Effect of Gratitude on Subjective Well-Being among Children

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Abstract

A total of 127 2nd - 4th graders were randomly assigned to 10 days of journaling in either a Gratitude, Hassles, or control (i.e. Free-write) condition to investigate if the happiness (i.e. subjective well-being, SWB) of the Gratitude journalers would increase more than it would for students who maintained a contrasting affect or control journal. SWB measures were satisfaction with life (SWL), positive affect (PA), and negative affect (NA). Mean SWB tended to change in the predicted direction; however, these changes were inconsistent and did not vary significantly by condition.

Gratitude journalers’ SWL increased for girls and decreased for boys. NA reducing benefits of Hassle journaling were greater for girls. Three of four Gratitude journalers expressed a positive emotional impact from journaling. Unexpectedly, so did three-fifths of Hassle journalers. Although underlying reasons varied, they help explain the insufficient differentiation in affect by condition. Journal entries indicated one-tenth of both the Gratitude and Hassle journal content was not indicative of intended affect. Affect prompts were effective but imperfect. Affect changes attributed to condition were likely confounded by limitations of the induction method.

Reasons for the inconclusive main findings may include students’ age and the brevity of the intervention. Given the innocuous, child-centered nature of the intervention, and its fit with educational methods, there may be a role – primarily for girls - for gratitude journaling to enhance SWL and for hassles journaling to decrease negative affect. Journaling about negative, self-selected, or salient emotions may reduce negative affect, thus enhance SWB as effectively as journaling about positive emotions.
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Emergence of positive psychology

There is a shift in interest among some psychologists from investigating the negative emotions associated with psychopathology to identifying the positive emotions associated with a positive psychological status (Emmons, 2006). This area of research interest, known as positive psychology, focuses on understanding and fostering the potentially unique factors, including positive emotions, which promote optimal individual and societal development (Seligman & Csikszentmihalyi, 2000; Seligson, Huebner & Valois, 2003). A correlation between positive emotions and individual or societal development seems so rudimentary that it hardly merits empirical attention. Indeed, investigators that have explored this relationship empirically have clearly found that a predominance of positive emotions over negative emotions is associated with well-being (Diener, Sandvik & Pavot, 1991). However, even more promising research results indicate that positive emotions not only correlate with psychological and relational well-being, but that they play a pivotal role in their causation (Fredrickson, 2005; Lyubomirsky, King & Diener, 2005).

A variety of explanations for this causal role have been proposed. Isen (1987) suggests that positive emotions enlarge people’s thought context for behavior. In essence, people can conceptualize a broader array of behavioral options when in a positive emotional state. Lyubomirsky, King, and Diener (2005) conducted a meta-analysis of results from over 200 investigations into the correlates and outcomes of positive emotions. Based on this research, they contend that positive emotions “produce the tendency to approach rather than to avoid and to prepare the individual to seek out and
undertake new goals” (p. 804). They suggest that people who experience frequent positive emotions are more successful in life for two reasons. The first reason is that their predominantly positive affective state predisposes them to think, feel, and act in ways that promote resource building and goal attainment. The second reason is that their history of being in this positive state has built for them a repertoire of skills and resources upon which they draw throughout life. Their explanation fits well with the Broaden-and-Build Theory of Positive Emotions (Fredrickson, 2001).

According to Fredrickson, experiences of positive emotion serve to broaden people’s habitual mode of thinking and acting (i.e. their thought-action repertoires). This broadening builds their enduring psychological, intellectual, physical, and social resources; and, hence their overall well-being. Conversely, negative emotions seem to be associated with thought-action tendencies that are narrowed. Negative emotions do not build personal or social resources. For example, anger seems to trigger the tendency toward aggression and fear is associated with flight. Although these response tendencies may be necessary or adaptive, Fredrickson contends that they concomitantly narrow people’s thought-action repertoires. Positive emotions tend to evoke response tendencies that build personal resources. The results of many experimental studies support this contention: joy leads to creative play and enhanced social resources (Fredrickson, 2004), happiness triggers kindness (Otake, Shimai, Tanaka-Matsumi, Otsui & Fredrickson, 2006), and interest piques exploration and builds intellectual resources (Csikszentmihalyi & Rathunde, 1998).
**Gratitude: A Positive Emotion**

Although it has been studied much less frequently than other positive emotions, recent research into the emotion of gratitude is revealing its clear association with optimal individual and social development (Emmons, 2007; Wood, Joseph & Linley, 2007). Gratitude has been defined as a “felt sense of wonder, thankfulness, and appreciation for life. It can be expressed to others as well as to impersonal (nature) or nonhuman sources” (Emmons & McCullough, 2003, p. 377). Perhaps because of the complex nature of gratitude, it is difficult to classify. It has been conceptualized as a virtue, a moral affect, a personality trait, and as an emotion (Wood, Joseph & Linley, 2007).

As a virtue, gratitude was considered by Cicero to be not only the greatest one, but the parent of all the others. The nurturing of gratitude, particularly among children, has been a societal goal for eons. It is a virtue that engenders a sense of unmerited favor or an obligation to reciprocate (Emmons & Kneezel, 2005).

Gratitude has been conceptualized as one of the moral affects, such as empathy and guilt. The moral affect of gratitude has three functions. As a moral barometer, it is a response to the perception that one has benefited from another’s good actions. As a moral motive, it motivates prosocial beneficence. As a moral reinforcer, its expression encourages future moral behavior of the benefactor (McCullough, Kilpatrick, Emmons & Larson 2001). The moral motive function of gratitude may explain the clearly consistent relationship found between grateful affect and positive social relationships (Wood, Joseph & Linley, 2007).
Gratitude has also been classified as a dispositional or personality trait (Wood, Maltby, Stewart, Linley & Joseph, In press). Watkins (2004) recently examined the link between trait gratitude and state gratitude and proposed a social cognitive model. They contend that upon receipt of help, people make various attributions regarding the nature of the aid. These attributions combine to form a benefit appraisal. Persons high on the trait of gratitude will tend to make a more positive benefit appraisal. Ultimately, it is the persons benefit appraisal that triggers the emotional state of gratitude. There has been a recent increase in two parallel streams of research on gratitude as a trait: one stream using the term appreciation, the other stream using the term gratitude. However, regardless of the terminology and assessment instruments used, both constructs have been shown to be conceptually and theoretically convergent (Wood, Maltby, Stewart & Joseph, 2008).

As an emotional state, gratitude has been defined as a person’s affective experience upon realization of their receipt of some positive outcome from an external source (McCullough, Kirkpatrick, Emmons & Larson, 2001). It is an attribution-dependent state that results from a person’s recognition that they have received something positive from a benefactor that may or may not have been earned. It is the appreciation of an altruistic gift (Weiner, 1985).

Fredrickson contends that the emotion of gratitude fits the Broaden-and-Build Theory of positive emotions (2004) as it seems to broaden people’s habitual mode of thinking and acting. Gratitude has been associated with generalized reciprocity (Komter, 2004; McCullough, Kilpatrick, Emmons, & Larson, 2001), reciprocal altruism (McCullough & Tsang, 2004), and effortful helping behavior even when this behavior was not directly beneficial to the helper, i.e. it was hedonically costly (Bartlett &
Gratitude is also associated with enhanced personal psychological resources. It has been associated with optimism, joy, and resilience (Emmons, 2007; Emmons & McCullough, 2003).

**Happiness: Definition and Measurement**

Whether it is classified as an emotional trait or state, one of the most robust correlates of grateful thinking is happiness (McCullough, Emmons & Tsang, 2002; Park, Peterson & Seligman, 2004; Watkins, 2004). Despite the strength and consistency of its relationship with gratitude, happiness is another construct whose definition and measurement are still debated (Emmons, 2006). According to Diener (1984) in his classic review of the topic, happiness encompasses both cognitive judgments and affective reactions. Happiness, a term Diener uses interchangeably with subjective well being (SWB), is usually conceptualized to encompass two elements. One element is positive affect as defined by a general subjectively determined predominance of positive affect over negative affect (Bradburn, 1969). This element of SWB has often been measured with affect scales.

The other element of SWB is referred to as satisfaction with life (SWL). This element has been defined as a judgmental evaluation of life that people make when they consider their life in general (i.e. global) or within specific domains of life that have personal relevance (i.e. domain specific). These domains can include family, environment, school, social relations and self. SWL is commonly measured with response options that range from very negative, through neutral, to very positive (Seligson, Huebner, Valois, 2003). SWL primarily measures the cognitive component of SWB. It may be influenced by affect but is not inherently a direct measure of emotion.
SWB is more frequently operationalized as life satisfaction than as affective state, perhaps because the former tends to provide a more global appraisal of well-being than does the latter (Diener, 1984). Additionally, positive and negative emotions typically vacillate while a judgment of overall life satisfaction may provide a measure of overall well-being that is more stable and less prone to emotionally reactivity (Huebner, 2004). Although there is a correlation between life satisfaction and the regular experience of positive emotion state, there are also times when these two diverge, making the measurement of both ideal for research on SWB.

Happiness is Desired

Whether happiness has been measured as an emotion or a cognitive judgment, its’ importance to psychological health seems empirically and culturally undisputed. The pursuit of happiness is commonly accepted to be the primary focus of most people’s life (Freedman, 1978; Gilbert, 2006). A study of strategies that people use in this pursuit was done by Tkach and Lyubomirsky (2006). While their results revealed some effective strategies for increasing happiness, one strategy that was inversely related to happiness was thinking about what is wrong with life. This strategy can be conceptualized as the opposite of thinking about what is right with life, which is the essence of gratitude. Consequently, it is not surprising that investigators who have researched the effects of the regular practice of grateful thinking have found happiness as an outcome (Emmons, 2007).

Happiness and Gratitude are Linked

Gratitude is clearly related to happiness. Happy people tend to be grateful people (Emmons & Shelton, 2002). Park, Peterson & Seligman (2004) found that not only was
gratitude related to life satisfaction, but the strength of this relationship was surpassed by only two other of 24 personality traits which they measured: optimism and zest. This “suggests that gratitude can explain more variance in life satisfaction than such traits as love, forgiveness, social intelligence, and humour” (Wood, Joseph, & Linley, 2007 p1077). A study of over 12,000 subjects revealed that the character strength of gratitude was among the most robust predictors of life satisfaction (Peterson, Ruch, Beerman, Park & Seligman, 2007).

Researchers who have contemplated the relationship between gratitude and SBW have proposed several explanations. Gratitude may be associated with happiness since it seems to focus people’s attention toward the positive. For example, gratitude has been associated with a positive memory bias (Watkins, 2004). Wood, Joseph and Linley (2007) suggest that people who feel more grateful are more likely to notice when they receive support. Additionally, grateful thinking seems to counteract the law of habituation by serving as a reminder of how good life is (Frijda, 1988). Gratefulness has been confused with indebtedness. However, these two emotions are dissimilar. The former has a positive valence while the latter has a negative valence. Indebtedness occurs when the attribution of help from the benefactor is viewed as negative. This occurs when the benefactors’ aid is viewed as selfish, not altruistic, or demanding of reciprocity.

Another explanation is that gratitude enhances happiness because it draws people’s attention away from the negative. The practice of gratitude diverts attention from the upward social comparisons that accompany feelings of deprivation (McCullough, Emmons & Tsang, 2002). Since gratitude requires a focus on what is good,
it serves as an effective coping mechanism against stress and depression (Emmons & McCullough, 2003). People tend to have a characteristic level of happiness, termed a set-point, to which they inevitably return despite any fluctuations. People adapt to change by either overcoming negative life events or taking positive life events for granted (Fujita & Diener, 2005). People’s intentional practice of focusing on things for which they are grateful has been shown to slow the downward adaptations that return people to their happiness set-point (Emmons, 2007).

