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Valuing happiness in youth: Associations with depressive symptoms and well-being



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ABSTRACT

In Western society, happiness is often viewed as an important or even preeminent life goal. Yet, research with adults suggests that excessively valuing happiness (e.g., equating happiness to constant feelings of happiness, worrying about happiness even when happy) is linked to more depressive symptoms and lower subjective wellbeing. We extended this work by investigating valuing happiness in youth within three samples: 7-12 year-old children (Study 1; N=76); 14-18 year-old adolescents (Study 2; N=142); and 12-18 year-old adolescents (Study 3; N=152). Paralleling research with adults, valuing happiness was related to higher depressive symptoms in all three studies. These associations were moderated by perceived stress in Study 2 and age in Study 3. Valuing happiness showed inconsistent associations with well-being. This research suggests that youth who value happiness too much are more depressed. We highlight the need for prospective designs and implications for understanding depression risk.

Introduction

The desire to be happy is an overarching priority for humans. Particularly in Western cultures, there is an emphasis on individuals' happiness (e.g., Bastian, Kuppens, De Roover, & Diener, 2014; Kitayama & Markus, 2000). It is reasonable that people value and pursue happiness because even beyond its pleasant feelings, happier people experience benefits such as better health and greater success with relationships and work (e.g., Fredrickson, 1998; Lyubomirsky, King, & Diener, 2005; Pressman & Cohen, 2005; Ramsey & Gentzler, 2015). However, as recognized in recent discussions (Ford & Mauss, 2014; Fritz & Lyubomirsky, 2017; Gruber, Mauss, & Tamir, 2011; Mauss, Tamir, Anderson, & Savino, 2011), placing an excessive value on happiness could be linked with, and perhaps even contribute to, lower well-being. For instance, highly valuing happiness has been related to higher depressive symptoms and lower well-being in adults (e.g., Ford, Shallcross, Mauss, Floerke, & Gruber, 2014; Mauss et al., 2011) and experimental research indicates that these beliefs contribute to lower positive affect and greater negative affect (Mauss et al., 2011). To date, however, all of the published work on valuing happiness has been conducted with adults. Because depression and low well-being are also prevalent in children and adolescents (e.g., Hankin et al., 2015; Keyes, 2006), it is important to determine if valuing happiness to an excessive degree is similarly problematic in youth. Thus, this research examined the associations between valuing happiness and both depressive symptoms and well-being in three samples of youth spanning 7 to 18 years of age.

Valuing happiness in adults

Although almost everyone wants to be happy, some people may excessively value happiness, in that they regard happiness as extremely important and feel the need to be happy all or almost all of the time. A valuing happiness measure designed by Mauss et al. (2011) taps into these more maladaptive beliefs where individuals may equate a worthwhile life with constant feelings of happiness, worry about their happiness even when they feel happy, and think there is something wrong with them if they are not happy. As discussed by Ford and Mauss (2014) and Ford (in press), valuing one's happiness too much may be related to worse psychological health due to unrealistic expectations about happiness and resulting disappointment in positive situations (Mauss et al., 2011), frequent self-monitoring that takes people out of the moment and undermines their positive affect (Schooler, Ariely, & Loewenstein, 2003), and using less adaptive behaviors to try to feel

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happy (Gentzler, Palmer, & Ramsey, 2016; Gruber et al., 2011). In support of these ideas, valuing happiness has been linked to poorer emotional health in adults across several studies.

With adult samples, valuing happiness has been associated with higher depressive symptoms and a higher likelihood of being diagnosed with depression (Catalino, Algoe, & Fredrickson, 2014; Fergus & Bardeen, 2016; Ford et al., 2014; Mauss et al., 2011). Additionally, in a sample of adults who were diagnosed with bipolar disorder, higher levels of valuing happiness predicted more depressive (and manic) episodes across the subsequent year even when covarying initial symptom levels (Ford, Mauss, & Gruber, 2015). One study also showed that women diagnosed with depression or anxiety thought they should experience more positive affect than a comparison group of women without a history of disorders, even when controlling for current emotions (Thompson, Kircanski, & Gotlib, 2016). Thus, depression may co-occur with highly valuing happiness or bidirectional effects may be present where depression might increase how much people value their happiness. Additionally, moderated effects have been found, wherein the association is stronger for those reporting lower life stress (Mauss et al., 2011) or for those with lower expectations that they can improve their negative mood (Fergus & Bardeen, 2016). Overall, evidence suggests that high levels of valuing one's happiness is a correlate of, and potential risk factor for, depressive symptoms in adults.

Valuing happiness has also been associated with lower subjective well-being (e.g., lower positive emotions, subjective happiness, life satisfaction; Catalino et al., 2014; Mauss et al., 2011). Well-being can vary among those who are not necessarily suffering from psychopathology but who are not living as well as they could (e.g., Keyes, 2006). Thus, in addition to being linked to depressive symptoms, valuing happiness too much may interfere with people's ability to maximize their positive experiences and enjoy their lives (Gentzler et al., 2016). Associations between valuing happiness and well-being also have varied based on life stress (i.e., stronger relationships for less stressed compared to more stressed adults; Mauss et al., 2011). Additionally, higher levels of valuing happiness were found to relate to lower well-being in more individualistic, Western cultures but not Eastern cultures (Ford et al., 2015). In general, these findings support the premise that valuing happiness is associated with poorer subjective well-being particularly among adults in Western societies.

Emotional beliefs and values in youth

Because maladaptive beliefs about emotions also appear to influence youth's psychological and social well-being (e.g., Ford, Lam, John, & Mauss, 2018; Romero, Master, Paunesku, Dweck, & Gross, 2014), it is possible that children also may be developing maladaptive beliefs about happiness (e.g., overvaluing its importance and worrying about their happiness to an extreme degree). Developmentally, by middle childhood, children should have the capacity to think about happiness and its importance. Even in early childhood, children learn to balance positive emotion goals with other goals (Thompson, 1994), such as delaying gratification and understanding ramifications of following through on an immediate desire (Laguttata, 2005; Mischel, Shoda, & Rodriguez, 1989). In middle childhood (by age 7), children develop an increased ability (and on par with adults) to recognize the value of nonhedonic motivations (e.g., using willpower or following rules) compared to younger children (Laguttata, 2005). Also during middle childhood, children can rank the importance of different values (e.g., relating to self-transcendence, self-enhancement; Schwartz, 1992) that are largely similar to how adolescents and adults think about values (Doring, Blauensteiner, Aryus, Drogekamp, & Bilsky, 2010). Together, this work suggests that by mid-childhood, children can reflect on their emotional goals and values pertaining to positive affect.

Yet, there also may be developmental changes in terms of how youth think about happiness. A study with Brazilian 5 to 12 year olds showed age differences in what youth think happiness is, where

younger children more often mention leisure activities but older children mention how happiness feels (Giacomoni, de Souza, & Hutz, 2014). Similar shifts in conceptions of happiness were found across a sample of Spanish 9 to 16 year olds, where children more often mentioned hedonic factors (i.e., good feelings) but adolescents more often mentioned broader eudaimonic factors, such as harmony and purpose (Lópéz-Perez, Sánchez, & Gummerum, 2016). Additionally, another study with Porteguese adolescents indicated they report that happiness involves both hedonic and eudaimonic components (Freire, Zenhas, Tavares, & Iglésias, 2013). Although in these studies the youth were reporting on the meaning of happiness rather than the value of it, this research suggests that children can reflect on their happiness and that their beliefs about happiness may show meaningful shifts with age.

This work on conceptions of happiness also illustrates that youth's thoughts about happiness follow other patterns in development (e.g., cognitive advances, moral reasoning). Specifically, across childhood and into adolescence, youth tend to think in more abstract and less selffocused ways (e.g., Eisenberg, Miller, Shell, McNalley, & Shea, 1991; Inhelder & Piaget, 1958). Additionally, because adolescents are especially prone to peer social comparison (e.g., Brechwald & Prinstein, 2011; LaFontana & Cillessen, 2010), others' happiness levels may be salient and may impact how adolescents think about and value their own happiness. These normative developmental changes in cognitive ability and social cognition could have direct relevance for how youth reason about and conceptualize their emotions. It is therefore possible that youth's value of happiness may differ from adults' value of happiness, and that these values change across childhood and adolescence because their conceptions of happiness change with age. Thus, investigating valuing happiness during these formative developmental years is a critical next step to understand how this potential risk factor for depression may operate in youth.

