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Happiness, Life Satisfaction, and Depression in College Students:

Relations with Student Behaviors and Attitudes

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ABSTRACT

The primary purpose of this study was to investigate how happiness and life satisfaction contribute to students' behaviors and attitudes. One hundred and four students from introductory and educational psychology classes in a southern regional state university responded to a questionnaire consisting of measures of psychological well-being (i.e., happiness and life satisfaction), depression, and student behaviors and attitudes. The results of correlational analyses indicate that depression and both measures of psychological well-being are strongly related to intrinsic motivation. In addition, both life satisfaction and depression are related to self-discipline and respect for professors. Hierarchical regression analyses conducted for each dependent variable demonstrate that positive constructs of happiness and life satisfaction predict student behaviors and attitudes over and above depression. Both scientifically and educationally this research fits well with the current emphasis in positive psychology on improving the positive elements on schools proactively rather than retroactively trying to "fix" problems that emerge.

INTRODUCTION

How important is it for our students to be happy? Does their subjective well-being have an impact on student success or on their relationships with professors and peers? The tentative and indirect answer is offered by positive psychology, a new movement that studies optimal human functioning (Seligman & Csikszentmihalyi, 2000), and which demonstrates that happiness promotes success across various arenas of human functioning (Myers, 1992). For example, happy people are more active, efficient, and productive at their jobs and earn better income (Argyle, 2001). They are optimistic and more positive toward other people (Seligman, 2002). They enjoy better physical and mental health, and cope with stress better than unhappy people (Vaillant, 2000). Based on Fredrickson's build-and-broaden theory (2002) and research by Isen (2003) positive affect correlates with processes that contribute to college success—cognition and motivation. For example, happy individuals are more flexible and efficient in problem solving, and they are more committed to their goals and pursue success rather than focusing on avoiding failure (Lyubomirsky, 2001). There has been only very limited research about the specific benefits of happiness in relation to student behaviors and attitudes (Borello, 2005; Frisch et al., 2005), but the evidence from positive psychology suggests that we clearly would expect a tie between happiness and student behaviors and attitudes.

Research from positive psychology demonstrates that it is more important to focus on developing positive characteristics rather than on avoiding or diminishing negative ones, such as depression. However, at present we know much more about negative effects of depression on student success than about the benefits of happiness and life satisfaction. For example, depression is negatively related to student success, and depressed adolescents have lower grade point averages and spend less time doing homework (Field, 2001). Although negative and positive affect are related, they are nevertheless distinct dimensions (Keyes, 2003), and the absence of mental disorders does not guarantee the presence of mental health. In other words, positive and negative states are asymmetrical; that is, they are not inversely related in form and effect (Aspinwall & Staudinger, 2003). Thus, if we measure only levels of depression we are missing important data which can be derived from a focus on psychological well-being.

Some educators (Noddings, 2003) suggest that happiness may be a worthwhile aim of education, and that promoting prevention and psychological health are more important for student success than treating mental health problems and risky behaviors after problems have emerged (Flay, 2002). Thus, one focus of this study is to put positive and negative characteristics into a mutual context, by investigating the differential importance of subjective well-being and depression on student behaviors and attitudes. We expected that psychological well-being would account for variation over and above negative predictors of student success (here reflected by depression).

Psychological well-being is a combination of happiness and satisfaction with life. Happiness describes mostly an emotional state whereas life satisfaction tends to address a more global cognitive evaluation of one's life (Compton, 2005). Which is the more critical, affective happiness or cognitive life satisfaction? This is an empirical question. For example, some researchers have argued that cognitive rather than affective elements may be key to one's psychological well-being (Ryff, 1989). Others have argued the opposite (Lyubomirsky & Tucker, 1998). In the present research, our secondary concern was to examine which element of well-being is most critical for academic contexts. Thus, we predicted that both affective (happiness) and cognitive (life satisfaction) constructs would be related to student attitudes and behaviors over and above depression, and without a specific expectation, we wanted to determine the relative importance of affective and cognitive well-being as explanatory predictors of student motivation and behavior.