A third explanation for the relationship between gratitude and happiness centers on the social benefits of gratefulness. Gratitude enhances the perception and quality of social relations. It has been associated with good interpersonal relationships and a sense of connectedness to community (Emmons & Shelton, 2002). Gratitude seems to decrease the experience of a variety of negative emotions toward others such as resentment, envy, and regret that tend to decrease well-being (Roberts 2004). It plays a crucial role in the establishment and maintenance of social relations. Komter (2004) considers expressions of gratitude and positive reciprocity to be the very core of social relationships. Wood, Joseph and Linley (2007) suggest that “grateful people may see the social world through a ‘rose-coloured lens’, perhaps seeing help they are given as more valuable, costly and altruistic, with strong implications for the quality of their social relationships” (p. 21).

Although gratitude has been associated with well-being because of positive affect (Weiner, 1985), it is more than mere positive affect. Watkins (2004) contends that both a grateful disposition and grateful behaviors serve to enhance the elaboration of positive information that exists in memory. In essence, memories of feeling thankful about a received benefit are recalled more markedly and positively than are memories of
something that was merely pleasant. Grateful emotions increases positive behavior even when generalized positive affect is low (Bartlett & DeSteno, 2006)

The Gratitude-Happiness Link is Important for Children

Almost all of previously cited studies on gratitude and subjective well-being have been conducted with adult subjects. Research on the correlates, predictors and outcomes of life satisfaction among children has, until recently, been limited by the lack of valid and reliable instruments that were developmentally appropriate (Suldo, Riley & Shaffer, 2006). This is disconcerting since the importance of SWB among children has been well documented (Weissberg, Kumpfer & Seligman, 2003). For example, children who are happier have been found to have fewer symptoms of depression and anxiety (Gilman & Huebner, 2003).

There are several reasons to justify the study of the benefits of gratefulness on SBW among children. For one reason, children in contemporary society may have a greater need for self-directed SWB-enhancing tools than did children in earlier generations. Children’s SWB seems to function to enhance resilience by moderating the effects of stressful life events among youth (Huebner, Seligson, Valois & Suldo, 2006). Given the steadily decreasing rates of family stability (Coontz, 1997), the SWB enhancing benefits of gratitude could be marked for children.

Another reason to study gratitude specifically among children is that they are affected by different domains of life than are adults, particularly the school domain. The majority of SWB research that has been done with children has focused on the life domains related to family and self. Yet, Huebner (2004) found that among all the domains of children’s life, SWB was most strongly associated with success in the school
functioning domain. Suldo, Riley and Shaffer (2006) reviewed the research literature specifically within this domain. They conclude that students who perceive themselves as competent academically, believe that their teachers are caring, and evaluate their school experience as positive are highly satisfied with life. These findings are important given the increased attention given to promoting school functioning, the increased social pressure for children to excel academically, and the amount of time children spend in the school environment. (Coontz, 1997; Huebner, 2004).

A third reason to study gratitude among children relates to where they are at chronologically and developmentally in their lifespan. Positive behaviors started early in life can help the child reap any benefits for many years. Consequently, ways to enhance SWB among children that are non-invasive, inexpensive, easy to implement, and within the control of the child – such as grateful thinking – are arguably more important during childhood than during adulthood even though the degree to which young children can attribute beneficence (a prerequisite to experiencing gratitude) is not known.

Starting early in infancy, people develop internal models to conceptualize and explain social relationships. These models have a strong impact on the quality of people’s social relations and become quite stable relatively early in life: arguably after late adolescence (Thompson, 1999). With grateful behavior being so clearly associated with good social relations, encouraging gratefulness early in life can potentially benefit the child for many years. Positive affect enhancing behaviors that are implemented in childhood have a greater impact on the person’s life because of how these positive behavioral experiences provide a constantly growing experiential base for future behavioral experiences (i.e. compounding) (Lyubomirsky, King, & Diener, 2005).
Review of Gratitude and Happiness Research

As important as is the link between well-being and positive emotions, particularly gratitude, most of the relevant studies to date have used non-experimental designs. Fortunately, there have been studies that have used an experimental design to elicit positive emotions in order to determine if its’ activation is associated with increases in well-being. In a recent intervention, a sample of college students was assigned to either a control or an experimental group. Members of the experimental group were requested to notice and count the daily number of acts of kindness they did for a week. Members of both groups were administered a measure of subjective happiness both one month prior to and one month after the intervention. Despite the simplicity and brevity of this intervention, subjects in the experimental group reported increases in happiness and gratefulness (Otake, et al, 2006).

Stone and Watkins (2001) conducted a study to examine if elicitation of the specific emotion of gratitude resulted in elevation of overall positive affect. University students were randomly assigned to either a control condition or one of three gratitude conditions. The control condition students were asked to write about their living rooms. In two of the gratitude conditions, subjects were asked to either write about someone to whom or for whom they were grateful. In the third grateful condition, students were asked to write a letter of gratitude to someone. Both prior to and immediately after the experiment, the students completed a measure of affect known as the Positive and Negative Affect Scale (PANAS) which contains 10 positive affect measures and 10 negative affect measures that are each rated on Likert-type scales. Overall, students in any of the grateful conditions experienced a greater increase in positive affect than those
in the control condition. These findings suggest that encouraging people to contemplate and write about the beneficence of someone results in enhanced happiness.

In a review of research on SWB and gratitude, Watkins (2004) contrasts the strengths of the findings from this study with a previous study he had done with different results. The earlier study requested students to think about anything for which they felt grateful. However, the results indicated no significant increase in positive affect. Based on the findings from both of these studies, Watkins conjectures that thankfulness for relationships and social experiences (as done in the second study) is more related to mood elevation than thankfulness for anything of a material nature (as done in the earlier study).

In a more recent study, gratitude was elicited by counting and journaling blessings. Emmons and McCullough (2003) assigned undergraduate students to one of three experimental conditions: blessings, hassles, or control. Participants in each condition were requested to write in a journal once a week for a period of 10 weeks. Subjects in the gratitude condition were to journal up to five things for which they felt blessed during that week. Subjects in the hassles condition were to journal up to five things in their journal five things for which they felt irritated. Subjects in the control group were to journal up to five events or circumstances that affected them. Both prior to starting the project and each week after completing their journals, the participants completed ratings of their mood and global life appraisal. Mood was assessed with an instrument that included 30 affect terms. Twenty-seven of these terms were from PANAS. Three additional affect terms were added to capture the grateful affect: thankful, grateful, and appreciative. Subjects were to rate the extent to which they had experienced
each emotion during the past week using a scale from 1 (not at all) to 5 (extremely). Global life appraisal was measured on a scale from -3 (terrible) to +3 (delighted). After 10 weeks of the intervention, participant scores on each of the 30 affect measures that were taken from the 9 weeks of journaling were aggregated as follows: A mean weekly gratitude score was calculated from a composite of the scores on the three gratitude adjectives; Composite scores for positive affect and for negative affect were also calculated. A one-way ANOVA was conducted with the 9-week gratitude rating as the dependent variable and the three conditions as the independent variable levels.

Results indicated that, overall, the three conditions did elicit significantly different levels of gratitude. Gratitude increased in the blessing group and decreased in the hassles group. Effect size was calculated for each condition. Results indicate that the size of the decrease in gratitude among the hassles group was comparable to the size of the increase in gratitude among the blessings group. Changes in positive or negative affect were not statistically significant in any of the conditions. Participants in the grateful condition had a significant increase in rating of overall life satisfaction as compared to participants in the two other groups. The authors suggest that the positive but only modest improvement in affect among the gratitude journaling groups may have been attributable to the mundane nature and short time period of the intervention. In order to strengthen the effect of the intervention, they designed a second study in which participants were to journal for a shorter (two weeks) but more frequent (daily) schedule.

The second sample also consisted of undergraduate students. They were each given a packet of “daily experience rating forms” which they were to complete for two weeks. The blessings and hassles groups were the same as in the prior study. However,
the third group in this study was not instructed to journal life events but to journal downward social comparisons (e.g. ways in which you are better off than others). Each day the participants were instructed to rate their mood on the same affect scale as used in the prior study. In this second study, participants were also asked to indicate each day with a “yes” or a “no” if they have helped someone with a problem or offered someone emotional support. These two items were designed to measure prosocial behavior.

The affect data were aggregated and analyzed as they were in the prior study. The main effect for condition on mean gratitude was statistically significant. Post hoc tests revealed that the subjects in the gratitude condition felt significantly more gratitude than did the subjects in the hassles condition. Effect size calculations indicate that, relative to the social comparisons condition, the gratitude and hassles conditions had nearly equal yet opposite effects on gratitude. Unlike the results from the prior study, results from this study indicated that people in the grateful condition experienced significantly more positive affect than did people in the hassles condition.

Negative affect did not change significantly during the study for participants in any condition. Participants in the gratitude condition were also more likely than the other participants to report having offered emotional support to others and having helped someone with a problem, although only the results from emotional support item were statistically significant. Based on a comparison of these findings to those from the prior study, the authors suggest that journaling of blessings does enhance both gratitude and overall positive affect, particularly if the journaling is done frequently if not daily. They also suggest that prosocial behavior is enhanced by the induction of gratitude. They
contend that these findings are noteworthy given the simplicity of the intervention and the brevity of the intervention period.

The goal of a study done by Seligman, Steen, Park and Peterson (2005), was to compare the effects of several mental exercises on happiness and depression. The eventual sample of 411 adult participants was drawn from solicitation of visitors to a Website created for one of the authors’ book on exercises to enhance happiness. Participants were asked to complete a one-week, Web-based activity designed to increase happiness. They were also told to expect to complete follow-up surveys at one week, one month, three months and six months after the exercise. Participants were randomly assigned to one of six conditions. In the placebo condition, participants wrote of early memories each night for one week. In the “Gratitude visit” condition, participants were to write and deliver a letter of gratitude to someone before the week elapsed. In the “Three good things” condition, participants were to daily write about three things that went well for them that day. In the “You at your best” condition, participants were to compose a description of their best strengths and review it daily. In the “Use strengths in new way” condition, participants were to identify their personal strengths and try to apply them in a new way each day. In the “Identify strengths” condition, participants were to identify their personal strengths and try to use them more each day.

The researchers found that participants in two of the groups increased their happiness and decreased their depression all the way through the 6 month follow-up: “Use strengthens in new way” and journaling “Three good things”. Happiness increased the greatest in the “Gratitude visit” condition, but only up through the one month follow-
up. Interestingly, the two activities associated with most marked increased happiness involved either the theme of gratitude or the act of journaling about good things.

Sheldon and Lyubomirsky (2006) investigated the effect of two mental exercises on positive emotion. Sixty-seven undergraduate students were randomly assigned to one of three conditions for four weeks. One condition was a control in which participants were to contemplate the details in their daily life. The other two conditions were for mental exercises designed to increase positive affect. In one of the mental exercise conditions, participants were to spend time visualizing their “best possible selves” and ideal life outcomes (BPS). In the other mental exercise condition, participants were to contemplate the things in their life for which they can be grateful. Participants were instructed to perform their assigned exercise for 4 weeks using forms posted on-line. Participants also completed a mood questionnaire several times: prior to the intervention, immediately after the first exercise, 2 weeks after starting the intervention, and, again after the four weeks of the intervention were completed. The mood questionnaire used was the PANAS.