Depression and well-being in youth

Investigating if happiness beliefs are linked to depression in youth is critical considering that the rates of depression increase dramatically during adolescence, with about 20% of adolescents experiencing major depressive disorder (e.g., Hankin et al., 1998; Hankin et al., 2015). Cumulative effects of depression during adolescence into adulthood also have been found, including higher rates of recurrent depressive episodes and poorer functioning, health, and relationships during adulthood (Lewinsohn, Rohde, Seeley, Klein, & Gotlib, 2003; Weissman et al., 1999). Even if youth do not report elevated or clinical levels of symptoms, they may not be thriving or flourishing (Keyes, 2006). Therefore, it is also important to examine rates of well-being. By studying valuing happiness, depressive symptoms, and well-being in youth, this work could identify a novel risk factor for poorer emotional functioning and inform prevention efforts.

$The\ present\ research$

The goal of this research was to investigate the value of happiness in youth and its association with depressive symptoms and well-being. The current studies are the first (to our knowledge) to examine the value of happiness among children and adolescents. It is not a foregone conclusion that excessively valuing happiness (e.g., demonstrating a need for happiness and a concern about happiness, even if one is happy) will be associated with worse outcomes for youth, as it is with adults. This hypothesis should be formally tested given evidence that the links between valuing happiness and well-being appear to be culturally specific (Ford, Dmitrieva, et al., 2015) and children may not yet fully be socialized into the United States' values regarding happiness. We assessed the value of happiness in youth from 7 to 18 years of age. By 7 years, children are capable of reflecting on happiness (Laguttata, 2005), but because there are noted shifts in how youth define happiness across adolescence (Lópéz-Perez et al., 2016), it is critical to determine

if valuing happiness levels, or its correlates, also vary across this middle childhood to late adolescence period. Specifically, our samples comprised: 7–12 year-old children from a small town and rural region in the southeastern U.S. (Study 1; N=76); 14–18 year-old adolescents from higher socioeconomic areas in a northeastern U.S. city (Study 2; N=142); and an economically and racially diverse sample of 12–18 year-old adolescents from a large metropolitan area in the northeastern U.S. (Study 3; N=152). These studies provide a unique opportunity to test our questions in geographically, socioeconomically, and developmentally diverse samples, which is important for the first report on valuing happiness in youth.

In each study, we report associations between valuing happiness and participants' age and gender given that so little is known about beliefs about happiness in youth. Second, we examine how youth's value of happiness is associated with depressive symptoms and wellbeing (life satisfaction and subjective happiness in Study 2, and life satisfaction and purpose in Study 3). Our measure of depressive symptoms was the same across each study (the Center for Epidemiological Studies Depression Scale - Children; CES-DC; Faulstich, Carey, Ruggiero, Envart, & Gresham, 1986; Weissman, Orvaschel, & Padian, 1980). To measure well-being, we assessed life satisfaction using the same measure in Study 2 and 3 (Students' Life Satisfaction Scale; Huebner, 1991), and a subjective happiness scale in Study 2 and a measure of purpose in Study 3. Although existing research has only focused on hedonic or subjective well-being (e.g., positive affect, happiness, life satisfaction), we could expect if youth are too focused on their own happiness, this may also interfere with their development of eudaimonic well-being (e.g., purpose), which is an important component of well-being during adolescence (Hershberg, DeSouza, Warren, Lerner, & Lerner, 2014).

We also explored whether any associations between valuing happiness and emotional health were moderated by youth age or gender. Rates of depression increase in mid-adolescence compared to childhood and girls have been found to experience higher rates of depression than boys (Hankin et al., 2015; SAMHSA, 2012). Moreover, risks for depression may also operate differently depending on youth age or gender (Gentzler, Ramsey, Yi, Palmer, & Morey, 2014; Gomez-Baya, Medoza, Paino, & Gillham, 2017; Mezulis, Abramson, Hyde, & Hankin, 2004). Finally, we explored whether youth's value of happiness was related to socio-demographic characteristics (e.g., parent education or income) given how little is known about the value of happiness in youth.

Study 1

In the initial study, 7–12 year olds completed surveys assessing their value of happiness and depressive symptoms. With the sample spanning middle childhood to early adolescence, we can determine if youth's value of happiness varies with age, similar to their definitions of happiness (Giacomoni et al., 2014; Lópéz-Perez et al., 2016). We also expected that children who report greater value of happiness would report higher depressive symptoms.

Methods

Participants

The sample was 76 mothers and their children (53% boys) who completed two surveys. Children ranged in age from 7 to 12 years $(M=9.34,\ SD=1.42)$ at the first session. Mothers reported their children's race or ethnicity as being 86.8% White, 5.3% African-American or Black, 3.9% multi-racial, 1.3% Hispanic or Latino, 1.3% Asian-American, and 1.3% other. Most mothers were college educated with 77.4% having completed a 4-year college degree or more. Mothers reported their yearly household income with 20% being between \$10,000 to \$49,999/year; 41.3% between \$50,000 to \$99,999/year; and 38.6% at \$100,000/year and above. Mothers mostly identified as married (85.1%) or living with a partner (2.7%).

These 76 families were from a larger sample of 100 mothers and children. Only mothers and children (N=79) who completed both assessments were eligible because the valuing happiness scale was only given at the second assessment. However, of those 79 families, for one family, only the mother completed the surveys at the second assessment, and two families were excluded based on the first session's data (due to substantial missing data or a language issue). This final sample of 76 families was compared to the remaining families without data at the second assessment on socio-demographic variables. For the 76 cases included in this study, mothers reported higher household income, t=1.00, than the cases excluded.

Procedure

Families from the community were recruited in various ways (e.g., flyers posted, emails sent through listservs, mailed letters through a local pediatrician's office). Mothers and children completed one inperson session in the university lab or the family's home. During this session, mothers and children completed surveys in a standardized order, as well as discussion tasks, which are not part of this investigation. Approximately five months later, research staff mailed brief surveys for mothers and children to complete. The time period between their completion of the second set of surveys and the first session was $M=159.49\,\mathrm{days}$ (SD=12.50). We report on children's value of happiness and depressive symptoms, which were given in the second set of surveys. Parents and children received \$30 for the first session and a \$10 gift card for completing the second set of surveys. The study was approved by the first author's Institutional Review Board.

Measures

Value of happiness

Children completed an adapted version of the original valuing happiness scale by Mauss et al. (2011) designed to assess a relatively extreme valuing of happiness that centers on experiencing a need for happiness and a concern about happiness, even when one feels happy. The original scale and our adaptation include seven items that are rated on a 7-point scale (1 = strongly disagree to 7 = strongly agree). To make the items more child-friendly, the authors changed several phrases and words to simplify the language to a 4th grade reading level. Example items are: "to have an important life, I need to feel happy most of the time" (original version: "to have a meaningful life, I need to feel happy most of the time"), and "even when I feel happy, I still wish I could be happier" (original version: "I am concerned about my happiness even when I feel happy"). We dropped one item ("If I am happy, that means my life is important") because it lowered the scale reliability (original $\alpha = 0.74$). The remaining six items were averaged to create a total score ($\alpha = 0.78$).

Depressive symptoms

Children completed the Center for Epidemiological Studies Depression Scale – Children (CES-DC; Faulstich et al., 1986; Weissman et al., 1980). This measure includes 20 items (e.g., "I felt down and unhappy") that children rated on a 4-point scale (0 = not at all to 3 = a lot) based on their feelings during the prior week. Items were summed to create a total score of their current depressive symptoms (α = 0.93).

