2 = .57$, p < .001). For

American teens, in predicting happiness, measures of independence outweigh measures of

interdependence, as illustrated by the comparatively high B-value for Self-Esteem.

Table 8

Linear Regression Analysis Predicting Life Satisfaction with Community, Positive Social

Relations Reverse Coded, and Self-Esteem for American Teens ($N = 59$)

Independent Variables	B-Value	R^2
Community	0.22 .	0.57 ***
Positive Social Relations Reverse Coded	0.18 .	
Self-Esteem	0.70 ***	

. $p < .1$. * $p < .05$. ** $p < .01$. *** $p < .001$.

DISCUSSION

This series of analyses confirmed the hypothesis that in all cultures studied, happiness

depends on a combination of independent and interdependent factors consistent with our first

hypothesis. Consistent with our second hypothesis the results show that in cultures that

emphasize independence, feelings of independence are particularly important to happiness. In

cultures that emphasize interdependence, feelings of interdependence are particularly important

for happiness.

How much does the happiness, as measured by life satisfaction among teens, depend on

feelings about their independence and interdependence, and how much does the culture they

come from influence this? To answer these questions, a series of linear regression models were

created using self-reported data, including responses to questions about life satisfaction and

feelings about independent and interdependent factors, collected from teens in El Portillo,

Nicaragua, Ivujivik, Quebec, and a suburban northeastern US village. To answer the first question, a linear model determined how much happiness depended on independent and interdependent factors. If feelings about these variables are positive, would life satisfaction also be positive? To answer the second question, a linear model was created to determine how much life satisfaction depends on independence and interdependence in the three cultures studied, comparing El Portillo, Ivujivik, and a suburban American village.

The overall linear regression model (Table 6) indicated that Life Satisfaction among teens depended on feelings of Community, Positive Social Relations Reverse Coded, and Self-Esteem. This supports Hypothesis 1 since a combination of independence (Self-Esteem) and interdependence (Community and Positive Social Relations Reverse Coded) best explains Life Satisfaction, or happiness, for all cultures together. The Inuit linear regression model (Table 7) indicated that Life Satisfaction among Inuit teens depended on feelings of Community, Positive Social Relations Reverse Coded, and Self-Esteem, with most of the weighting on Community and Positive Social Relations Reverse Coded. This supports Hypothesis 2 since a combination of independence (Self-Esteem) and interdependence (Community and Positive Social Relations Reverse Coded) best explains Life Satisfaction for Inuit teens, an interdependent culture, with feelings about interdependence strongly required for happiness. The American linear regression (Table 8) indicated that Life Satisfaction among American teens depended on feelings of Community, Positive Social Relations Reverse Coded, and Self-Esteem, with most of the weighting on Self-Esteem. This supports Hypothesis 2 since a combination of independence (Self-Esteem) and interdependence (Community and Positive Social Relations Reverse Coded) best explains Life Satisfaction, or happiness for American teens, an independent culture, with feelings about independence strongly required for happiness.

Factors associated with feelings of well-being in adolescents from three different cultures were examined in the current study. It was hypothesized and shown that combinations of both independent and interdependent factors are needed for them to be happy.

People from different cultures often use different concepts to make explanations of the world, of social behavior, and of personal behavior (Markus 2006). The current study hypothesized that happiness would be expressed by a different combination of independent and interdependent factors cross-culturally. Markus showed how cultural differences can explain behavior. For example, in 2006, she conducted two studies on Japanese and on American populations, seeking explanations for the gold medal performances by athletes from the two countries. By classifying and counting adjectives used in media reporting, she showed that Americans like to think that athletes possess a bundle of traits, and these personal traits, such as physicality, motivation, independence and work ethic, explained a gold medal performance at the Olympics. The Japanese like to think that an individual's past behavior and relations with other people are most important in explaining the gold medal performance. In the current, study it was hypothesized that Nicaraguans, Inuits, and Americans all have their own bundle of traits required for their happiness. The current study found that Inuits require more interdependence to be happy, whereas, Americans require more independence to be happy. The results for Nicaraguans were inconclusive.

Nicaraguan, Inuit, and American social structures are different from one another. People have different family and social roles depending on the cultural context. For example, the males in Nicaragua are the ones who work and take much pride in supporting their often very large families. But both Nicaragua and Ivujivik, Quebec are very poor communities compared to the American village in the current study. Nicaragua is the second poorest country in the western

hemisphere. Prices are extremely high for the Inuit of Ivujivik because it takes so much effort to

get goods and materials up to the northern-most part of the Canadian province of Quebec. The

Inuit's diet is mainly the fish they catch and the meat they hunt, but given its scarcity, they share

the food communally. The purpose of this study was to show that views of adolescents on the

factors associated with well-being might be different between these cultures.

Research on happiness has focused on correlates with happiness within a specific

population. Diener and Seligman (2002) found that satisfying social relations helped explain

happiness among American college students. Biswas-Diener (2005) found that Kenyan Maasai,

US Amish, and the Greenlandic Inughuit all experienced happiness for different reasons. This is

consistent with the hypothesis and results of the current study, which shows that happiness is

related to different factors in independent and interdependent cultures.

Measures of independence and interdependence could not be used to predict happiness

for El Portillo, Nicaragua. Future studies should focus on Nicaraguan teens in order to better

understand their requirements for happiness. The findings of the current study were consistent

with other work that contrasts differences between independent and interdependent cultures

(Markus 2006, Kitayama 2003, and Markus and Conner 2013). The current study was unique in

focusing on happiness among teens contrasted between independent and interdependent cultures,

as represented by three different rural communities in three different cultures, Nicaraguan, Inuit,

and suburban American.

CONCLUSION

The fields of social and cultural psychology help us define what beliefs and feelings are essential to determining human happiness. Research shows that feelings and beliefs depend on the culture that a particular individual and population come from. Without a global understanding of happiness, the challenges of a world of limited resources and a growing population could devolve into chaos. In my research, I found that happiness can be predicted by social and psychological factors and that the way these factors blend together depends on culture.

Literature on this subject describes cultures as emphasizing independence or interdependence. In independent cultures, people focus more of their feelings on themselves. In interdependent cultures, people focus more of their feelings on themselves in relationship with their friends and family. The current study showed that in interdependent cultures, such as, Ivujivik, Quebec, happiness can be predicted by positive social relations and positive feelings about a community, and, to a lesser extent, feelings about one's self-esteem. And, while positive feelings about others and one's community are also important in independent cultures, the current study showed that the feelings about one's self-esteem in suburban northeastern American culture were the strongest factors required for happiness.

The importance of feelings about the self and one's relationships with others differs across cultures. These feelings also depend on the phase of life one is in. Although happiness in adolescents does have its similarities with adult happiness there may be some key differences, such as importance of filial relations and self-esteem. These topics would be useful to research in the future. No research was found that systematically describe the blending of major factors associated with happiness cross-culturally, and across life stages. In the future, scientifically

designed psychological measures, such as those used in the current study will be used to gauge human happiness and well-being. And measures of happiness will become globally important measures of human health for all countries to share, along with their global measures of the health of the world's environment, such as carbon dioxide levels. By understanding how cultures and societies determine the happiness of their own populations, better public policy and laws about the environment, the economy, education, social services, and other areas of social concern will be more likely to succeed.

A mix of feelings about social relations and about accomplishments and self-esteem are predictors of happiness. In the future, the dynamics of the world environment will increasingly depend on scientists understanding how different cultures see themselves and how they see themselves fitting into the world around them.

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