Results revealed a decrease in negative affect and an increase in positive affect associated with participation in the gratitude journaling. These changes were not statistically significant. However, the strength of these associations became more marked among those subjects who continued the exercises for 4 weeks as compared to 2 weeks. Based on these findings, the authors suggest a longer time period for the intervention. They recommend caution when using the PANAS to capture changes in positive affect related to gratitude induction since it is biased toward active measures of positive affect. The positive emotional outcomes of gratitude may be more subtle or gentle than they are
active. Consequently, these outcomes may not be captured by the terms incorporated into the PANAS. They suggest the use of quieter measures for positive affect when studying gratitude, such as “content”, “satisfied”, or “serene”.

**Review of Happiness and Gratitude Research Among Children**

As promising as are the results from the studies reviewed above, there has been a paucity of experimental research designed to examine whether gratitude affects happiness among children. One notable study was conducted by Froh, Sefick, and Emmons (2007). The authors’ goal was to investigate whether the positive outcomes associated with gratitude induction via journaling that was used by Emmons and McCullough (2003) could be replicated among a sample of children. Participants were from 6th and 7th grade classrooms which were randomly assigned to one of three conditions: gratitude, hassles or control. Students in the gratitude condition classrooms were asked to contemplate and then journal five things for which they were grateful since yesterday. Students in the hassles condition classrooms were to do the same except with hassles. These two groups were given time in class each day for two weeks to journal. Students in the control group condition did not journal. Students completed several measures: life satisfaction using the Brief Multidimensional Student’s Life Satisfaction Scale (BMSLSS), well-being using 30 affect terms drawn from both the PANAS and three related to gratitude, and prosocial behavior using the same items described above in the Emmons and McCullough (2003) study. These measures were also completed by all participants prior to the study, after the two weeks of intervention, and at a 3 week follow-up.

Data were aggregated in a manner similar to that used by Emmons and McCullough (2003). Data from the three gratitude affect terms were combined to create
daily composites of gratitude, as well as aggregates for the 8 days of journaling, the post-test and the follow-up. In a similar manner, composite scores were created for the positive affect measures and the negative affect measures. An overall life satisfaction composite was created by adding the five BMSLSS scales.

Results indicated an enhancement of positive affect with condition as the independent variable. However, these results were not statistically significant using positive affect as measured by either the 8 day aggregate, post-test or follow-up for the dependent variable. There was a significant main effect for condition when negative affect was the dependent variable. Follow-up tests indicated that negative affect was significantly lower among the gratitude condition as compared to the hassles or the control condition. This relationship was true for data from the 8 day aggregate, the post-test, and from the follow-up. These findings suggest that among the participants in the gratitude journaling groups, positive affect increased (although not enough to be statistically significant) and negative affect decreased.

The data from the life satisfaction scales were also analyzed. There was a significant main effect for global life satisfaction over the past few weeks with the mean life satisfaction for the hassles group ($M = 5.47, SD = 1.49$) being lower at post-test than was the mean for the gratitude ($M = 5.80, SD = 1.29$) or the control group ($M = 6.00, SD = 1.05$). Among the specific domains, only life satisfaction within the school domain had a significant main effect. The mean satisfaction with school experience was highest for the gratitude group and lowest for the hassles group both at post-test, $F = 4.00, df (2, 202), p < .05$, and at the 3 week follow-up. The relationship between condition and prosocial behavior was not significant. Based on these findings, the authors contend that
gratitude induction via journaling was related to heightened gratitude, less negative affect and enhanced well-being, particularly in the satisfaction with school domain. The authors state that encouraging children to focus on what they have in their life that is good according to their subjective assessment is an excellent way to enhance well-being (Froh, Sefick & Emmons, 2007).

*Reasons for Limited Research among Children*

Despite these findings, there are few other studies on eliciting gratitude as a means to enhance SBW among children (Gordon, Musher-Eizenmann, Holub & Dalrymple, 2004). This is particularly disconcerting since one method to do so – journaling – has been proven to be effective and simple to implement. Perhaps one limitation to working with children is that there is an element of attribution that is requisite to gratitude of which young children are not capable. For example, Gleason and Weintraub (1976) found that less than one-quarter of the children younger than 6 years expressed thankfulness to adults who gave them a sweet. However, the ability of children to attribute good intent from a benefactor, the emotion of gratitude, and a desire to express gratitude quickly develops in the early elementary school years (Weiner & Graham, 1988). Regardless, Gordon, Musher-Eizenmann, Holub & Dalrymple (2004) documented clear expressions of gratitude as journaled by children as young as 4 years of age, albeit the focus of the gratitude was more materialistic and egocentric in the younger years and became more relationship focused among the older children. Another limitation that has been addressed only recently was the lack of valid and reliable survey instruments that were appropriate with good psychometric properties with children.
Consequently, the purpose of the current study is to examine whether the relationship between gratitude induction and SWB enhancement that has been found among older children can be successfully extended into an even younger cohort of children. Study participants will be divided into one of three experimental conditions: gratitude, hassles (i.e. comparison group), or control. Their assigned condition will determine the focus of their journaling: those in the gratitude condition will journal about things for which they are thankful; those in the hassles condition will journal about irritants; and, those in the control condition will free-write.

The gratitude and hassles conditions were designed to replicate those used by Froh, Sefick, and Emmons (2007). They justified these conditions because counting blessings creates a focus on positive outcomes and counting hassles creates a focus on negative outcomes. Hassles are related to ongoing patterns of beliefs (Gruen, Folkman & Lazarus, 1988). Both hassles and blessings are frequently occurring, usually minor, and dependent on the individual’s appraisal. The contrast these conditions create enhances the ability to find any differences. Additionally, results from this study will be more readily comparable to their results. It is hypothesized that, after completion of a period of prompted journaling, the SWB of the students who maintain a gratitude journal will increase more than will the SWB of students who maintain a comparison (i.e. hassles) or control (i.e. freewrite) journal.

Methods

Participants

Two classrooms of students from each of the 2nd, 3rd, and 4th grade classes in a rural, midwestern public school were invited to be in the study. Two weeks prior to the
study, all students in these six classrooms were sent home with a letter seeking parental support for the study. The letter explained the purpose of the study and requested they sign and return the letter if they chose to withhold consent (Appendix E). Of the final sample of students, those children who also gave their personal assent to participate were the eventual study participants. This resulted in a final sample of 127 (out of 162 total possible, 78.4%) students in the study, who ranged in age from 7 to 11 years ($M = 9.12$ years, $SD = 1.07$ years). These students were about equally divided by gender with 60 (47.2%) girls and 67 (52.8%) boys and by grade with 43 (33.9%) in 2nd grade, 42 (33.1%) in 3rd grade, and 42 (33.1%) in 4th grade.

Materials

Student Survey

The Student Survey was composed of three demographic items (i.e. gender, grade and age) and the SWB measures of Satisfaction with Life (SWL), positive affect and negative affect. Written content was evaluated using the Flesch-Kincaid method. Results of this evaluation indicate a reading level of 4th grade with a confidence interval of plus or minus 1.5 grade levels. The survey was administered orally to the children in order to decrease the reading comprehension level by two grades (Burns, Roe & Ross, 1996). The Student Survey had a cover sheet for the participant’s name. Upon completion of the Survey, the teacher discarded this sheet and substituted it with a unique code for each child. The Survey was used for both the pre-test and the post-test.

Affect Measure. A scale that is adapted from the PANAS for children (PANAS-C; Watson, Clark & Tellegen, 1988) was developed for this study to measure the affect component of SWB. The PANAS-C was modified from the original PANAS to a middle
childhood reading and comprehension level. It is composed of 15 positive affect terms (i.e. interested, alert, excited, happy, strong, energetic, calm, cheerful, active, proud, joyful, fearless, delighted, daring and lively) and 15 negative affect terms (i.e. sad, frightened, ashamed, upset, nervous, guilty, scared, miserable, jittery, afraid, lonely, mad, disgusted, blue, and gloomy). The PANAS-C has demonstrated good convergent and discriminant validity among 4th-8th grade subjects (Laurent, et al., 1999).

The PANAS-C has been further adapted for the current study to address two limitations. One limitation was that the terms used in the PANAS-C may not capture the appropriate activation level of positive emotions that seem to be associated with gratitude. Laurent, et al (1999) contends that positive emotions have an energizing effect that is associated with heightened activity. The PANAS was designed to measure this activation. However, Russell and Carroll (1999) contend that positive affect can also be described with terms that still imply pleasantness but with medium or low activity. They recommend inclusion of positive affect terms that imply lower activity when merited by the research topic. For example, “pleased” and “content” can describe medium activity and serve as semantic opposites to “unhappy” and “miserable”; and, “serene” and “tranquil” can describe low activity and serve as semantic opposites to “nervous” and “upset”. Sheldon and Lyubomirsky (2006) have suggested that the impact of gratitude elicitation on affect may be more pronounced if positive emotion is measured with “quieter” terms such as content, serene, and satisfied. Another limitation to the use of the standard PANAS-C for the purposes of this study was that the terms may not capture the emotions uniquely associated with gratefulness. In related research, Emmons and
McCullough (2003) used some of the PANAS terms but added 3 terms specific to gratefulness: gratitude, thankfulness and appreciative.

Due to the lack of relevant research studies among such a young age group, a brief pilot study was conducted with a convenience sample of the target population to identify which affect terms they would spontaneously list as outcomes to a gratitude induction prompt. Two 2nd grade classes from the study population were selected: one with 23 students, the other with 18 students. Two months prior to the commencement of the study, the teachers of these two classes requested their students to quietly think of one or two people for whom they felt grateful. After a quiet moment, the teacher asked them to describe what they felt on a piece of paper. These papers were collected and sent to me for review. A review of the responses revealed that all 41 students wrote at least one emotion on their paper. Probably because the students had not been instructed to limit their responses, 8 students listed more than one emotion. All the emotions listed and their frequency of citation are as follows: “happy” (19), “good” (10), “grateful/thankful” (7), “friendly” (4), “sad” (3), “attached/close” (2), “forgiving” (1), “fun” (1), “laughing” (1), and “nothing” (1). These findings not only support the importance of including a variety of positive affect terms at different activation levels but also a gratitude-specific term (i.e., grateful) and several social affect terms (i.e., friendly, forgiving, attached).

In consideration of these limitations and the findings from the pilot study, a modified version of the PANAS-C was used in this study. This version contained three terms for lower activation levels of positive affect: “secure” and “peaceful” for low activation; and, “content” and “hopeful” for medium activation. To capture the positive emotion of gratitude, the term “thankful” is included. Although Emmons and
McCullough (2003) also used “appreciative” in their study, it will not be in the current instrument as this term and “gratitude” – as these terms are commonly conceptualized and measured – may be theoretically redundant (Wood, Maltby, Stewart & Joseph, 2008).

In order to further explore the social affect terms that were given by the students in the pilot test, “friendly”, “forgiving”, and “attached” have been added. Several terms from the original PANAS-C are eliminated due to their readability level. Additionally, the term “fearless’ was eliminated since it is structurally based on a negative affect term. Marsh (1986) has demonstrated that a tendency to misinterpret these types of items is a cognitive-developmental phenomenon that exists among students at least through 2nd grade.