Results

We examined bivariate associations with children's valuing happiness scores. Valuing happiness scores were negatively correlated with age, r(75) = -0.36, p = .002, indicating that younger children reported greater value of their happiness. No gender differences were found, t(74) = 0.57, p = .57, with girls reporting similar levels (M = 4.27, SD = 1.47) as boys (M = 4.44, SD = 1.24). We also explored if children's value of happiness was related to socio-demographic

variables of maternal education, household income, child race/ethnicity (dichotomized as white and minority), but no associations were found. Children's value of happiness was also correlated with higher depressive symptoms (see Table 1).

To examine associations while covarying age and gender and testing moderated effects (valuing happiness by age or gender), we conducted a regression model using the PROCESS macro for SPSS (Hayes, 2013). However, due to the interactions not being significant, we dropped these terms and conducted our final model in SPSS. The results indicated that children's value of happiness was positively associated with more depressive symptoms (see Table 2).

Discussion

This study provides the first evidence on valuing happiness in youth. We used a child-adapted version of the valuing happiness scale, and found evidence for concurrent validity in that its association with depressive symptoms mirrors results with adult samples (Mauss et al., 2011). However, because we did not have data to show convergent validity or test-retest reliability, more research with children is needed to validate this construct for this age. The study also indicated that children's age was negatively correlated with valuing happiness. It is possible that the younger children see "happiness" as uniformly good, whereas older children may have a more nuanced understanding of happiness or may begin to better understand the value of other emotional states.

As hypothesized, and in line with prior research with adults (Mauss et al., 2011), children who reported higher value of happiness also experienced higher levels of depressive symptoms. This effect was not moderated by children's age, which is interesting given the negative correlation with age. The effect also was not moderated by gender, but the elevated risk for depression in girls does not appear until adolescence (e.g., Hankin et al., 1998). Overall, this study suggests that even in childhood, beliefs about happiness matter. Yet, given the limitions of a small, single sample of youth, further research is needed.

Study 2

Study 2 complemented the first by examining an adolescent sample (14-18 years), assessing well-being (subjective happiness and life satisfaction), and exploring the moderating role of perceived stress. Sampling youth during mid-adolescence is important given the rise in depression at that age (Hankin et al., 1998). Moreover, adolescents may have more elaborate views of happiness than children in that adolescents think about both eudaimonic and hedonic aspects (Freire et al., 2013; Lópéz-Perez et al., 2016). Additionally, because a measure of depressive symptoms indicates the presence of psychological symptoms but does not capture a full range of healthy functioning, broadening the investigation to include indices of well-being is useful. Finally, stress levels are relevant because valuing happiness may be especially problematic in low-stress or positive scenarios when individuals feel that they should be happy but their concerns undermine their experience of happiness. In line with this proposition, Mauss et al. (2011) found valuing happiness was related to depressive symptoms and well-being for adults reporting low stress but not those reporting higher stress. In contrast, during stressful times, other factors (e.g., negative cognitive styles and attributions) may exacerbate the effects of stress, in line with stress-diathesis models (e.g., Abela, Hankin, Sheshko, Fishman, & Stolow, 2012; Abramson, Seligman, & Teasdale, 1978).

We expected that valuing happiness would be associated with higher levels of depressive symptoms and lower well-being (subjective happiness and life satisfaction), which would replicate similar findings with adults (Mauss et al., 2011). Finally, we explored whether each association was moderated by stress level, expecting links to be stronger for adolescents reporting lower stress compared to those reporting higher stress.

Method

Participants

The sample was 142 adolescents (61.3% male) aged 14–18 years (M=15.50, SD=0.89). The race or ethnicity of adolescents was 78.3% White, 9.8% Black or African-American, 2.8% Asian-American, 1.4% Hispanic or Latino, 0.7% Pacific Islander or Hawaiian, and 1.4% Other, and 4.2% Multi-Racial (and 1.4% missing). Of the 142 adolescents, 114 had at least one parent also participate (59 had a mother, 17 had a father, and 38 had two parents participate). Parents reported their education level with the majority indicating they were college graduates (70.9% of mothers and 81.8% of fathers completed at least a 4-year degree) and 100 parents reported household income showing a wide range (from \$20,000 to over \$200,000) but predominantly middle to high income (the median was in the \$120,000 to \$139,000 range).

Procedure

Adolescents were recruited from two high schools. Information letters were sent home with students for parents to read and give consent for the adolescent to participate. Research staff then administered assent and surveys (in a standardized order) to consented students at schools. Parents were sent a survey packet by mail or an online link via email to complete their consent and surveys online. Adolescents and parents each received \$20 for their participation. The study was approved by the first author's Institutional Review Board.

Measures

Value of happiness

Adolescents completed a 7-item version of the valuing happiness scale (Mauss et al., 2011) that was edited slightly for use with teens but not as extensively as the child-friendly adaptation in Study 1. For instance, in the original scale, we changed "I value things in life only to the extent that they influence my personal happiness" to "I only want things in life that will make me happy." The initial reliability was 0.60. The same item that lowered reliability in Study 1 was also dropped in Study 2 to improve reliability ("If I am happy that means my life is good and worthwhile"), yielding a final scale reliability of $\alpha=0.62.^1$

Depressive symptoms

Adolescents completed the same CES-DC from Study 1 (Faulstich et al., 1986; Weissman et al., 1980) that includes 20 items (e.g., "I felt lonely, like I didn't have any friends") that were rated from 0 = not at all to 3 = a lot and summed for an index of current level of depressive symptoms ($\alpha = 0.84$).

Perceived stress

Adolescents completed the 10-item perceived stress scale (Cohen, Kamarck, & Mermelstein, 1983). They answered items (e.g., "felt nervous or stressed") based on how they felt during the past month using a 5-point scale (0 = never to 4 = very often). Items were summed to create a total perceived stress score ($\alpha = 0.84$).

Subjective happiness

Adolescents completed the widely used 4-item subjective happiness measure (Lyubomirsky & Lepper, 1999). Items (e.g., "In general, I

¹ The original version of this item in the valuing happiness scale (Mauss et al., 2011) was "How happy I am at any given moment says a lot about how worthwhile my life is." Given this same item lowered the scale scores' inter-item reliability across both Studies 1 and 2, we believe our modifications may have changed the meaning of the item more substantially than we intended. In both of our reworded versions, we had dropped "at any given moment" which may have made the item tap into happiness generally (potentially an adaptive belief) instead of a need to be happy all of the time (potentially a maladaptive belief).

Table 1
Descriptives for study variables and correlations between valuing happiness and outcomes for Studies 1–3.

	Study 1 N = 74–76, Aged 7–12		Study 2 N = 141, Aged 14–18		Study 3 N = 142-150, Aged 12-18	
	M (SD)	Correlation with Valuing Happiness	M (SD)	Correlation with Valuing Happiness	M (SD)	Correlation with Valuing Happiness
Valuing happiness	4.36 (1.35)		4.36 (0.96)		4.34 (1.33)	
Depressive Symptoms Well-being	13.57 (10.82)	r = 0.35**	19.47 (8.69)	r = 0.25**	26.00 (16.33)	r = 0.26**
Subjective happiness	_	_	5.00 (1.16)	r = -0.05	_	-
Life satisfaction	_	_	4.57 (0.83)	r = -0.22*	4.40 (1.03)	r = -0.05
Purpose in life	_	-	-	-	3.79 (0.86)	r = 0.04

Notes. A dash (-) indicates that the variable was not assessed within the given study.

Table 2 Study 1: linear regression model predicting children's depressive symptoms from their value of happiness (N=76).

	Depressive symptoms
R^2	0.14*
Regression predictors	b (se)
Child age	0.25 (0.90)
Child gender	2.47 (2.38)
Valuing happiness	2.86** (0.94)

Notes. Unstandardized b estimates are reported. The finding for valuing happiness also remain significant without child age and gender in the model.

Gender: 1 = girls and 2 = boys.

consider myself: $1 = not \ a \ very \ happy \ person$ to $7 = a \ very \ happy \ person$ ") are rated on a 7-point scale and were averaged to index their general feelings of happiness ($\alpha = 0.83$).

Life satisfaction

Adolescents completed the 7-item scale assessing life satisfaction by Huebner (1991). They rated statements (e.g., "I have a good life") on a 6-point scale (1 = strongly disagree to 6 = strongly agree). Items were averaged ($\alpha = 0.81$).