We looked at three different elements of student attitudes and behaviors as dependent variables that relate to student success in college. First, in line with traditional research, we examined intrinsic motivation, which is reflected in a desire to study based on personal interest and satisfaction rather than for a grade. Second, to focus more on functional elements of students, we examined self-discipline behaviors (e.g., studying, getting to class on time). Third, we examined attitudes toward professors (e.g., thinking highly of their professional level). Our prediction was that happiness and life satisfaction would be related to each of those variables, but differentially so.

METHOD

Participants

We recruited 30 men and 74 women from Educational (N=53) and Introductory Psychology (N=51) classes at a regional state university in the southeast who responded to a questionnaire for extra credit. The average age of the students was 26 years (SD=8.1). The questionnaire consisted of the measures given below.

Measures

Life Satisfaction. Based on the literature on subjective well-being and life satisfaction (e.g., Peterson & Seligman, 2004; Ryff, 1989), we created 24 items asking each participant to rate their satisfaction with various aspects of their life (e.g., material well-being, family, having a purpose in life, etc.) on a Likert scale from 0 "not satisfied" to 4 "completely satisfied." These items formed a composite measure of life satisfaction with an alpha of .92.

Student Behaviors and Attitudes. This measure originally consisted of 15 items measuring basic classroom behaviors and attitudes. The scale was based on Iliina's Motivation for Learning Instrument published by Iliin (2000) and translated from Russian by the first and third authors. The students were asked how much they agreed or disagreed with the statements about their attitudes toward classes ("I am interested in studying") and about common behaviors, (e.g., "I often miss classes for no good reason"). The results of an exploratory factor analysis (with varimax rotation) yielded three clearly interpretable factors, and a fourth factor that included three variables with no clear conceptual ties. Thus, we used the first three factors to create composite variables which we named intrinsic motivation (6 items; e.g., "I study to become a professional and not just to pass an exam"), with factor loadings ranging from .43 to .74, with an eigenvalue of 4.56, accounting for 30% of the variation, self discipline (4 items; e.g., "I am not late for classes"), with factor loadings ranging from .65 to .74, an eigenvalue of 1.6, accounting for 11% of the variance, and respect for college professors (2 items; e.g., "I have a lot of respect for my college instructors"), with factor loadings of .81 and .82, an eigenvalue of 1.5, and accounting for 10% of the variance. (The total set of items is available from the first author.)

Depression. The Trait Depression Scale (Spielberger, Ritterband, Reheiser, & Brunner, 2003) consists of 10 depression-present (dysthymia) and depression-absent (euthymia) items. It produces a single trait depression score with alpha coefficients of .90 and higher. A focus on traits was used because we did not want to focus on transient states, but rather on individual tendencies that cross time.

Happiness. Lyubomirsky's Subjective Happiness Scale (1999) measures global or enduring happiness. The first item asks participants to evaluate their general level of happiness, whereas the second item asks them to compare themselves to peers. The other two items provide short descriptions of happy and unhappy

individuals and ask participants to which extent these characteristics describe them. In Lyubomisky's original study (1999) the items showed excellent internal consistency with alphas ranging between 0.79 and 0.94.

Procedure

Participants were brought together in groups. They filled out a questionnaire that consisted of the measures described above, demographic information, and two additional scales that were not a part of this study (i.e., definitions of happiness and an attributional style instrument).

RESULTS

We had three basic research questions, each of which is presented separately below. The first question was strictly correlational in nature: Are both affective (happiness) and cognitive (life satisfaction) constructs related to student attitudes and behaviors? The results are reflected in Table 1. Virtually all variables are related significantly to the other variables. All but 2 correlations were significant at the .05 level (*r*s > .17). These results indicate, first, that sufficient systematic variability exists for relations to emerge if they exist, and, second, that cognitive and affective well-being are related to student attitudes and behaviors. In fact, the variation in sizes of correlations indicates that different aspects of well-being correspond differentially with different aspects of student behaviors and attitudes. This idea is examined in more detail below.

Table 1
Intercorrelations between Measures of Psychological Well-being and Academic Behaviors and Attitudes

	Intrinsic Motivation	Self Discipline	Respect for Professors	Depression	Happiness
1.Intrinsic motivation	--				
2. Self discipline	.51*	--			
3.Respect for professors	.36*	.22*	--		
4.Depression	-.41*	-.17*	-.17*	--	
5. Happiness	.35*	.06	.15	-.68*	--
6. Life satisfaction	.44*	.18*	.31*	-.68*	.53*

*p<.05.