In summation, the final list of 25 terms in the affect measure was composed of 16 positive and 9 negative affect terms (See Appendix A). As per standard procedure with the PANAS-C, the respondent rates each of these terms five point Likert scale (1 = “very slightly or not at all” to 5 = “extremely”) as to the extent to which they have felt that feeling during an instructed time period. The summed Positive Affect (PA) score for each student could range from a low of 16 to a high of 80. The summed Negative Affect (NA) score could range from a low of 9 to a high of 45. The instructed time frame was “the past few weeks”.

*Satification with life measure.* Life satisfaction was measured with a developmentally appropriate scale known as the Brief Multidimensional Student’s Life Satisfaction Scale (BMSLSS). This scale is composed of five questions, one for each of the following life domains of importance to youth: family, school, friends, self, and living environment (Huebner, 1994). Response options are derived from the 7 point Delighted-
Terrible Scale (Andrews & Withey, 1976): terrible, unhappy, mostly dissatisfied, mixed, mostly satisfied, pleased, and delighted. When summed, these domain specific scores provide a measure of global life satisfaction with values that can range from a low of 5 to a high of 35. Acceptable results for internal consistency reliability, criterion-related validity, construct validity, convergent validity, and discriminant validity have been documented among children age 8 to 18 years (Huebner, Seligson, Valois & Suldo, 2006; Seligson, Huebner & Valois, 2003).

Due to the young age of the participants, two modifications to the BMSLSS were made for the current study. One modification was a decrease in the scale response options from a 7 point to a 5 point spread by removing the “mostly dissatisfied” and “mostly dissatisfied” response options. Consequently, the resultant responses can only range up to a revised upper limit of 25. Another modification was to add pictures of faces, taken from the Faces Pain Scale (Wong & Baker, 1998), that represent each response option.

**Student Journals**

Each student participant was given a uniquely coded folder to serve as his or her journal. The journals contained two items: an instruction sheet to serve as a reminder to the student of how they are to journal; and, an attached stack of lined pages, titled Day 1 – Day 10, for their written responses. Journals were colored yellow, blue, or green to indicate the respective experimental condition: gratitude, hassles, or control.

**Procedures**

One week prior to the study, one of the teachers took the final list of participating students from each class. She consecutively assigned each student to one of the three experimental conditions. Based on this process, there were 45 (35.4%) of the students in
the Gratitude condition, 42 (33.1%) of the students in the Hassles condition, and 40 (31.5%) of the students in the Control condition.

Each participating student was given a unique 5 digit code to indicate: experimental condition (i.e. 1=gratitude, 2=hassles, and 3=control), grade, classroom, and student number. Codes were assigned for purposes of the study to preserve the confidentiality of the child’s responses. The teacher was the only person able to connect the child’s name with their code. The researcher took the final list of codes and used it to numerically label the journals. Non-participating students were not assigned a code but were given a control journal. The teachers requested this arrangement to ensure that those children would not feel ostracized during the journaling periods. The journals of these students were not collected by the researcher.

On the school day prior to commencement of journaling (hence “Pre-test Day”), the researcher went to the classroom to explain the study procedures, administer the Student Survey, and explain the journaling process. Upon her arrival, the teacher invited the students to be in a study that was designed to find out if the things that happen in children’s lives affect their feelings. To participate, she explained they would first take a brief survey, then spend a few weeks in class writing about their thoughts and feelings in a journal. After this time, the teacher would collect the journals and they would take another survey. The teacher reminded the students that it was okay for them to stop being in the study at any time they so chose.

Next, the researcher introduced herself and administered the Pre-test Survey by reading it aloud to them using a standardized protocol (Appendix C). Once the surveys were collected, the teacher discarded the survey cover sheet and substituted it with the
student’s code on the Survey. As was being done, the researcher explained to the class that, on the next day, their teacher was going to hand them each their own journal in which they would be writing for the study period. Students would get either a yellow, blue or green journal. What they were to write about in their journal depended upon the color of their journal. She answered any student questions. Finally, she left the classroom with the student code list and the coded Pre-test Surveys from the teachers.

On the following school day, the teacher distributed the journals using standardized scripts to explain the writing procedures. Students with yellow journals (i.e. the gratitude condition) were instructed to think about and journal things for which they were grateful in the past couple days using the following instructions: “There are many things in our life that we might be grateful about. Think back over the past couple days and write on the lines below things that you are grateful for.” They were not specifically guided to contemplate material things for which they were thankful since Watkins (2004) contends that people tend to be more grateful for experiences and relationships than for material blessings. Students with blue journals (i.e. the hassles condition) were to think about and journal things for which they felt hassled in the past couple days using the following instructions: “Hassles annoy you or make you feel bad. Think about things or people who have hassled you in the past couple days. Write about them in your journal.” Students with green journals were to use their journals to free-write using the following instructions: “Spend a moment thinking about something you would like to write about. Use the pages to free-write.” She explained that these same instructions were written on the inside cover of their journals as a reminder. She allowed time for any student questions. Prior to leaving the classroom, the researcher gave the teacher the pre-coded
journals and a list of standardized scripts and protocols to explain the study methods and answer any student questions during the study (Appendix D). Teacher utilization of this information standardized the protocol and decreased the demand characteristics.

After the three week journaling period, the researcher returned to administer the Post-test Survey. After the students completed the Post-test Survey, the researcher asked the students to write a few comments about how they felt about the journaling project on the back of their Survey. The teacher collected the completed Surveys, replaced the cover sheet with the students’ code and gave them to the researcher. The researcher thanked each class and provided a small gift to them and the teachers prior to leaving.

Results

Overview

The central hypothesis of this study was that, after completion of a period of journaling, the SWB of the students in the Gratitude condition would have increased more than would the SWB of students in both the Hassles condition (i.e. comparison group) and in the Control condition (i.e. free-write group) groups. Change in SWB was measured by the SWB survey which was given prior to the journaling period (Pre-test) and after the journaling period (Post-test). The resultant Pre- and Post-test Survey data were entered and analyzed in SPSS Version 13. Frequencies for each of the demographic variables were calculated. The remainder of the analysis of the survey data were done separately for the SWL data (from the BMSLSS) data and then for the PA and NA data (from the PANAS). Exploratory gender analysis was done within each of these data sets. Alpha was set at .05 for all analyses.
There were also two sets of qualitative data generated in the study. The first set was the brief comments (i.e. Comments) by the students on their feelings about the journaling project. These were written by the student on the back of their completed Post-test Surveys. The second set was the 10 days of content of the entries that students made in their journals during the three week study period (i.e. Journal Entries). This content was reviewed by two independent researchers and used to create a matrix to organize the data by two categories: the affective content of the entries (i.e. “Content”) and the subject to which/whom the content was related (i.e. “Subject”). After assessing inter-rater reliability, the two researchers used this matrix to analyze all the journal entries by experimental condition to investigate the nature of what the students wrote about in their journals and whether this writing varied based on which journaling prompts (i.e. experimental condition) they were assigned.

**Subjective Well Being: Satisfaction with Life**

The first measure of SWB that was analyzed was SWL. The mean and standard deviation were calculated for each of the five domain-specific SWL items on the BMSLSS both for Pre-test scores and for Post-test scores. As is evident in the results (See Table 1), the mean Pre-test survey scores on each of these items were extremely high (lowest overall domain-specific mean was $M = 3.44$) given that the highest possible response on the scale was a rating of 5 (indicating “Delighted”). Similarly, the overall mean Post-test survey scores were also high (lowest domain-specific mean was $M = 3.97$). The scores for the each student on all five SWL domain items was summed for both the Pre-test and the Post-test to create PreSWL and PostSWL, respectively. Then, a change score was calculated for each student by taking their PostSWL score and
subtracting from it their PreSWL score. For these resultant change scores (i.e. ChngSWL), a positive integer indicated an increase in overall SWL from Pre-test to Post-test while a negative integer indicated a decrease in overall SWL during the study period. A one-way, between subjects ANOVA was used to analyze differences between ChngSWL by condition. The mean differences in SWL between the Gratitude ($M = .22$, $SD = 3.48$), Control ($M = .42$, $SD = 3.22$), and Hassles ($M = -.88$, $SD = 2.43$) conditions were not statistically significant, $F(2, 114) = 2.00$, $p = .140$.

Subjective Well Being: Affect

The next two sets of SWB data were generated from the student’s survey responses: one from the positive affect (PA) items and one from the negative affect (NA) items. Student’s responses for each of the PA items were summed for both the Pre-test and the Post-test to create a total Pre-test positive affect (PrePA) score and a total Post-test positive affect (PostPA) score, respectively. The same procedure was done with the responses from the negative affect terms to create a total Pre-test negative affect (PreNA) score and a total Post-test negative affect (PostNA) score. These scores were used to calculate both PA change scores and NA change scores in the same way as was done with the SWL data.

Two separate, one-way, ANOVA tests were done to examine whether these differences in PA or NA change scores were statistically significant. For both tests, the dependent variable was affect change score and the independent variable was experimental condition. It was hypothesized that the enhancement of SWB among students in the Gratitude condition (as evidenced by an increase in PA and a decrease in NA) would be greater than among the students in the Hassles or Control conditions.
**Positive Affect.** The PrePA was subtracted from the PostPA to create a positive affect change score (i.e. ChngPA) for each student. Just as with the SWL change scores, a positive integer for ChngPA indicated an increase of positive affect from Pre-test to Post-test. Results indicated that the differences between the mean changes in PA between the Gratitude journalers \((M = -1.66, SD = 11.24)\), Hassles journalers \((M = -1.79, SD = 10.45)\), and Control journalers \((M = .23, SD = 10.11)\), were not statistically significant, \(F(2, 108) = .41, p = .667\).

**Negative Affect.** The same process that was done to create change scores for the PA data was done to create changes scores for the NA data (i.e. ChngNA). Similar to the interpretation of PA, a positive integer for ChngNA will indicate an increase in NA from Pre- to Post-test regardless of any adverse psychological consequences such a change might imply. This protocol was adopted to maintain a standardized procedure for the calculation and presentation of each SWB change score. Results indicated that the differences between the NA mean change scores of the Gratitude \((M = -.19, SD = 6.45)\), Hassles \((M = -2.24, SD = 5.84)\), and Control \((M = -3.39, SD = 8.13)\) conditions were not statistically significant, \(F(2, 108) = 2.05, p = .134\).

**Exploratory Gender Analysis**

The data from this study were split into three groups by experimental condition. Within each condition, the mean change scores for each of the three SWB data sets were split and analyzed separately by gender. For each of these ANOVA tests, the independent variable was experimental condition and the dependent variable was the SWB change score. This was done to explore whether the effects, within each specific journaling condition separately, were experienced differently for boys than for girls. In order to
examine these effects while statistically removing the influence of gender, the same
series of tests listed above where done but as an ANCOVA with gender as the covariate.

*Gender and Satisfaction with Life.* The change in SWL among students in each
condition was analyzed separately by gender. Among just the Gratitude condition
students, SWL increased among the girls ($M = 1.41$) about as much as it decreased
among the boys ($M = -1.16$) with this difference being statistically significant, $F(1, 39) =
6.30, p = .016$. Among just the Hassles students, the mean decreases in SWL among both
boys ($M = -1.19$) and girls ($M = -.53$) were not significantly different. Among just the
Control students, the mean SWL changes for girls ($M = 1.06$) and boys ($M = -.10$) were
not significantly different. In general, these gender-specific results suggest that gratitude
journaling may increase SWL among girls while it may decrease SWL among boys.
Finally, results of an ANCOVA indicated that although gender was significantly related
to change in SWL, $F(1, 113) = 7.15, p = .009$, experimental condition did not have a
significant effect on change in SWL after controlling for the effect of gender, $F(2, 113) =
2.094, p = .128$. Although gender differences were clearly associated with changes in
SWL, this change may not be attributable to journaling group.