Results

Preliminary analyses indicated that valuing happiness scores did not correlate with adolescents' age, r(140) = 0.02, p = .78. Also, no gender differences were found, t(139) = 0.86, p = .40, indicating boys (M = 4.31, SD = 0.96) and girls (M = 4.45, SD = 0.95) valued their happiness to similar degrees. To determine if any sociodemographic variables were related to adolescents' value of happiness, we examined mother-reported education, father-reported education, parent-reported household income, and adolescent-reported race/ethnicity (dichotomized as white and minority). However, these variables were not associated with valuing happiness levels.

Bivariate correlations between valuing happiness and outcomes indicated that valuing happiness was positively correlated with depressive symptoms, negatively correlated with life satisfaction, and not significantly related to subjective happiness (see Table 1).

We then conducted linear regressions in PROCESS with gender, age, valuing happiness, and perceived stress as predictors. We initially included interactions between valuing happiness with gender and age but because no significant interactions were found, these terms were dropped from all models (see Table 3). In each model, we also included

Table 3 Study 2: linear regression models predicting adolescents' symptoms and wellbeing from their value of happpiness and perceived stress (N=134).

	Depressive symptoms	Subjective happiness	Life satisfaction
R^2	0.51***	0.41***	0.29***
Regression Predictors	b (se)	b (se)	b (se)
Adolescent Age	-1.67** (0.62)	0.13 (0.09)	0.08 (0.07)
Adolescent Gender	1.31 (1.20)	0.16 (0.17)	0.03 (0.14)
Valuing Happiness	1.78** (0.57)	0.01 (0.08)	-0.13* (0.06)
Perceived Stress	0.82*** (0.09)	-0.11***	-0.06***
		(0.01)	(0.01)
$VH \times Stress$	0.19 * (0.08)	-0.005 (0.01)	-0.005 (0.01)
Simple effects for the VH × Stress Interaction	b (se)	b (se)	b (se)
-Lower Stresss	0.56 (0.75)	_	_
Region of Significance	_		
-Higher Stress	3.01***(0.82)	_	_
Region of Significance	Stress ≥23.54		

Notes. VH = Valuing happiness. Gender was coded as 1 = boys and 2 = girls. Unstandardized b estimates are reported. Interaction terms between valuing happiness and gender and age were never statistically significant so these were not included in the models. Region of Significance is for p < .05 using Johnson-Neyman tests. The above findings are all still significant if gender and age are not controlled.

Bolded text are significant values.

- * p < .05.
- ** p < .01.
- *** p < .001.

an interaction term between valuing happiness and perceived stress. The results confirmed that adolescents who more strongly valued happiness reported more depressive symptoms (see Table 3). In addition, greater perceived stress was linked to more symptoms, and it also moderated the association between valuing happiness and depressive symptoms. Contrary to expectations, when adolescents reported lower stress, valuing happiness was unrelated to depressive symptoms, but for those reporting higher stress, greater value of happiness predicted more depressive symptoms (see Fig. 1 for the interaction and Table 3 for simple slopes). Table 3 also shows the results of the Johnson-Neyman region of significance test, which indicates the precise values of the moderator for when the slope of the predictor is significantly different from zero (Johnson & Neyman, 1936). This test indicated that valuing happiness significantly predicted higher levels of depressive symptoms at p < .05 when perceived stress value was 23.54 and higher, which is 0.35 SD below the mean for stress (M = 25.83). In terms of well-being, valuing happiness remained negatively associated with life satisfaction while controlling for age, gender, and perceived stress. The association

^{*} p < .05.

^{**} p < .01.

Bolded text are significant values.

^{*} p < .05.

^{**} p < .01.

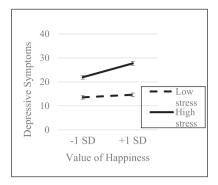


Fig. 1. The interaction between valuing happiness and perceived predicting depressive symptoms in Study 2.

Note. One SD below the mean for stress is 19.28; one SD above the mean is 32.30. Variables were centered for the statistical models, but raw values are provided here for ease of interpretation.

between valuing happiness and life satisfaction was not moderated by perceived stress. Valuing happiness was not associated with subjective happiness (see Table 3).

Discussion

This study corroborated our earlier findings for valuing happiness. Adolescents who reported higher levels of valuing their happiness reported more depressive symptoms. This association was not moderated by age or gender and there were no age or gender differences for levels of valuing happiness.

The study also showed that the link between valuing happiness and depressive sympotms held when controlling for perceived stress, and that stress moderated the association between valuing happiness and depressive symptoms. Specifically, the association was apparent for those reporting average and higher levels of stress, but not lower levels of stress. This finding contradicts an earlier study with adults (Mauss et al., 2011), where the link between valuing happiness and depressive symptoms only held for those reporting lower but not higher levels of stress. One difference between these studies, besides participants' age, was that our measure assessed perceived or felt stress, whereas Mauss et al. (2011) examined the impact of discrete negative life events. It is unknown whether our highly-stressed adolescents felt stressed because of a greater number of life events or were feeling stressed in the absence of major life events. Indeed, perceived stress strongly predicted depressive symptoms, suggesting that it may better reflect subjective distress and be indicative of low coping ability. In support of this idea, Fergus and Bardeen (2016) found that valuing happiness more strongly predicted depressive symptoms in adults who reported lower efficacy to regulate their negative affect. Our results may be similar in that stressed youth could have low confidence in their ability to feel better and achieve their happiness goals, which may contribute to a stronger association between valuing happiness and depressive symptoms. Additionally, McMahan, Choi, Kwon, Fuller, and Josh (2016) found that college students who believe that having a good life means they do not experience any negative emotions (i.e., negative hedonic beliefs) were more affected by elevated stress in terms of reporting lower well-being and more negative affect and depressive symptoms. Future research should explore if adolescents who strongly value their happiness also have unrealistic views about negative emotions. Overall, these findings suggest that valuing happiness may work as a vulnerability factor that exacerbates the influence of perceived stress, consistent with stressdiathesis models.

The results also indicated that adolescents who more highly value their happiness also reported lower life satisfaction. This association held above and beyond the effect of perceived stress, which was a strong predictor of lower life satisfaction. Thus, regardless of stress level, if adolescents are overly concerned with their happiness and desire more happiness than they currently feel, these beliefs could potentially undermine their satisfaction with their lives. Yet, valuing happiness was unrelated to subjective happiness. It is unclear why an association would be found for one index of well-being but not the other.

In general, this study addressed a critical gap in research on happiness beliefs in adolescents. We did not find associations with subjective happiness, and gender or age did not moderate any findings, but our sample was truncated on age (82% were 15–16 year olds). Therefore, a sample with a wider age range and broader assessment of well-being would be useful to further investigate these associations during the important period of adolescence.

Study 3

This third study allowed us to pursue three main goals. First, by using a sample with a wider age range (12 to 18 years), we were able to better examine age in relation to valuing happiness and as a moderator of its association with depressive symptoms and well-being. Second, we assessed well-being more comprehensively in this study by adding a eudaimonic component (purpose in life) rather than only focusing on affective or subjective well-being. Third, given that the adapted adolescent version of the valuing happiness measure had lower reliability than expected in the prior study, we used the original valuing happiness measure in this study to evaluate its appropriateness with youth. Consistent with prior studies, we hypothesized that valuing happiness would be associated with higher depressive symptoms and lower well-being (life satisfaction and purpose), and we explored whether these associations were moderated by adolescents' age and gender.

Method

Participants

Participants included 152 adolescents between the ages of 12–18 years (M = 15.50, SD = 1.77; 69.7% female). Participants' race or ethnicity included White/European-American (31.6%), Hispanic/ Latino (31.6%), Asian/Pacific Islander (17.8%), Black/African-American (13.8%), or biracial (5.3%). To obtain indices of socio-economic status, we asked adolescents to report on parents' education level, whether the youth received a free or reduced lunch at school, and if parents had difficulty paying bills. Adolescents reported that at least one caregiver had completed: at least some graduate or professional school (33.5%), college (19.7%), some college (15.1%), high school (11.8%), or did not complete high school (7.2%). An additional 12.5% reported that they did not know their primary caregivers' education level. About one third of participants (32.8%) reported that they received free or reduced lunch from school (and 24 students indicated they did not know or preferred not to answer). Adolescents also rated the difficulty that their parents or caregivers had paying bills on a 1 to 7 scale where 1 = "very difficult" to 7 = "not at all difficult" (<math>M = 5.05, SD = 1.61).