The second question addressed whether the positive constructs account for variation over and above negative predictors of student success (here reflected by depression). Hierarchical regressions were conducted for each dependent variable in which depression was added to the equation, and then happiness and life satisfaction were added subsequently as a set. The results show that happiness and life satisfaction add significantly to the variance explained by depression (R^2 = .16 and .03, respectively) for both intrinsic motivation (R^2 increase = 5.4%) and respect (R^2 increase = 6.5%), but not for self discipline (both R^2 <.04, *p*s >.05). Table 2 shows a summary of the regression analyses.

Table 2

Summary of Hierarchical Regression Analyses for Variables Predicting Academic Behaviors and Attitudes

Variable	B	SE B	ß	R^2
		Intrinsic motivation		
Step 1				.16*
Depression	-.34	.33	-.14	
Step 2				.05*
Happiness	.09	.12	.09	
Life Satisfaction	.56	.24	.29*	
		Self-discipline		
Step 1				.03
Depression	-.42	.40	-.17	
Step 2				.02
Happiness	-.13	.15	-.12	
Life Satisfaction	.28	.28	.13	
		Respect for Professors		
Step 1				.03
Depression	.14	.27	.08	
Step 2				.07*
Happiness	.02	.10	.02	
Life Satisfaction	.50	.19	.35*	

*p<.05

The third question focused on the relative importance of the cognitive (life satisfaction) and the affective (happiness) components of psychological well-being. In the regressions described above, the residual importance of life satisfaction and happiness can be examined by the relative beta weights for each. For both intrinsic motivation and respect for professors (excluding self discipline because there were no significant effects), life satisfaction emerged as significant (betas of .29 and .35, respectively, *p*s<.05), whereas happiness did not (with betas of .09 and .02, respectively). Life satisfaction significantly predicts intrinsic motivation and respect over and above happiness and depression.

DISCUSSION

The results indicate that psychological well-being is related to intrinsic motivation—happier individuals appear to seek learning goals; that is, they are more interested in gaining knowledge or self-improvement. However, such well-being does not seem to be related to outward classroom behaviors like following classroom rules and getting to class on time, even though such behaviors are related to intrinsic motivation. Psychological well-being is predictive of attitudes toward professors.

Scientifically, this study supports past research indicating the importance of mental health as a predictor of student behaviors. However, both scientifically and educationally this research fits well with the current emphasis on improving the positive elements of schools proactively rather than retroactively trying to "fix" problems that emerge. It is important that this "reverse" (positive, proactive) view become part of the educational and public understanding of student success. More than that, we need to distinguish the important components of well-being, such as the cognitive and affective components, as they relate to the educational enterprise.

Well-being is thought to play a critical role in society more generally (e.g., see Benson, 2006), so much so that both the Federal government and private organizations are putting a great deal of money into measuring and enhancing subjective well-being. Our study shows that we need to focus on such well-being in schools. Overall, this research supports Noddings' view (2003) that education and psychological well-being are inextricably intertwined. Further, we need to determine experimentally whether psychological well-being can be enhanced in schools and whether it will yield classroom achievement gains.

REFERENCES

Aspinwall, L. G., & Staudinger, U. M. (2003). A psychology of human strengths: Some central issues of an emerging field. In L. G. Aspinwall, & U. M. Staudinger (Eds.), *A psychology of human strengths: Fundamental questions and future directions for a positive psychology* (pp. 9-22). Washington, DC: American Psychological Association.

Argyle, M. (2001). *The psychology of happiness* (2nd ed.). New York, NY: Taylor & Francis Inc.

Benson, E. S. (2006, April). Social policy and subjective well-being [Electronic version]. *Observer, 19*, Article 10. Retrieved May 5, 2006, from http://www.psychologicalscience.org/observer/getArticle.cfm?id=1969

Borrello, A. (2005). Subjective well-being and student success among college students (Doctoral dissertation, Capella University, 2005). *Dissertation Abstracts International, 66*, 2810.

Compton, W. C. (2005). *An introduction to positive psychology*. Belmont, CA: Thomson Wadsworth.

Field, T. (2001). Adolescent depression and risk factors. *Adolescence, 36*, 491-498.