*Gender and Positive Affect.* The change in PA among students in each condition
was analyzed separately by gender. Among just the Gratitude condition students, PA
tended to decrease for both girls ($M = -1.75$) and boys ($M = -1.56$). Among just the
Hassles students, PA also decreased for both genders although more markedly among
girls ($M = -3.05$) than boys ($M = -.53$). Among just the Control students, PA increased
almost as much for girls ($M = 1.87$) as it decreased for boys ($M = -1.16$). Although these
gender-specific results suggest that boys and girls may experience differences in how
their PA changes due to which journal they maintain, none of these differences were statistically significant. ANCOVA results indicated that gender was not significantly related to change in PA and experimental condition did not have a significant effect on PA change when effect of gender is controlled.

Gender and Negative Affect. The change in NA among students in each condition was analyzed separately by gender. Among just the Gratitude condition students, NA did not seem to change for girls ($M = .05$) or boys ($M = -.44$). Among just the Hassles students, NA decreased significantly more for girls ($M = -4.05$) than boys ($M = -.42$), $F(1, 36) = 3.97, p = .05$. Among just the Control students, NA decreased more for girls ($M = -5.94$) and than for boys ($M = -1.35$). In general, these gender-specific results suggest that NA is not much affected by gratitude or free-write journaling among boys or girls. However, Hassles journaling decreases NA significantly more for girls than it does for boys. Finally, ANCOVA results indicated that although gender was significantly related to change in NA $F(1, 107) = 3.95, p = .049$, experimental condition did not have a significant effect on change in NA after controlling for the effect of gender, $F(2, 107) = 2.315, p = .104$. Although gender differences were clearly associated with changes in NA, this change may not be attributable to journaling group.

Qualitative Data Analysis

The two sets of qualitative data were: the journaling Comments composed of brief student responses to a request for their thoughts and feelings about the journaling project; and, the Journal Entries which were taken from the written content of the student journals.
Qualitative Data Analysis of Comments. The purpose of the analysis of the Comments data was to help understand the SWB change data. Using SPSS Version 13, these data were entered as string data and were inputted within each individual student’s record. The content of the students’ brief comments on their feelings related to their journaling experience was reviewed. Each comment was categorized by experimental condition and by its’ relative positivity or negativity along the following scale: Positive, Mixed or Neutral, and Negative.

The majority of students did write comments: 45 (100%) of the 45 Gratitude condition students, 40 (95%) of the 42 Hassles condition students, and 38 (95%) of the 40 Control condition students. The majority of students in each experimental condition thought that their journaling experience was Positive as reported by, 34 (76%) of the Gratitude students, 24 (57%) of the Hassles students, and 29 (73%) of the Control students. For the Gratitude students, quotes included: “Awesome”, “Fun”, “Calm”, and “Delighted”. For the Hassles students, Positive quotes included: “Good to tell feelings”, “Happy. Got anger out”, “Very calm”, and “Nice to let out hassled feeling”. For the Control students, Positive quotes included: “Fun”, “Good and happy. I could write what I like”, “Good, got to share feelings”.

Overall, a smaller percentage of students in each condition expressed Mixed or Neutral feelings: 11% of Gratitude journalers, 12% of Hassles journalers, and 8% of Control journalers. Sample quotes among the Gratitude journalers were: “Fun but upset”, “Happy yet sad”, and “Good but I did not like it”. Sample quotes among the Hassles journalers were: “Good to get out feelings but hard”, “Happy, sad, confused”, “Good but
I did not like it”. Sample quotes among the Control journalers were: “Some scary and happy”, “No feel different” and “Mixed”.

Of the remainder of students who felt that their journaling experience was Negative, proportionately fewer were from the Gratitude condition (6, 13%) and the Control condition (5, 13%) than from the Hassles condition (11, 26%). Some Negative quotes from Gratitude students were: “Terrible, spies”, “Mad to share”, “Sad”, and “Uncomfortable”. Some quotes from Control students were: “Happy yet sad”, “Scary and happy”, “Glad and mad”. Some quotes from Hassles students were: “Make me think of too much of bad”, “Very stressed”, “Sad” and “Not want to tell of my home”.

Qualitative Data Analysis of Journal Entries. The first purpose of the analysis of the Journal Entries was similar to that of the previous Comments analysis: to explore the effectiveness of the journaling condition to elicit the target affect (i.e. Gratitude condition with positive affect, Hassles condition with negative affect, and Control condition with neither affect dominant). The second purpose was to add depth of understanding to the current SWB findings.

A preliminary review of the actual journal entries in the total of 127 students’ journals by two independent researchers resulted in a matrix of two categories. The first category (i.e. Subject) represented the subject to which the content was related and contained the following subcategories: Dad, Mom, Brother, Sister, Family, Pet, Friend, Peer, Teacher, Self, Uncle/Aunt, Cousin, Grandfather/mother, and Other. The second category (i.e. Affect) represented the affective content of the entries and contained the following three groups of subcategories. 1) Positive Affect subcategory: Interpersonal Positive, Beneficence, Intrapersonal Positive, Giving/Helping, Competence, and Physical

A thorough review of the 10 days of entries was conducted using this Affect by Subject Matrix and the following protocol. In each of the journals, once a unique Affect-by-Subject entry was journaled, one tally was entered in the related cell in the Matrix. If the writer journaled another entry within their journal that would be appropriately placed in the same cell, it was not recorded. Consequently, each tally in the matrix cells represents an expression by a given student of that Affect by Subject at any point in their journal, regardless of how many times this expression may have been repeated within their journal. This protocol was adopted to eliminate the risk of biasing the results due to writing style artifact (i.e. the risk that the responses of children who tend to write more or repeat their same thoughts would artificially inflate the frequency of that Affect by Subject cell within the whole study). Tallies were separated by experimental condition.

In order to calculate inter-rater reliability, the two independent researchers used the Matrix to code the journal entries of a randomly selected sample of 25 (20%) of the 127 completed journals as recommended by Cone and Foster (1993). Percent agreement for inter-rater reliability was 90.1%.

*Journal Entries analyzed with Affect by Subject Matrix.* The entries in each journal were coded using the Matrix. The cell frequencies were then totaled first for all the students then separately by experimental condition. The Affect by Subject content of the journal entries varied considerably by experimental condition.
Table 2 displays the Matrix cells which contained the five highest frequencies for each of the experimental conditions. These findings clearly indicate that journal entries of the Gratitude journalers were dominated by positive affect, particularly beneficence. These emotionally positive entries were most commonly related to their parents, but also to their self and their friends.

The affect reflected in the Control journals was predominantly positive or neutral and the Subject of their writing was their self: 4 of the 5 most common cells specified self as the Subject. Most of these egocentric expressions were positive or descriptive, although negative expressions were not uncommon. The only other Subject of high frequency was friends. The Hassles journalers clearly focused on negative Affect themes, although most of this negative affect was related to friends, siblings and parents and less to self.

**Affect Data condensed into a Trichotomy.** To further condense the data and facilitate a comparison of just the affective content of students’ journal entries by experimental condition, the data from the Affect categories were trichotomized into the Positive, Neutral, and Negative affect subcategories that are described above. As displayed in Table 3, almost all of the entries made by students in the Gratitude condition (221, 91.2% of the 250 total entries) did indicate Positive Affect. Almost all of the entries made by students in the Hassles condition (180, 90.5% of the 199 total entress) indicated Negative Affect. The majority of entries made by the students in the Control condition (116 of 200 total, 58.0%) indicated Positive Affect, with the remainder divided between Negative (24%) and Neutral (18%) Affect.
Discussion

**Subjective Well-Being**

*Satisfaction with Life (SWL).* Students’ satisfaction with life was measured by their ratings in five different life domains. In this study, the mean rating within each of these domains and the composite rating at the Pre-test was so high as to suggest a ceiling effect. Consequently, Post-test scores had very little numerical range within which to vary thus obscuring change in SWL. Perhaps this explains why, although the differences in change scores among the different journaling groups did tend to change in the hypothesized direction, the variance between groups was insufficient to be statistically significant.

Froh, Sefick and Emmons (2007) examined the effects of gratitude or hassles journaling among 6th and 7th graders on SWL as measured in this study with the BMSLSS. They found an increase in SWL among gratitude journalers and a decrease in SWL among hassles journalers. Although findings from the current study indicated similar trends in the data, the mean differences were not statistically significant. Perhaps one reason for the similar yet weaker findings in the current study was the developmental stage of the students. In the current study, the students were in the 2nd – 4th grade. In the Froh, Sefick, and Emmons (2007) study, the students were in the 6th - 7th grade. Younger children tend to be more ego-centric with a less mature capacity to understand the actions of others (Piaget, 1967). These qualities may hinder their ability to perceive any positive intent of others. According to the Theory of Mind, younger children are developmentally less able to identify their specific emotions or their emotions may be less stable, making the influence of emotion elicitation efforts harder to measure (Lee and Homer, 1999).
It may also be, according to Theory of Mind, that children this young may not be able to discern the intentions of others. Without this ability, they cannot fully perceive beneficence, which is a component of gratitude. They may be limited to conceptualizations of what is good to things that are concrete or personal; thereby, missing the prosocial nuance of gratefulness. Consequently, the current journaling exercise which was designed to elicit gratefulness and thus positive emotions, may have been too developmentally advanced for students at this age – particularly those who were in the 2nd grade.

Affect. Although in this study, there was a negligible increase in Positive Affect among the Controls, there was a trend indicative of a reduction in Positive Affect for students in both the Gratitude and Hassles condition. One potential reason for the weak and inconsistent findings related to Positive Affect in this study may be due to the scale of measurement. The variability among the scale items used to measure it was markedly greater than for the Negative Affect or SWL items. The 95% confidence intervals created around the mean change scores for all of the experimental conditions contained zero, a value that indicates no change. In summary, the direction of change in Positive Affect for each condition did suggest a decrease for Hassles and Gratitude students and an increase for Free-write students. However, the variability within these data was so pronounced that confidence in these findings is questionable.

It may also be that the assumption that gratitude journaling would elicit predominantly positive affect was incorrect. Perhaps contemplating things for which we are grateful can also trigger negative affect if some those things have been lost. Harrist, Carlozzi, McGovern and Harrist (2007) conducted a study of the benefits of expressive
writing using only two conditions: one designed to induce no specific affect (i.e. emotionally neutral) and one designed to induce positive affect. However, the latter method involved imaging “Best Possible Self” in the future. Since this exercise is not limited by the writer’s awareness of barriers that may exist in reality, it may be a more effective prompting method for positive affect, if that is the goal. These authors did find that the Best Possible Selves writers did have a significant increase in positive mood and decrease in negative mood compared to the students in the emotionally-neutral writing condition. Future research on the link between gratitude-induction and SWB might need to be aware of the possible negative affect outcomes of grateful thinking which may confound results.