The original sample included 295 adolescents. Thirty-eight participants were excluded because they did not accurately respond to attention-checking validation questions in the survey (e.g., "Please select 'not at all' for this question"). Fifty-six participants dropped out of the study and an additional 49 participants did not complete questionnaires of interest (i.e., valuing happiness or depressive symptoms). These drop-out rates and incorrect responses to attention-checks are consistent with other online survey-based studies in adults (e.g., Keith, Tay, & Harms, 2017; Zhou & Fishbach, 2016). Participants removed from the final sample for insufficient data or for failing validity questions were more likely to be male $[X^2(1) = 6.65, p = .01]$, and were more likely to qualify for free or reduced lunch $[X^2(1) = 5.99, p = .014]$. There were no differences between participants who were excluded versus retained for the final sample based on adolescents' age or race/ethnicity, or

parents' education level, or measures of interest.

Procedure

Participants were recruited through a high school in a large metropolitan area in the northeastern United States. If students chose to participate, they were given a link to complete an anonymous online survey at school. The questionnaires were presented in a standardized order. For helping with the project, one classroom in the school was randomly selected to win a pizza party. The study was approved by the first author's Institutional Review Board.

Measures

Value of happiness

Adolescents completed the original value of happiness scale (Mauss et al., 2011). Participants responded to the seven items (e.g., "I am concerned about my happiness even when I feel happy") on a 7-point scale (1 = strongly disagree to 7 = strongly agree). Items were averaged so that higher scores indicate a higher value of happiness ($\alpha = 0.73$).

Depressive symptoms

Participants completed a slightly adapted version of the 20-item CES-DC (Faulstich et al., 1986; Weissman et al., 1980). In this study, the four typically reverse-coded items were reworded so they were not reversed (e.g., "I felt happy" in the original CES-DC was worded as "I felt unhappy;" Seligman, 1991, pp. 139–140). Participants answered based on their feelings within the past week (0 = not at all to 3 = a lot). We summed each item to create a total symptom score (α = 0.97).

Life satisfaction

Adolescents completed the same Students' Life Satisfaction Scale (Huebner, 1991) used in Study 2. Participants responded to the seven items (e.g., "I have what I want in life") from $1 = strongly \ disagree$ to $6 = strongly \ agree$ based on how they have felt in the past several weeks. Items were averaged ($\alpha = 0.86$) to obtain a life satisfaction index.

Life purpose

Adolescents completed a 3-item scale to assess their feelings of meaning and purpose (Lippman et al., 2014). Adolescents responded to statements (e.g., "My life will make a difference in the world") using a 5-point scale (1 = strongly disagree to 5 = strongly agree). Items were averaged with higher scores indicating greater purpose (α = 0.64).

Results

We examined how valuing happiness was related to adolescent age and gender. Valuing happiness was not significantly associated with age, r(149) = -0.09, p = .28, and mean levels for boys (M = 4.29, SD = 1.36) and girls (M = 4.36, SD = 1.33) did not differ, t (148) = -0.28, p = .78. We also explored associations between valuing happiness and available socio-demographic indicators (adolescent-reported parental education, free lunch status, and a dichotomized race/ethnicity variable). Adolescents reporting their parent had lower education (averaged if they reported for both mothers and fathers) reported higher value of happiness, r(131) = -0.22, p = .01. Adolescents reporting receiving a free or reduced lunch (n = 42) also reported higher valuing happiness levels (M = 4.57, SD = 1.37) compared to those reporting not receiving a free or reduced lunch (n = 84; M = 4.09, SD = 1.23), t(124) = -2.00, p = .048. Valuing happiness was not associated with reported difficulty paying bills or with race/ ethnicity either dichotomized (White and minority) or examining 5 groups (White/European-American, Hispanic/Latino, Asian/Pacific Islander, Black/African-American, or biracial).

Bivariate correlations showed that valuing happiness was correlated with higher depressive symptoms, but it was unrelated to well-being indices (see Table 1).

Table 4Study 3: linear regression models predicting adolescents' depressive symptoms and well-being outcomes from their value of happiness.

	Depressive symptoms	Life satisfaction	Purpose
	N = 146	N = 147	N = 142
R ² Regression Predictors Age Gender Valuing Happiness VH × Age	0.14*** b (se) -0.35 (0.72) 4.61 (2.77) 3.72*** (0.97) 1.47** (0.51)	0.10°° b (se) -0.07 (0.05) 0.08 (0.18) -0.11 (0.06) -0.12°° (0.03)	0.10** b (se) -0.02 (0.04) -0.18 (0.15) -0.03 (0.06) -0.10*** (0.03)
Simple effects for the VH × Age Interaction	b (se)	b (se)	b (se)
Younger Adolescents Region of Significance	1.12 (1.17) -	0.12 * (0.08) ≤ 13.2 years old	0.16 * (0.07) ≤ 13.8 years old
Older Adolescents Region of Significance	6.33*** (1.47) ≥ 14.4 years old	- 0.33*** (0.10) ≥15.9 years old	- 0.21 * (0.08) ≥ 16.8 years old

Notes. VH = Valuing happiness. Gender: 1 = boys and 2 = girls. Unstandardized b estimates are reported. Interaction terms between valuing happiness and gender were never statistically significant so these were not included in the models. Region of Significance is for p < .05 using Johnson-Neyman tests. The above findings for valuing happiness remain significant if gender is not controlled in the models. Bolded text are significant values.

* p < .05.

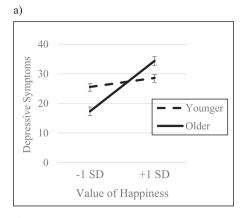
** p < .01.

*** p < .001.

We conducted regression models in PROCESS with valuing happiness predicting each index of emotional health, including age and gender and the interaction terms between valuing happiness with gender and age. However, because the interaction with gender was never significant, this term was dropped from the models and analyses were rerun. As expected, valuing happiness predicted higher levels of depressive symptoms (see Table 4). Age also moderated the link between valuing happiness and depressive symptoms, as well as the link between valuing happiness and well-being indices (life satisfaction and purpose). Although the precise pattern of simple effects varied across these outcome measures, the overall pattern was similar where valuing happiness predicted worse outcomes for older adolescents but better outcomes for younger adolescents.

Specifically, valuing happiness was unrelated to depressive symptoms for younger adolescents, but was related to higher symptoms for older adolescents (see Fig. 2). The regions of significance based on the Johnson-Neyman technique indicated valuing happiness was related to greater depressive symptoms for youth aged 14.4 to 18 years (see Table 4). Similarly, valuing happiness was unrelated to life satisfaction for younger adolescents, but it was related to lower satisfaction for older adolescents aged 15.9 to 18 years. Although outside the traditional -1 SD range, the Johnson-Neyman technique also showed that valuing happiness was related to higher life satisfaction for 12 to 13.20 years. Finally, for purpose, both simple slopes were significant with valuing happiness relating to greater purpose for younger adolescents (12 to 13.80 years), but lower purpose for older adolescents (16.8 years to 18 years). See Fig. 2 and Table 4.

Because this study was more diverse in terms of socio-economic status and race and ethnicity and we found that valuing happiness was associated with SES indicators, we also explored whether associations between valuing happiness and depression and well-being were moderated by parental education, free lunch status, difficulty paying bills, or race/ethnicity (dichotomized). Using Hayes' (2013) PROCESS (Model 2 with two interaction terms), we examined (in addition to the



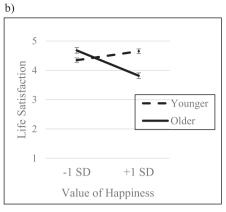
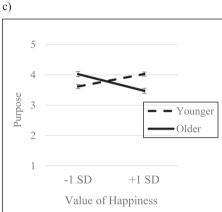


Fig. 2. Valuing happiness by age interactions in Study 3 for: a) Depressive Symptoms, b) Life Satisfaction, and c) Purpose in Life.