Flay, B. R. (2002). Positive youth development requires comprehensive health promotion programs. *American Journal of Health Behavior, 26*, 407-424.

Fredrickson, B. L. (2002). Positive emotions. In C. R. Snyder, & S. L. Lopez. (Eds.), *Handbook of positive psychology* (pp. 120-134). New York, NY: Oxford University Press.

Frisch, M. B., Clark, M. P., Rouse, S. V., Rudd, M. D., Paweleck, J. K., Greenstone, A., et al. (2005). Predictive and treatment validity of life satisfaction and the quality of life inventory. *Assessment, 12*, 66-78.

Iliin, P. (2000). *Motivatsia y motivy* [Motivation and motives]. Peterburg: Piter.

Isen, A. M. (2003). Positive affect as a source of human strength. In L. G. Aspinwall, & U. M. Staudinger (Eds.), *A psychology of human strengths: Fundamental questions and future directions for a positive psychology* (pp. 179-195). Washington, DC: American Psychological Association.

Keyes, C. L. M. (2003). Complete mental health: An agenda for the 21st century. In C. L. M. Keyes, & J. Haidt (Eds.), *Flourishing: Positive psychology and the life well-lived* (pp. 293-312). Washington, DC: American Psychological Association.

Lyubomirsky, S. (2001). Why are some people happier than others?: The role of cognitive and motivational processes in well-being. *American Psychologist, 56,* 239-249.

Lyubomirsky, S., & Lepper, H. S. (1999). A measure of subjective happiness: Preliminary reliability and construct validation. *Social Indicators Research, 46,* 137-155.

Lyubomirsky, S., & Tucker, K. L. (1998). Implications of individual differences in subjective happiness for perceiving, interpreting, and thinking about life events. *Motivation and Emotion, 22,* 155-186.

Myers, D. G. (1992). *The pursuit of happiness*. New York: Morrow.

Noddings, N. (2003). *Happiness and education*. New York, NY: Cambridge University Press.

Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues.* Washington, DC: American Psychological Association.

Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology, 57,* 1069-1081.

Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist, 55,* 5-14.

Seligman, M. E. P. (2002). *Authentic happiness.* New York: Free Press.

Spielberger, C. D., Ritterband, L. M., Reheiser, E. C., & Brunner, T. M. (2003). The nature and measurement of depression. *International Journal of Clinical and Health Psychology, 3,* 209-234.

Vaillant, G. E. (2000). Adaptive mental mechanisms: Their role in positive psychology. *American Psychologist, 55,* 89-98.

Appendix A: Life Satisfaction Items

Directions: How much are you satisfied with each of the following aspects of your life?
Response format is as follows: 0 = Not satisfied, 1 = A little satisfied, 2 = Mostly satisfied, 3 = Satisfied, 4 = Completely satisfied

1. Reaching goals
2. Independence in thinking and behavior
3. Ability to control my thoughts and feelings
4. Psychological health
5. Carefree life
6. Good relations with people
7. Inner peace
8. Material well-being
9. Love
10. Fulfillment of my dreams (wishes)
11. Fun (entertainment)
12. Good fortune (luck)
13. Ability to overcome difficulties
14. Self-respect and self-confidence
15. Interesting work/job
16. Good and loyal friends
17. Good education
18. Spirituality/religiosity
19. Absence of suffering
20. Having a purpose in life
21. Physical health
22. Personal growth
23. Family
24. Well-being of others

Appendix B: Student Behavior and Attitudes Items

Directions: Indicate your agreement with each of the following items on a scale from 1 = Absolutely disagree to 7 = Absolutely agree

1. I enjoy attending classes at the university
2. I am interested in studying
3. I am not late for classes
4. I have a lot of respect for my college instructors
5. I have established good relations with other students
6. I get ready for classes and exams on a regular basis
7. I have excellent memories about my school teachers (teachers I had before college)
8. I often miss classes without a good reason
9. I am often bored during classes
10. Overall, I think highly of the professional level of my university instructors
11. I study topics for my future profession beyond what is required
12. Most of the work that we do in college is meaningless
13. If possible, I cheat during the tests
14. I study to become a professional and not just to pass an exam
15. Long before I started at the university, I have been interested in this profession