Froh, Sefick and Emmons (2007) examined the effects of gratitude or hassles journaling on affect among 6th and 7th grades. Similar to the current findings, they also found a decrease in negative affect among gratitude journalers. However, in the current study, the value of this decrease was almost zero: a score indicative of no change. Additionally, the 95% confidence interval built around the NA change for the gratitude students extended almost as far in the direction of a decrease in Negative Affect as it did in the direction of an increase. Since this range includes zero, these findings must be considered with caution.

Dissimilar to the results of Froh, Sefick and Emmons (2007), an even greater decrease in Negative Affect among the hassles and control students was found among the gratitude students. This finding suggests that the students in this study who maintained journals in which they were to focus on issues or irritants that were salient to them or that were given the freedom to self-select a topic, experienced a reduction in Negative Affect
that was greater than for students who maintained Gratitude journals. Although the overall Negative Affect change scores did not differ significantly by journaling condition, the post-hoc analysis comparing just the Gratitude student change scores to the Control student change scores was statistically significant. In essence, the Free-writers had a significantly greater reduction in Negative Affect than even the Gratitude journalers. Interestingly, the strength of the reduction in Negative Affect was similar for both the Free-writers and the Hassles journalers. Perhaps allowing children to either express their salient emotions or vent their negative emotions has a cathartic effect which results in a reduction in Negative Affect. This cathartic effect was more effective in reducing Negative Affect than was the Gratitude induction intervention.

Petrie, Booth, and Pennebaker (1998) have done extensive research on the physiological benefits of the written expression, versus the suppression, of thoughts associated with negative emotions. Although their outcome of interest was physiological not subjective well-being, their findings still suggest that journaling of negative thoughts is clearly beneficial to students. They found that college students who were specifically prompted to write about these types of thoughts had a significant increase in a measure of their immunological system as compared to college students who participated in a thought suppression exercise.

Sheldon and Lyubomirsky (2006) investigated the effects of four weeks of gratitude contemplation on positive affect as measured with PANAS. While they found a subsequent increase in positive affect and a decrease in negative affect among their subjects, the change was not statistically significant. They contend that the active nature of the PANAS positive affect items may have been inappropriate for the potentially
gentler or more subtle emotional outcomes of grateful thinking. For this reason, the PANAS was adapted to include some of the positive affect terms they suggested (i.e. Content and calm). Regardless of this adaptation, the only Positive Affect terms that both increased for the Gratitude journalers and decreased for the Hassles journalers was “calm”. Perhaps the adaptations to the PANAS in this study were not sufficient to correct its’ potential limitations for use with measuring affective outcomes of grateful thinking as found in this study and by Sheldon and Lyubomirsky (2006).

*Satisfaction with Life compared to Affect Findings.* Although the strength of the relation between SBW – as measured by SWL - and journaling condition was not significant, the direction of this relationship tended toward the hypothesized direction. The SWL as reported by the Gratitude journalers increased more than it did among the Hassles and Control journalers. The relationship found in this study between SWB – as measured by the Positive and Negative Affect scales – and journaling condition was not clearly or consistently supportive of the study hypothesis. It is impossible in this study to discern if the inconsistent findings between these two different measures of SWB were due to some underlying phenomena or due to measurement issues.

Since the SWL findings have been supported more consistently in the literature than are the affect finding, it may be that SWL is a preferable measure of SWB since it is based on a more global appraisal of positive affect. Diener (1984) contends that SWL is a cognitive judgment of SWB that may be influenced by affect state but does not merely measure it. Huebner (2004) states that measures of SWB based on SWL are less prone to emotional reactivity than are those based on affect, like the PANAS.
Exploratory Gender Analysis

The SWB results from this study were split into three groups by experimental condition. Within each condition, the relationship between gender and each of the three SWB measures was examined in order to explore whether the effects, within each specific journaling condition separately, were experienced differently for boys than for girls.

Gender and Satisfaction with Life. Among just the Gratitude journalers, SWL increased among the girls just as much as it decreased among the boys with this difference being statistically significant. This finding indicates a gender difference on the evaluative effects of SWB due to gratitude journaling among children: positively for girls and negatively for boys. A similar, although nonsignificant, trend was found between the genders when both maintained Free-write journals. There was some indication that Hassles journaling decreased the SWL of boys slightly more than of girls.

In general, these exploratory, gender-specific results suggest that boys and girls experience some differences in how their SWL changes due to the focus of their journaling efforts. However, boys may be more vulnerable to decrements in their SWL as an outcome of the emotions triggered by journaling – even by gratitude journaling - than are girls. Until future research can further explore these issues, school mental health practitioners may need to consider the potentially greater susceptibility of boys to a decrease in their satisfaction with life when they are triggered to contemplate their emotions – even when those triggers are intended to elicit positive emotions.

Gender and Positive Affect. The overall decrease in Positive Affect that was noted above was experienced about equally by both genders who maintained Gratitude
journals and by girls who maintained Hassles journals. However, since none of these relationships varied significantly by gender, gratitude or hassles journaling may have no effect on positive affect. Interestingly, among just the Free-writers, Positive Affect increased almost as much for girls as it decreased for boys. Although none of these gender differences were statistically significant, the trends in the data suggest that journaling – regardless of the focus of the journal – may decrease the positive emotional state of boys. The same general trend may be true with girls, with one possible exception: the potentially beneficial effects of free-writing. Until future research can further investigate this issue, practitioners may consider being attentive to potentially negative emotional outcomes of journaling among boys and potentially positive emotional outcomes of free-write journaling among girls.

**Gender and Negative Affect.** Among just the Gratitude journalers, Negative Affect changed very little for both genders. Among just the Hassles journalers, Negative Affect decreased significantly more for girls than it did for boys. Among just the Free-writers, Negative Affect also decreased for both genders.

In general, these gender-specific results suggest potential benefits in terms of reductions in negative affect from journaling about self-selected topics or hassles. These emotional benefits may only be notable for girls who are encouraged to express things in their life for which they feel hassled. If future research supports this finding, school mental health practitioners might consider the potential benefits of allowing children to express their negative feelings in a private manner, like journaling.
Comments

The results from review of the student’s feelings about the journaling project were interesting. About 3 of every four Gratitude and Control students expressed comments indicative of positive feelings. Only about one-half of the Hassles students did the same. By far the most frequently used word by all groups was “Happy”. In general, these findings seem to support the overall contention of this project: journaling about things for which one is grateful makes one happier than journaling about things for which one feels hassled. However, since the difference between the groups was less marked and consistent than was expected, it may help explain the weaker than anticipated findings in the current study. Having such a high percent of students leaving the hassles journaling project and the control journaling project with such positive feelings was unexpected. Perhaps an understanding for reasons for this can be found in the actual quotes.

The positive quotes among the gratitude students were simplistic and consistent: it made them feel happy and good. The positive quotes among the hassles students included some very different content: they suggested a cathartic effect from having been able to express their negative emotions. The positive quotes among the control students included a broader range of positive emotions and were more centered around the pleasure they felt from being able to express their salient feelings or self-select the topic.

Of the remainder of students who commented that their journaling experience made them feel negative – or at least partially negative – feelings were slightly more likely to be from the Hassles condition and proportionately about as likely to be from the Gratitude and Control condition. As with the Positive feelings comments, it was not expected that almost one-fourth of the Gratitude students would feel partially or
completely negative about gratitude journaling. This finding helps explain the lack of statistical significance between conditions in the study. Regardless, the nature of the negative comments among Gratitude journalers and Hassles journalers may help explain the findings. The Gratitude journalers’ negative comments were relatively vague with a few allusions to vulnerability (e.g. “Stupid”, “Spies”, “Uncomfortable”); whereas the Hassles journalers’ negative comments were more dominated by sadness and anger. In conclusions, gratitude journaling does clearly seem to be associated with positive emotions, but for a notable minority of students, that outcome seems to be either overcome by, or at least mixed with, negative emotions. Future researcher, who plan to use a methodology similar to the current one, need to be aware of this possibility and its’ potential effect on their research.

*Journal Entries*

*Entries by Experimental Condition.* Among the most frequently cited subjects that were the focus of the gratitude journalers’ writing content, very few were related to self. The subjects of their writing, in descending order, were parents, self, and friends. The affect associated with these Subjects was predominantly positive. Additionally, the actual emotion that was most frequently expressed was received beneficence, followed by enjoyment of interpersonal relations. These findings suggest that students, who are directed to focus on gratefulness, do tend to think about persons beyond themselves and do tend to do so with positive emotions, particularly an awareness of their receipt of intended good.

Among the most frequently cited subjects that were the focus of the hassles journalers’ writing, few were also related to self. The subject of their writing in
descending order was friends, self siblings and parents. The difference between their writing content as compared to that of the Gratitude journalers’ was the clear dominance of negative affect associated with these subjects. Interestingly, the subject that was most frequently cited by the Control journalers was self, with a predominantly positive affect. The Free-writers did also journal about negative feelings about themselves, but these were only about half as common. This suggests that children tend to think positively and egocentrically when they are allowed to journal without any specific prompts. The geocentricism found in this study is consistent with the developmental stage of 7 – 10 year olds (Piaget, 1967).

These findings related to the gratitude journalers support the contention of Wood, Joseph and Linley (2007) that there is a consistent link between grateful affect and positive social relationships. Fredrickson (2004) suggests that gratitude seems to broaden people’s habitual mode of thinking. In this study, the gratitude journalers clearly tended to think about people beyond themselves much more than did the free-writers. Consequently, the qualitative findings of this study support the classification of gratitude as not only a positive emotion, but also to support the role of positive emotions in broadening people’s mode of thinking as postulated in the Broaden and Build Theory of Positive Emotions.

Emmons and McCullough (2003) conducted a study of the effects of gratitude and hassles journaling on pro-social behavior. They reported that the participants in the gratitude condition were more likely to report offering emotional support to someone than were participants in other conditions. While acts of pro-social behavior were not directly measured in this study, the content of the gratitude journals was clearly
dominated by pro-social thoughts while the journal content of the hassles students was clearly dominated negative thoughts related to others as well as egocentrically. Seligman and Peters (2005) compared the effects of contemplating and completing a gratitude expression exercise on happiness and they found that although happiness increased with gratitude journaling, it increased even more with completion of a gratitude expression activity. Perhaps the weaker increases in subjective well being as measured and found in this study as compared to in their study was attributable to the more passive nature of the intervention. It may be that the happiness enhancing benefits of gratitude are greater with acts of reciprocity than a mere remembrance of receipt of beneficence.

*Entry findings in relation to SWB.* It was beyond the scope of the current study to attach the journal entries to the individual student. Consequently, any discussion that links the two must be made with caution. Regardless, some overall observations can be made for the purposes of generating future hypotheses. One such observation is that although the overall effect of the journaling as measured by a change in pre-test to post-test survey scores were inconclusive – the affect content of the journals varied dramatically based on experimental condition. Students instructed to focus on what they are grateful for, do express more positive emotions, including gratitude. Students instructed to focus on what they are hassled by, do express more negative emotions. Finally, students instructed to focus on a topic of their choice tend to express a blend of predominantly positive, but also not infrequently negative emotions. We can conclude that journal prompts do seem to be effective, although not perfect, in triggering students to emote as instructed.
**Overall Conclusions related to Subjects.** The developmental stage of the subjects in this study may have affected the findings across each of the three SWB and two qualitative data sets in two ways. The first way relates to the procedures. It may be possible, that the Post-test survey, which was designed to measure affect change, was administered too long after the last actual day of journaling. According to the terms mandated by the school, his time period could have been as long as two days. Given the temporal instability of affect state, particularly among younger populations, future studies may need to further investigate the best timing of the post-test. If it is done too long after the conclusion of the journaling period, perhaps any benefits attributable to journaling may be forgotten. If it is done immediately after the last journaling period, perhaps any benefits may not be reflective of their overall emotional experience, but be masked by more immediate emotional state. Regardless, the minimum of a four day delay between the last journaling day and the post-test day in this study, may help explain why the change score findings from the SWL scale, which has been demonstrated to be a more stable measure of SWB, were consistent with the original study hypothesis while the change scores from both sets of affect data were not.