Note. One SD below the mean for participant age is 13.72–13.73, and 1 SD above the mean is 17.27–17.28. Variables were centered for the statistical models, but raw values are provided here for ease of interpretation.



Valuing Happiness \times Age interaction) an interaction term with each of the socio-demographic variables (e.g., Valuing Happiness \times Parent Education). However, these variables did not moderate the association between valuing happiness and depressive symptoms, life satisfaction, or purpose.

Discussion

In this study, valuing happiness was associated with several outcomes in the predicted direction for older adolescents: greater depressive symptoms, lower life satisfaction, and lower purpose. These results parallel findings with adults (Mauss et al., 2011) and Studies 1 and 2. In contrast, for younger adolescents, valuing happiness was unrelated to depressive symptoms, and it related to more life satisfaction and purpose. The positive associations between valuing happiness and well-being are counter to expectations, particularly because youth in late childhood and early adolescence conceptualize happiness as being more about positive feelings than do older adolescents who may be more likely tie happiness to eudaimonic pursuits (Lópéz-Perez et al., 2016). Overall, although this study replicated the other studies for older adolescents, it also demonstrated that further research is needed to determine when and why valuing happiness may be differentially associated with well-being by age and sample.

General discussion

These studies are the first to report on valuing happiness in youth and, critically, to show that valuing happiness has negative correlates even within youth samples. All three studies provide consistent findings indicating that children and adolescents who highly value their happiness have higher levels of depressive symptoms. However, the links between valuing happiness and well-being were mixed, and suggest that these associations may be more nuanced or depend on the

particular aspect of well-being under consideration. Overall, the replications across three studies, including unique samples from different locations in the U.S., bolster support for our hypotheses on the importance of youth's happiness beliefs.

Our studies offer important developmental considerations about the value of happiness in youth. First, levels of valuing happiness were similar across the studies and within adolescent samples: M=4.36 (SD=1.35) in Study 1 (7–12 year olds); M=4.36 (SD=0.96) in Study 2 (14–18 year olds); and M=4.34 (SD=1.33) in Study 3 (12–18 year olds). These similarities even held when using three slightly different versions of the valuing happiness scale. Yet interestingly, our means with youth are higher than other studies with adults. Fergus and Bardeen (2016) reported valuing happiness means of 4.04 and 4.08 (SD=1.19 and 1.15) within two samples of 19–65 year olds ($M_{\rm age}=35.9$, 35.8 years; SD=11.7, 11.4). Similarly, Ford, Mauss, and Gruber (2015) reported a valuing happiness mean of 4.06 (SD=0.98) in a sample of 510 undergraduates ($M_{\rm age}=19.92$ years, SD=4.32). Thus, there may be developmental shifts in levels of valuing happiness that may be apparent in wider age range comparisons.

A second point about development is that age was negatively correlated with valuing happiness in Study 1 indicating younger children tended to report higher levels of valuing happiness than older children. This pattern may reflect developmental trends in cognitive abilities where younger children predominantly think concretely, whereas by adolescence, youth are able to think more abstractly (e.g., Inhelder & Piaget, 1958). Prior research also indicates that children think of happiness more in terms of concrete things that make them happy (leisure and people) and good feelings whereas adolescents more often mention broader conditions or qualities (e.g., harmony/balance and achievement; Giacomoni et al., 2014; Lópéz-Perez et al., 2016). Thus, it is possible that younger children are drawing from a conceptualization of happiness as being solely about good feelings, and answer questions based on their beliefs that good feelings are desirable. Taken together,

this research indicates there may be little variation in valuing happiness across the adolescent years but that a shift may occur in middle childhood (across ages 7 to 12). Overall, these studies provide novel evidence that valuing happiness is meaningful during middle childhood and adolescence, but further research (ideally longitudinal) is warranted into how youth's value and conceptualization of happiness may change with age.

Valuing happiness and depression

The hypothesis most consistently supported within the present studies was that youth who reported higher value of their happiness also reported higher depressive symptoms, which replicates findings with adult samples (Ford, Dmitrieva, et al., 2015; Mauss et al., 2011). All three studies indicated that the link between valuing happiness and depressive symptoms is not moderated by gender. Even though the rates of depression in adolescence are twice as high for girls compared to boys (e.g., Hankin et al., 2015), and girls exhibit greater risks for depression than boys (Gentzler et al., 2014; Gomez-Baya et al., 2017; Hankin et al., 2015; Mezulis et al., 2004), the current research provides evidence that both boys and girls across three samples are vulnerable to maladaptive levels of valuing happiness and its potential ramifications. In terms of age, with one exception (younger adolescents in Study 3), the valuing happiness-depressive symptoms link was consistent across a wide age range of youth.

In Study 2, we also found evidence that the association for valuing happiness and depressive symptoms held for adolescents reporting average and higher stress levels, though not for those reporting lower stress. Unfortunately, we only measured stress in one study so research should further examine the role of stress. Even though the correlation for valuing happiness and depressive symptoms was smaller (r=0.25, p=.003) compared to the correlation between perceived stress and depressive symptoms (r=0.64, p<.001), critically, valuing happiness still predicted depressive symptoms with perceived stress in the model. Research should continue to investigate how strongly valuing happiness predicts depression above and beyond other known risks for depression, such as negative attributions (e.g., Joiner & Wagner, 1995), and prospectively test if valuing happiness is a risk for future depression in youth.

Valuing happiness and well-being

The hypothesis that valuing happiness would relate to lower well-being (subjective happiness, life satisfaction, and purpose) was partially supported. First, valuing happiness was associated with lower life satisfaction in Study 2 (14–18 year olds) and for older adolescents in Study 3 (about 13.6 to 18 year olds). These results may suggest that being extremely concerned about one's happiness is especially relevant to evaluating one's satisfaction with life. As valuing happiness is proposed to stem in part from having unrealistic expectations about happiness (Ford & Mauss, 2014; Schooler et al., 2003), it may be the case that these individuals report lower satisfaction with their lives for similar reasons (i.e., having unrealistic ideals for what their lives could or should be like).

Other indices of well-being were only assessed in a single study and findings were mixed. Specifically, in Study 2, valuing happiness was unrelated to adolescents' subjective happiness. In Study 3, valuing happiness was associated with lower purpose for older adolescents but with greater purpose for younger adolescents. One posthoc consideration about why valuing happiness was linked to higher well-being (purpose and life satisfaction) in younger adolescents in Study 3 pertains to our use of the original (adult) valuing happiness scale in Study 3 (whereas Study 2 used a slightly-adapted adolescent version). It is possible that the young adolescents in Study 3 missed some of the nuances of the adult version and were responding with a "happiness is good" mindset, resulting in the scale being linked to higher well-being.

Although the findings for younger adolescents were counter to expectations, our findings extend existing research on the eudaimonic component of well-being (purpose). Because eudaimonia (e.g., purpose) is a salient goal during adolescence (Hershberg et al., 2014), it is important to consider if focusing on one's own happiness interferes with motives to live to one's potential and find broader purpose. Taken together, although this research provided some evidence that valuing happiness in youth is linked to lower well-being, other findings were equivocal. Because other research suggesets that links between valuing happiness and well-being are moderated (e.g., by culture; Ford, Dmitrieva, et al., 2015) or that items from the valuing happiness scale differentially relate to well-being (Luhmann, Necka, Schonbrodt, & Hawkley, 2015), more research is needed to understand these associations.