The second way in which the developmental stage of the subjects may have affected the findings across each of the SWB data sets was related to the instrumentation. Each of the three main sets of SWB data were dominated by ceiling effects due to the extremely high Pre-test scores, which were particularly high for the positive affect scores. Consequently, the variability in the data was too restricted, by this ceiling effect to allow for significant changes in scores during the study. For example, the lowest Pre-test positive affect item mean score was for “Calm” (rating of 3.29 on a scale from 1=“Not at
The group mean for total positive affect score at Pre-test was high (62.8, of a maximum cumulative score of 80). The same was true, albeit less so, among the negative affect items. For example, the lowest Pre-test score on a negative affect items was for “Weak” (rating of 1.92). The group mean for total negative affect score at Pre-test was almost at the scale mid-point (i.e. 21.42, of a maximum cumulative score of 45). Children may have been too developmentally immature to have resisted dichotomous conceptualizations of affective state, thus leaving the nuances of emotional variation unmeasured.

Children may also have been too developmentally immature to have resisted a positive response bias due to the attention of an unfamiliar adult and increased teacher attention. The extremely high pre-test scores on positive affect suggest a Hawthorne effect: the study was introduced in a positive manner by the teacher and explained by an adult visitor (myself) who interrupted their typical classroom day. This was a novel enough source of positive attention. Additionally, she comes to express an interest in their feelings and to introduce a new classroom project. Although the researcher was not there during any of the journaling days, this potential threat to validity cannot be ignored.

This conclusion is further supported by the qualitative data findings. Both set of these data clearly indicate that – overall – the Gratitude journalers did experience predominantly positive emotions and the Hassles journalers did experience predominantly negative emotions. The journaling prompts were generally effective, leaving limitations in the ability to consistently document condition-related affect changes via the surveys, left largely unexplained by other methodological issues.
Conclusions

The qualitative findings of this study suggest that journaling with specific affect-inducing prompts, does seem to result in an elicitation of that affect among young children. Particularly given the results of the qualitative data that were analyzed in this study, among children as young as 2nd to 4th grade, gratitude journaling did seem to trend toward being effective in eliciting positive emotions and hassles journaling did seem to trend toward being effective in eliciting negative emotions. However, overall, the effects of these change on enhancement of SWB was less marked and consistent than hypothesized when measured by an affect scale; and, consistent yet weaker than hypothesized when measured by a SWL scale. Interestingly, although based on an exploratory analysis of the current data, there were some distinct variations between girls and boys in how their emotional state was affected by the different journaling prompts. These findings may help to clarify how to elicit gratitude among young children.

Despite the limitations of the current study and subsequent findings, the importance of journaling to enhance affect warrants further research. Hassles and free-write journaling may provide an opportunity to understand, express, and even decrease negative emotions. Gratitude journaling may encourage a shift – even if slight - to a more positive evaluation of emotional well-being. Given the non-invasive, innocuous, child-centered nature of the intervention and how well it fits within the education mission and methods of elementary school, the school setting may be an appropriate site for journaling. Anecdotally, the teachers involved in this study felt that journaling provided the child an opportunity to quietly contemplate and privately express their salient
feelings. This benefit may be even more important for those children who are developmentally, psychologically or socially unable to do so in other ways.
Table 1

*Survey Responses for each Domain of Satisfaction with Life*

<table>
<thead>
<tr>
<th>SWL Domain</th>
<th>Pre-test Survey M (SD)</th>
<th>Post-test Survey M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td>4.10 (1.20)</td>
<td>3.98 (1.30)</td>
</tr>
<tr>
<td>School</td>
<td>3.44 (1.29)</td>
<td>3.57 (1.30)</td>
</tr>
<tr>
<td>Friend</td>
<td>4.35 (1.01)</td>
<td>4.23 (1.09)</td>
</tr>
<tr>
<td>Self</td>
<td>4.05 (1.17)</td>
<td>4.06 (1.18)</td>
</tr>
<tr>
<td>Environment</td>
<td>4.08 (1.14)</td>
<td>4.00 (1.27)</td>
</tr>
</tbody>
</table>
Table 2

*Most Frequently Cited Journal Entries by Affect and Subject.*

<table>
<thead>
<tr>
<th>Experimental Condition</th>
<th>Gratitude</th>
<th>Control</th>
<th>Hassles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affect/Subject (n)</td>
<td>Affect/Subject (n)</td>
<td>Affect/Subject (n)</td>
<td>Affect/Subject (n)</td>
</tr>
<tr>
<td>Beneficence/Mother (21)</td>
<td>Intra-prsnl Pos/Self (24)</td>
<td>Inter-prsnl Neg/Friend (16)</td>
<td></td>
</tr>
<tr>
<td>Beneficence/Father (17)</td>
<td>Descriptive/Self (21)</td>
<td>Intra-prsnl Neg/Self (16)</td>
<td></td>
</tr>
<tr>
<td>Intra-prsnl Pos/Self (14)</td>
<td>Inter-prsnl Pos/Friend (16)</td>
<td>Inter-prsnl Neg/Sister (15)</td>
<td></td>
</tr>
<tr>
<td>Inter-prsnl Pos/Friend (13)</td>
<td>Intra-prsnl Neg/Self (11)</td>
<td>Inter-prsnl Neg/Brother (11)</td>
<td></td>
</tr>
<tr>
<td>Intra-prsnl Pos/Pet (13)</td>
<td>Competence/Self (11)</td>
<td>Inter-prsnl Neg/Mom (9)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inter-prsnl Neg/Dad (9)</td>
<td></td>
</tr>
</tbody>
</table>
Table 3

*Affect in Journal Entries by Experimental Condition*

<table>
<thead>
<tr>
<th>Affect</th>
<th>Gratitude</th>
<th>Hassles</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
</tr>
<tr>
<td>Positive</td>
<td>228 (91.2)</td>
<td>18 (9.0)</td>
<td>116 (58.0)</td>
</tr>
<tr>
<td>Neutral</td>
<td>10 (4.0)</td>
<td>1 (0.5)</td>
<td>36 (18.0)</td>
</tr>
<tr>
<td>Negative</td>
<td>12 (4.8)</td>
<td>180 (90.5)</td>
<td>48 (24.0)</td>
</tr>
</tbody>
</table>
References


Coontz, S. (1997). *The way we really are.*


Effect of Gratitude


M.E. McCullough (Eds.), *The psychology of gratitude* (pp. 58-78). New York: Oxford University Press.


Appendix A
Student Survey

Pre-Test

Name: ________________________________________________________
Student Survey

Check one:  I am a girl _____  My grade is: ______
I am a boy _____  My age is: ______

YOUR FEELINGS

These questions have words that describe different feelings. Read each feeling. Circle the “pie” that describes how much you felt this way during the past few weeks.

<table>
<thead>
<tr>
<th>Feeling</th>
<th>Not at all</th>
<th>A little</th>
<th>Some</th>
<th>Quite a bit</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friendly</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Sad</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Happy</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Forgiving</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Worried</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Helpful</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Active</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Ashamed</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Secure</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Weak</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Feeling</td>
<td>Not at all</td>
<td>A little</td>
<td>Some</td>
<td>Quite a bit</td>
<td>Extremely</td>
</tr>
<tr>
<td>-----------</td>
<td>------------</td>
<td>----------</td>
<td>------</td>
<td>-------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Scared</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Content</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Upset</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Thankful</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Lonely</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Peaceful</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Attached</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Unhappy</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Strong</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Hopeful</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Calm</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Proud</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Kind</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Mad</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Alert</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
</tbody>
</table>
YOUR THOUGHTS

The following questions ask what you think about your life. Read each sentence. Then circle the face that describes how you feel about your life during the past few weeks.

1. I would describe my satisfaction with my family life as:
   - Delighted
   - Pleased
   - Mixed
   - Unhappy
   - Terrible

2. I would describe my satisfaction with my school life as:
   - Delighted
   - Pleased
   - Mixed
   - Unhappy
   - Terrible

3. I would describe my satisfaction with my friends as:
   - Delighted
   - Pleased
   - Mixed
   - Unhappy
   - Terrible

4. I would describe my satisfaction with my self as:
   - Delighted
   - Pleased
   - Mixed
   - Unhappy
   - Terrible

5. I would describe my satisfaction with my living environment as:
   - Delighted
   - Pleased
   - Mixed
   - Unhappy
   - Terrible
Appendix B
GRATITUDE JOURNAL

There are many things in our life that we might be grateful about. Think back over the past couple days about what you were grateful for. Write about them on the lines below.

Journal Day 1:

In the past couple days, I felt grateful for:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Journal Day 2:

In the past couple days, I felt grateful for:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Journal Day 3:

In the past couple days, I felt grateful for:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Journal Day 4:

In the past couple days, I felt grateful for:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Journal Day 5:
In the past couple days, I felt grateful for:

________________________________________

________________________________________

________________________________________

Journal Day 6:
In the past couple days, I felt grateful for:

________________________________________

________________________________________

________________________________________

Journal Day 7:
In the past couple days, I felt grateful for:

________________________________________

________________________________________

________________________________________

Journal Day 8:
In the past couple days, I felt grateful for:

________________________________________

________________________________________

________________________________________

Journal Day 9:
In the past couple days, I felt grateful for:

________________________________________

________________________________________

________________________________________
HASSLES JOURNAL

Hassles are things that irritate or annoy you. Think back over the past couple days about what has hassled you. Write about them on the lines below.

Journal Day 1:
In the past couple days, I felt hassled by:

____________________________________
____________________________________
____________________________________

Journal Day 2:
In the past couple days, I felt hassled by:

____________________________________
____________________________________
____________________________________

Journal Day 3:
In the past couple days, I felt hassled by:

____________________________________
____________________________________
____________________________________

Journal Day 4:
In the past couple days, I felt hassled by:

____________________________________
____________________________________
____________________________________
Journal Day 5:

In the past couple days, I felt hassled by:

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

Journal Day 6:

In the past couple days, I felt hassled by:

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

Journal Day 7:

In the past couple days, I felt hassled by:

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

Journal Day 8:

In the past couple days, I felt hassled by:

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

Journal Day 9:

In the past couple days, I felt hassled by:

____________________________________________________________________
FREE-WRITE JOURNAL

Spend a moment thinking about something that you would like to write about. Use the lines below to write about anything you would like.

Journal Day 1:
I am going to write about:

________________________________________________________

________________________________________________________

________________________________________________________

Journal Day 2:
I am going to write about:

________________________________________________________

________________________________________________________

________________________________________________________

Journal Day 3:
I am going to write about:

________________________________________________________

________________________________________________________

________________________________________________________

Journal Day 4:
I am going to write about:

________________________________________________________

________________________________________________________

________________________________________________________
Journal Day 5:
I am going to write about:


Journal Day 6:
I am going to write about:


Journal Day 7:
I am going to write about:


Journal Day 8:
I am going to write about:


Journal Day 9:
I am going to write about:


Appendix C
Effect of Gratitude

Classroom Administration Instructions

Survey Instructions Script

Hi! My name is Dr. Eileen Filozof. I am a researcher! I am interested in finding out how childrens’ thoughts and feelings affect them. In order to do this, today I am going to give you a survey to fill out about your thoughts and feelings. After that I am going to explain about a writing project you are going to work on for a few weeks in class.