Limitations and future directions

The main limitations of these studies were due to the studies' design and measures. First, the cross-sectional studies limit directional inferences. Valuing happiness may be a risk for depressive symptoms but depressive symptoms may also prompt youth to value what they do not have. Although other studies have shown valuing happiness predicts a higher number of depressive episodes across a year among adults with bipolar disorder (Ford, Mauss, & Gruber, 2015) and that increasing how much adults value their happiness results in lower positive affect and more negative affect (Mauss et al., 2011), longitudinal and experimental research is needed with youth samples. Second, it would be worthwhile to expand from our reliance on survey and self-reported data. Future studies should include more objective reporters (e.g., clinical assessments of depression, parent or peer reports of well-being). In addition, experience-sampling methods or multi-method behavioral data in the lab would be useful to assess in-the-moment reactions (e.g., excessive monitoring of one's feelings, ineffective emotion regulation; Fergus & Bardeen, 2016; Ford, in press; Ford & Mauss, 2014; Gentzler et al., 2016) that could explain why valuing happiness is related to depressive symptoms in youth. Third, the valuing happiness scales had somewhat low inter-item reliability across the studies (Cronbach $\alpha = 0.78$, 0.62, and 0.73). However, these were similar to reliability estimates with several college student and adult samples (ranging from 0.67 to 0.80; Catalino et al., 2014; Fergus & Bardeen, 2016; Ford et al., 2014; Gentzler et al., 2016; Mauss et al., 2011; 2012). Still, given the low reliability with the adapted adolescent version, in future studies with high school students, researchers should consider using the original version.

Despite the limitations, the findings from all three studies suggest that even by middle childhood, some American youth may be developing unhealthy concerns with their happiness. The United States, where this research was conducted, is known for emphasizing individuals' right to pursue happiness, as stated in the Declaration of Independence. It would be worth examining youth in relatively collectivistic cultures (e.g., Japan), where it is more normative to dampen positive affect (Miyamoto & Ma, 2011), to desire different types of positive affect (i.e., desire low-arousal positive emotions more frequently and high-arousal positive emotions less frequently than European-Americans; Tsai, Knutson, & Fung, 2006), or to define happiness in more socially engaged ways (focused on others and relationships and behaving prosocially) compared to the United States (Ford, Dmitrieva, et al., 2015). Consistent with Ford, Dmitrieva, et al. (2015), the value of happiness may be more maladaptive in Western societies where happiness is less tied to people's relationships with others. Our first two samples were limited on socio-economic and cultural diversity, and exploratory moderation analyses with Study 3 did not show that valuing happiness was differentially associated with depressive symptoms or well-being. However, given there is likely to be cultural specificity, research should comprehensively investigate youth from multiple cultures. More generally, youth's beliefs about happiness likely originate

from many sources (e.g., cultural norms, parental socialization, expectations from media) and are worth investigating in future research.

Overall, if these findings are replicated in experimental studies, this line of research could provide novel routes for prevention and intervention. Applications could include helping children and adolescents think about happiness and emotions in different ways. For example, it may benefit youth who excessively value happiness to scale back their assumptions of how much or how often they think they should feel positive emotions. Additionally, if overvaluing happiness means youth are also less accepting of negative emotions, it may be useful to teach them to understand the value of negative emotions and to increase their tolerance of distressing feelings. Increasing youth's emotional acceptance, wherein they learn to accept their emotions rather than judge them, could help to reduce negative emotions and attain greater longterm well-being (Ford et al., 2018). Finally, based on research with adults (Fergus & Bardeen, 2016; Gentzler et al., 2016), youth who highly value their happiness may benefit from learning more effective emotion regulation strategies. In general, the current studies underscore the importance of understanding youth's beliefs about happiness, and suggest several directions for future research that could lead to the development of prevention efforts.

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References

- Abela, J. R. Z., Hankin, B. L., Sheshko, D. M., Fishman, M. B., & Stolow, D. (2012). Multi-wave prospective examination of the stress-reactivity extension of response styles theory of depression in high-risk children and early adolescents. *Journal of Abnormal Child Psychology*, 40, 277–287.
- Abramson, L. Y., Seligman, M. E., & Teasdale, J. D. (1978). Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology*, 87, 49–74.
- Bastian, B., Kuppens, P., De Roover, K., & Diener, E. (2014). Is valuing positive emotion associated with life satisfaction? *Emotion*. 14. 639–645.
- Brechwald, W. A., & Prinstein, M. J. (2011). Beyond homophily: A decade of advances in understanding peer influence process. *Journal of Research on Adolescence*, 21, 166–179
- Catalino, L. I., Algoe, S. B., & Fredrickson, B. L. (2014). Prioritizing positivity: An effective approach to pursuing happiness? *Emotion*, 14, 1155–1161.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. Journal of Health and Social Behavior, 24, 385–396.
- Doring, A. K., Blauensteiner, A., Aryus, K., Drogekamp, L., & Bilsky, W. (2010). Assessing values at an early age: The picture-based value survey for children (PBVS-C). *Journal* of Personality Assessment, 92, 439–448.
- Eisenberg, N., Miller, P. A., Shell, R., McNalley, S., & Shea, C. (1991). Prosocial development in adolescence: A longitudinal study. *Developmental Psychology*, 27, 849–857.
- Faulstich, M. E., Carey, M. P., Ruggiero, L., Envart, P., & Gresham, F. (1986). Assessment of depression in childhood and adolescence: An evaluation of the Center for Epidemiological Studies Depression Scale for Children (CES-DC). American Journal of Psychiatry, 143, 1024–1027.
- Fergus, T. A., & Bardeen, J. R. (2016). Negative mood regulation expectancies moderate the association between happiness emotion goals and depressive symptoms. *Personality and Individual Differences*, 100, 23–27.
- Ford, B. Q. (2019). Pursuing positive emotion: When and why is wanting to feel happy linked to psychopathology? In J. Gruber (Ed.). Positive emotion and psychopathologyOxford University Press (In press).
- Ford, B. Q., Dmitrieva, J. O., Heller, D., Chentsova-Dutton, Y., Grossmann, I., Tamir, M., ... Mauss, I. (2015). Culture shapes whether the pursuit of happiness predicts higher or lower well-being. *Journal of Experimental Psychology: General*, 144, 1053–1062.
- Ford, B. Q., Lam, P., John, O., & Mauss, I. B. (2018). The psychological health benefits of accepting negative emotions and thoughts: Laboratory, diary, and longitudinal evidence. *Journal of Personality and Social Psychology*, 115, 1075–1092.
- Ford, B. Q., & Mauss, I. B. (2014). The paradoxical effects of pursuing positive emotion: When and why wanting to feel happy backfires. In J. Gruber, & J. T. Moskowitz (Eds.). The light and dark sides of positive emotion (pp. 363–381). New York, NY: Oxford University Press.
- Ford, B. Q., Mauss, I. B., & Gruber, J. (2015). Valuing happiness is associated with bipolar disorder. *Emotion*, 15, 211–222.
- Ford, B. Q., Shallcross, A. J., Mauss, I. B., Floerke, V. A., & Gruber, J. (2014). Desperately seeking happiness: Valuing happiness is associated with symptoms and diagnoses of depression. *Journal of Social and Clinical Psychology*, 33, 890–905.

- Fredrickson, B. L. (1998). What good are positive emotions? *Review of General Psychology*, 2, 300–319.
- Freire, T., Zenhas, F., Tavares, D., & Iglésias, C. (2013). Felicidade hedónica e eudaimónica: um estudo com adolescents portugueses. *Análise Psicológica, 4*, 329–342.
- Fritz, M. M., & Lyubomirsky, S. (2017). Whither happiness? When, how, and why might positive activities undermine well-being. To appear in. In J. P. Forgas, & R. F. Baumeister (Eds.). The social psychology of living well. New York: Psychology Press.
- Gentzler, A. L., Palmer, C. A., & Ramsey, M. A. (2016). Savoring with intent: Investigating types of and motives for responses to positive events. *Journal of Happiness Studies*, 17, 937–958.
- Gentzler, A. L., Ramsey, M. A., Yi, C. Y., Palmer, C., & Morey, J. (2014). Young adolescents' emotional and regulatory responses to positive events: Investigating temperament, attachment, and event characteristics. *Journal of Positive Psychology*, 9, 108–121
- Giacomoni, C. H., de Souza, L. K., & Hutz, C. S. (2014). O conceito de felicidade em crianças (the concept of happiness in children). Vol. 19, Psico-USF, Bragranca Paulista143–153.
- Gomez-Baya, D., Medoza, R., Paino, S., & Gillham, J. E. (2017). A two-year longitudinal study of gender differences in responses to positive affect and depressive symptoms during middle adolescence. *Journal of Adolescence*, 56, 11–23.
- Gruber, J., Mauss, I. B., & Tamir, M. (2011). A dark side of happiness? How, when, and why happiness is not always good. *Perspectives on Psychological Science*, 6, 222–233.
- Hankin, B. L., Abramson, L. Y., Moffitt, T. E., Silva, P. A., McGee, R., & Angell, K. E. (1998). Development of depression from preadolescence to young adulthood: Emerging gender differences in a 10-year longitudinal study. *Journal of Abnormal Psychology*, 107, 128–140.
- Hankin, B. L., Young, J. R. Z., Smolen, A., Jenness, J. L., Gulley, L. D., Technow, ... Oppenheimer, C. W. (2015). Depression from childhood into late adolescence: Influence of gender, development, genetic susceptibility, and peer stress. *Journal of Abnormal Psychology*, 124, 803–816.
- Hayes, A. F. (2013). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. New York: Guilford Press.
- Hershberg, R. M., DeSouza, L. M., Warren, A. E., Lerner, J. V., & Lerner, R. M. (2014). Illuminating trajectories of adolescent thriving and contribution through the words of youth: Qualitative findings from the 4-H study of Positive Youth Development. *Journal of Youth and Adolescence*, 43, 950–970.
- Huebner, E. S. (1991). Correlates of life satisfaction in children. Social Psychology Quarterly, 6, 103–111.
- Inhelder, B., & Piaget, J. (1958). The growth of logical thinking from childhood to adolescence. New York, NY: Basic Books Inc.
- Johnson, P. O., & Neyman, J. (1936). Tests of certain linear hypotheses and their application to some educational problems. Vol. 1, Statistical Research Memoirs57–93.
- Joiner, T. E., & Wagner, K. (1995). Attributional style and depression in children and adolescents: A meta-analytic review. Clinical Psychology Review, 15, 777–798.
- Keith, M. G., Tay, L., & Harms, P. D. (2017). Systems perspective of Amazon Mechanical Turk for organizational research: Review and recommendations. Frontiers in Psychology, 8, 1359.
- Keyes, C. L. M. (2006). Mental health in adolescence: Is America's youth flourishing? American Journal of Orthopsychiatry, 76, 395–402.
- Kitayama, S., & Markus, H. R. (2000). The pursuit of happiness and the realization of sympathy: Cultural patterns of self, social relations, and wellbeing. In E. Diener, & E. M. Sul (Eds.). Culture and subjective well-being (pp. 113–162). Cambridge, MA: The MIT Press.
- LaFontana, K., & Cillessen, A. H. N. (2010). Developmental changes in the priority of perceived status in childhood and adolescence. Social Development, 19, 130–147.
- Laguttata, K. H. (2005). When you shouldn't do what you want to do: Young children's understanding of desires, rules, and emotions. Child Development, 76, 713–733.
- Lewinsohn, P. M., Rohde, P., Seeley, J. R., Klein, D. N., & Gotlib, I. H. (2003). Psychosocial functioning of young adults who have experienced and recovered from major depressive disorder during adolescence. *Journal of Abnormal Psychology*, 112, 353–363.
- Lippman, L., Moore, K. A., Guzman, L., Ryberg, R., McIntosh, H., Ramos, M., ... Kuhfeld, M. (2014). Flourishing children: Defining and testing indicators of positive development. Dordrecht, Netherlands: Springer.
- Lópéz-Perez, B., Sánchez, J., & Gummerum, M. (2016). Children's and adolescents' conceptions of happiness. *Journal of Happiness Studies*, 17, 2431–2455.
- Luhmann, M., Necka, E. A., Schonbrodt, F. D., & Hawkley, L. C. (2015). Is valuing happiness associated with lower well-being? A factor-level analysis using the valuing happiness scale. *Journal of Research in Personality*, 60, 46–50.
- Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? Psychological Bulletin, 131, 803–855.
- Lyubomirsky, S., & Lepper, H. S. (1999). A measure of subjective happiness: Preliminary reliability and construct validation. Social Indicators Research, 46, 137–155.
- Mauss, I. B., Tamir, M., Anderson, C. L., & Savino, N. S. (2011). Can seeking happiness make people unhappy? Paradoxical effects of valuing happiness. *Emotion*, 11, 807–815.
- Mauss, I. B., Savino, N. S., Anderson, C. L., Weisbuch, M., Tamir, M., & Laudenslager, M. L. (2012). The pursuit of happiness can be lonely. *Emotion*, 12, 908–912. 10.1037/a0025299.
- McMahan, E. A., Choi, I., Kwon, Y., Fuller, J., & Josh, P. (2016). Some implications of believing that happiness involves the absence of pain: Negative hedonic beliefs exacerbate the effects of stress on well-being. *Journal of Happiness Studies*, 17, 2569–2593.
- Mezulis, A. H., Abramson, L. Y., Hyde, J. S., & Hankin, B. L. (2004). Is there a universal positivity bias in attributions? A meta-analytic review of individual, developmental, and cultural differences in the self-serving attributional bias. *Psychological Bulletin*,

- 130, 711-747.
- Mischel, W., Shoda, Y., & Rodriguez, M. L. (1989). Delay of gratification in children. Science, 244, 933–938.
- Miyamoto, Y., & Ma, X. (2011). Dampening or savoring positive emotions: A dialectical cultural script guides emotion regulation. *Emotion*, 11, 1346–1357.
- Pressman, S. D., & Cohen, S. (2005). Does positive affect influence health? *Psychological Bulletin*, 131, 925–971.
- Ramsey, M. A., & Gentzler, A. L. (2015). An upward spiral: Bidirectional associations between positive affect and positive close relationships across the life span. *Developmental Review*, 36, 58–104.
- Romero, C., Master, A., Paunesku, D., Dweck, C. S., & Gross, J. J. (2014). Academic and emotional functioning in middle school: The role of implicit theories. *Emotion*, 14, 227–234.
- Schooler, J. W., Ariely, D., & Loewenstein, G. (2003). The pursuit and assessment of happiness can be self-defeating. In J. C. I. Brocas (Ed.). *The psychology of economic decisions* (pp. 41–70). Oxford: Oxford University Press.
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In M. P. Zanna (Vol. Ed.), Advances in experimental social psychology. Vol. 25. Advances in experimental social psychology (pp. 1–65). San Diego, CA: Academic.
- Seligman, M. (1991). Learned optimism. New York, NY: Simon & Schuster Inc.

- Substance Abuse and Mental Health Services Administration (SAMHSA) (2012). Results from the 2011 National Survey on Drug Use and Health: Summary of National Findings. NSDUH Series H-44, HHS Publication No. (SMA) 12-4713. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Thompson, R. A. (1994). Emotion regulation: A theme in search of definition. Monographs of the society for research in child development. 59. Monographs of the society for research in child development (pp. 25–52).
- Thompson, R. J., Kircanski, K., & Gotlib, I. H. (2016). The grass is not as green as you think: Affect evaluation in people with internalizing disorders. *Journal of Affective Disorders*, 203, 233–240.
- Tsai, J. L., Knutson, B., & Fung, H. H. (2006). Cultural variation in affect valuation. Journal of Personality and Social Psychology, 90, 288–307.
- Weissman, M. M., Orvaschel, H., & Padian, N. (1980). Children's symptom and social functioning self-report scales: Comparison of mothers' and children's reports. *Journal* of Nervous and Mental Disorders, 168, 736–740.
- Weissman, M. M., Wolk, S., Goldstein, R. B., Moreau, D., Adams, P., Greenwald, S., ... Wickramaratne, P. (1999). Depressed adolescents grown up. JAMA, 281, 1707–1718.
- Zhou, H., & Fishbach, A. (2016). The pitfall of experimenting on the web: How unattended selective attrition leads to surprising (yet false) research conclusions. Journal of Personality and Social Psychology, 111, 493–504.