Since I am going to do this project in quite a few classrooms in your school, I want to make sure that I give the same explanation in each class. To do this, I am going to read the directions to you. I will give you time at the end to ask any questions.

Let us get started. First, I am going to give you the survey of your thoughts and feelings. (Pass out) Notice that the top page is for you to write your name. The next three pages are questions for you to answer. The first set of questions are about your feelings. The second set of questions are about your thoughts. I am going to read the questions out loud to the whole class. You will write your answers on the pages.

There are no “right” or “wrong” answers to these questions. They are about your personal thoughts and feelings. I hope that answering these questions is not too hard or makes you feel bad. If you feel like you want to stop at any time, you are allowed to do so. Just quietly put down your pencil and rest your head upon your desk while the rest of the class finishes. If you have any questions, please raise your hand. Ready?

Okay, please write your name on the top. (wait)

Now, turn to the first page of questions. I am going to read this list of feelings out loud. After I read each feeling, think about how much you have been having that feeling in the past few weeks. Then, circle the pie that describes how much.

- If you circle the pie that is not at all filled in (looks empty), that means you have not felt that feeling at all recently
- If you circle the pie that is filled a little bit, that means you have felt that feeling “A little” bit recently
- If you circle the pie that is filled in half full, that means you have felt that feeling “some” recently
- If you circle the pie that filled is almost all filled in, that means you have felt that feeling “quite a bit” recently
- If you circle the pie that is totally filled in, that means you have felt that feeling “extremely” a lot recently
Let us start … Ready?

**Friendly** = Like to meet and talk with others  
**Sad** = Feeling or causing sorrow or unhappiness  
**Happy** = Feeling pleasure or joy  
**Forgiving** = To stop being angry at or blaming.

**Worried** = To feel uneasy.  
**Helpful** = To give or do what is needed or useful.

**Active** = Full of energy, taking part in activities.  
**Ashamed** = Feeling guilt or shame, holding back because of fear.  
**Secure** = Safe against danger or loss. Certain.

**Weak** = Without power or energy.

**Scared** = To feel fright.  
**Content** = Happy with what you have or what you are. Satisfied.  
**Upset** = To feel sad, disturbed or worried.

**Thankful** = Feeling grateful or appreciative.  
**Lonely** = Sad at being alone.  
**Peaceful** = Calm, free from being upset.

**Attached** = Belonging, to feel affectionate or loyal.  
**Unhappy** = Miserable, without pleasure.  
**Strong** = Feeling power or firmness.

**Hopeful** = To trust that a wish will come true, to feel confident  
**Calm** = Not disturbed, Without motion. Quiet  
**Proud** = Feeling pleased over what you do, own or are part of.

**Kind** = Helpful, considerate, gentle.  
**Mad** = Very angry, not controlled.  
**Alert** = Quick to notice or act. Attentive.

Your Thoughts:

(When done). On the next page, I am going to ask you some questions about how satisfied you are in different areas of your life. These areas are family, school, friends, yourself, and your living environment. After I read each one, think about how you have felt about that area in the past few weeks. Then circle the face that describes how much.
If you circle “Delighted” that means you have felt very good in that area
If you circle “Pleased” that means you have felt a little good in that area
If you circle “Mixed” that means you have not felt either bad or good in that area
If you circle “Unhappy” that means you have felt a little bad in that area of your life
If you circle “Terrible” that means you have felt really bad in that area of your life

If you have any question, please raise your hand and ask. Ready?

1. Family life = everything related to your family
2. School life = everything related to being in school
3. Friends = everything related to your friends
4. Self = everything related to you – your own self
5. Living environment = everything related to your home, neighborhood and where you live

Thank you for your help. Your teacher will collect your papers.

Journaling Instructions

Now I am going to explain the actual writing project.

For this project, you are going to write in journals for a few weeks. You are going to write about your very own thoughts and feelings (so no answers will be right or wrong)!
On Monday, your teacher is going to hand out the journals. They are to stay here at school since you will be writing in them during class time.

There are three different colors for the journals. What type of thoughts and feelings you are going to write about depend on the color of your journal. Don’t worry – your teacher will explain that on Monday. However, even if you forget, the instructions for what you are to write about are also written inside your journal. (SHOW SAMPLES)

I am going to come back in a few weeks to collect your journals. I am excited to see how you will be doing!
Appendix D
I am going to explain a journal writing project that we are going to be doing in class for the next few weeks. When Dr. Filozof was here on Friday, she talked a little bit about this project. The purpose of the project is to write about your thoughts and feelings.

I am going to give each of you your own journal. You are to keep your journal at school. We are going to write in them during class. There are three different colors for the journals. What you will write about depends on the color of your journal. No matter which journal you get, you are to use it to write about your own thoughts and feelings. There are no “right” or “wrong” answers!

We are going to write a total of 10 days. Inside your journal, you will see the instructions on the left. On the right is a stack of paper with a section for each day of writing. Each day before you begin writing, I will tell you which writing day it is. You are to write in your journal for about 5 or 10 minutes.

(Pass out the journals then break the students into 3 groups based on the color of their journal. Explain the content of their writing specific to them.)

“If you have a yellow journal, you have a Gratitude Journal. You are to write about anything or anyone who benefits you or makes you feel blessed. Examples: Someone has done something to benefit you. Something happened that was good for you.”
(Key Descriptors: Helpful, blessing, beneficial, selfless.)

“If you have a blue journal, you have a Hassles Journal. You are to write about anything that irritates you or makes you feel burdened. Examples: Someone has been selfish towards you. Something happened that was not good for you.”
(Key Descriptors: Unhelpful, irritating, burden, bothersome.)

“If you have a green journal, you have a Free-Write Journal. You are to use this time as a free-write period.”
Teacher Response Scripts to Student Questions

*Student: Seeks permission/approval to stop answering/journaling*
Teacher: “You can stop if you would like to. That is okay!”

*Student: Questions what they are to write about in the journals*
Teacher: “If you have a yellow journal, you have a Gratitude Journal. You are to write about anything or anyone who benefits you or makes you feel blessed. Examples: Someone has done something to benefit you. Something happened that was good for you.”
Key Descriptors: Helpful, blessing, beneficial, selfless.

“If you have a blue journal, you have a Hassles Journal. You are to write about anything that irritates you or makes you feel burdened. Examples: Someone has been selfish towards you. Something happened that was not good for you.”
Key Descriptors: Unhelpful, irritating, burden, bothersome.

“If you have a green journal, you have a Free-Write Journal. You are to use this time as a free-write period.”

*Student: How much/long do I have to write?*
Teacher: What is important is that you take a couple minutes to think about what you write. You do not have to write a lot, even a few words is okay. Just try to remember your feelings!

*Student: I feel upset about do this ... what should I do?*
Teacher: “You can stop writing”.

*Student: Do I write people’s names in my journal?*
Teacher: Try not to. Can you just write about them?

*Student: Can I draw a picture?*
Teacher: Be sure to write words first, if there is time, you can draw.

*Student: Do I have to put the date on the paper?*
Teacher: No. (Please refer student to the writing day schedule)
Journaling Protocol

Journal maintenance: At your discretion, the journals may be kept in the students’ desk or collected and distributed each journaling day. However, they are to stay at school.

Journaling frequency: Refer to the schedule provided by Susan Polly. The schedule allows for 10 days of journaling, preferably on nonconsecutive days. The actual date upon which the students write is not as important as is the number of days (i.e. 10 days).

Journaling time: Plan on providing about 5-10 minutes of writing time.

Student misses a writing period: If a student misses a journaling period, if possible – have the child make-up the writing the next possible day. If this is not possible, have them continue with the rest of the class on the next scheduled writing day.

Students without consent or personal assent: Those students with dissenting parents or who have expressed a desire to discontinue participating will NOT take the surveys. They will be given a green “Free-write” journal. However, these journals will be marked with an asterisk after the Code (to distinguish them from the “Control” version) and are to be discarded directly by you. They will not be included in the study in any way.

Journaling Instructions: Each time the students are to journal, announce the Day Number. If they have questions, please refer to the Scripted responses above. Ideally, the students are not to discuss the content of their writing with each other.
Appendix E
Parent Info Sheet
Gratitude Journaling Study
Dear Parent,

The purpose of this letter is to inform you of a study on the relationship between grateful thinking and happiness that is planned in your child’s class. We are seeking your support for your child to participate in this study. The goal of the study is to investigate if the happiness levels of children who journal about things in their life from which they feel grateful increases more than children who journal about things in their life for which they feel hassled or burdened. Recent research in psychology has shown that not only do grateful people tend to be happy people, but grateful thinking can cause happiness! Unfortunately, this research has been done only with adults and adolescents - not with younger children. With the benefits being so clear, our hope is that we can find that the same benefits can occur among younger children in the 2nd – 4th grade.

The study is designed so that the children in your child’s class will be randomly assigned to one of three experimental groups. In each group, their participation will involve spending a few class moments to write in a journal about their thoughts. Depending on the group to which they are assigned, they will either write about their blessings, their hassles or about a teacher-assigned topic. Children in the Control group will write about a topic assigned by the teacher as part of their regular curriculum. No child may participate if a parent or the child withholds consent. Children without consent will have a journal to write in during the writing period but they will not participate in the surveys nor will their journals be collected or used by the researcher in any way. In order to investigate if the children experience a change in happiness level, the participating students will also fill out a brief survey on their feelings and satisfaction with life two times: before the study begins and after the study is complete.

In order to ensure that all information collected from the participating children cannot be linked to their name, we will do the following: each child in the study will be assigned a code number, only the teacher will have access to the list of the student name and code, only the researcher will have access to the responses and code number. Consequently, no one will be able to link the child’s name to their responses.

Beyond some possible discomfort with recalling irritants, there are no foreseeable risks to your child from their participation. Writing their thoughts and journaling to prompts from
a teacher are normal parts of their educational process. Regardless, your child will be told prior to the study that they can stop participating at any time with no negative consequences.

We hope you will allow your child to be in the study. Please note that this research study has been approved by the Marietta College Human Subjects Committee. If you have any questions or concerns regarding this research or subject’s rights, contact Dr. Jennifer McCabe, Marietta College Human Subjects Committee Chair at (740) 376-7894 or Jennifer.McCabe@marietta.edu. For all other questions or concerns, please contact the school facilitator Mrs. Susan Polly at Black River Elementary (419) 736-2161 or (spolly@blackriver.K12.oh.us) or the researcher, Dr. Eileen Filozof, at Marietta College Department of Psychology at (740) 376-4749 or (email is emf002@marietta.edu).

If you do NOT approve of your child’ participation, please sign below and return this letter to school with your child. If this letter is not returned by April 30, 2008, we will assume that your child has your permission to participate in this study. Thank you!

Sincerely,

Susan Polly, MA, Teacher
Black River Elementary School

Eileen Filozof, PhD, Researcher
Marietta College

My signature below indicates that I do not want my child to be in the Gratitude Journaling Study.

________________________________________  ________________________
Signature                                      Date

My child’s name