



# **The Inner Resilience Program: Building Resiliency from the Inside Out**

**Evaluation Report**

**July 2005**

**Submitted To:**

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***Metis Associates***  
*...making a meaningful difference*

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# **The Inner Resilience Program: Building Resiliency from the Inside Out**

## **Evaluation Report**

### **I. PROJECT OVERVIEW**

#### **A. Organization Description**

The Inner Resilience Program<sup>1</sup> was established in the spring of 2002 in response to the effects that the events of September 11<sup>th</sup>, 2001 had on New York City teachers, guidance counselors, administrators, students, and parents. Inner Resilience Program equips school staff and parents with the tools, skills and strategies to strengthen their own inner resiliency in order to take positive action in the face of grief and trauma and to model these skills for the young people in their care. The Inner Resilience Program supports long-term wellness approaches to healing and recovery that include developing the capacities of adults to nurture their own inner resources in order to better support their emotional health and growth. These approaches include residential and day-long retreats; after-school workshops and institutes; technical assistance and training; individual stress reduction sessions; and yoga classes. The Inner Resilience Program's work with young people is designed to help students increase their capacity to manage stress and explore the role they can play in their own and their peers' growth process. This service is provided through training in such areas as stress reduction, anger management and conflict resolution.

Inner Resilience Program's primary target population is the 28 elementary, middle and high schools in and around Ground Zero under the jurisdiction of Region 9 of the New York City Department of Education that were evacuated immediately, hosted displaced and evacuated students, or were severely affected by the aftermath of the events of September 11<sup>th</sup>, 2001. Since its inception, the Inner Resilience Program has worked with over 3,000 educators who collectively serve over 70,000 students. In the youth leadership component, the organization has worked with 400 students directly to integrate their experiences of September 11<sup>th</sup>, 2001 and to teach them to care for themselves by using various stress reduction techniques.

#### **B. Core Program and Activities**

Inner Resilience Program believes that our life of mind and spirit, whether we acknowledge it or not, is integrally connected to our work in the outer world. Inner Resilience Program's core program of support services, consultation, and training draws on a range of cross-cultural traditions and self-care strategies that are aimed at helping participants:

- Gain awareness of the many personal and professional forces that contribute to stress and how it impacts on their health and performance;
- Practice relaxation techniques and self-care tools to manage stress and maintain healthy coping skills and incorporate them into their daily lives;

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<sup>1</sup> Formerly known as Project Renewal–Tides Center.

- Explore reflective approaches to experiencing and expressing grief, pain, and anxiety in themselves and others;
- Reconnect with their own sense of deeper meaning and purpose that led them into education in the first place;
- Use culturally- and age-appropriate strategies in classrooms that nurture their own and students' inner lives.

The Inner Resilience Program describes its core program activities in the following way:

- **Residential Retreats** – Inner Resilience Program offers seasonal weekend retreats for school personnel. These retreats honor the genuine need for rest and rejuvenation while also introducing educators to practical strategies for staying calm, strong, and creative within the turmoil and stresses of work and life. Participants take home powerful and practical tools for keeping alive a sense of purpose as they are renewed and sustained for the long haul.
- **After-School Workshops** – A key part of Inner Resilience Program's work is after-school workshops offered to school personnel. Workshop topics are selected by the individual schools and are tailored to meet the specific needs of school communities. They are conducted at the individual school sites, typically last two and one half hours, and are facilitated by a range of experts in the fields of education, trauma recovery, music, poetry, and drama.
- **Nurturing the Inner Life Series** – This four-part monthly after-school group is hosted at Inner Resilience Program's downtown training space, which offers an atmosphere of safety and relaxation. Through interactive exercises, individual reflection and small group discussion, educators explore the skills needed to stay centered in times of transition and change.
- **Individual Stress Reduction Sessions** – Inner Resilience Program's stress reduction days offer school personnel individual sessions in bodywork from certified practitioners at their school site. Individual stress reduction sessions, which typically last 20 minutes, offer emotional support through the use of holistic techniques and tools that incorporate relaxation and self-care techniques, creative movement, gentle stretching exercises, and healing touch.
- **Yoga Classes** – Inner Resilience Program also offers a series of 10 to 12 weekly yoga classes to school-based staff. Classes are offered through the leadership of a skilled yoga instructor and take place at Inner Resilience Program's training space. Participants learn relaxation and breathing techniques, increase awareness of the body's responses to stressful situations and how to alter these responses, build strength and increase flexibility, and connect with other school staff in a relaxed setting.
- **Youth Leadership Development** – Inner Resilience Program has hosted two Youth Leadership Residential Retreats for 30 high school youth leaders and their faculty

advisors. During this two-day event, student participants reflected on their post-September 11<sup>th</sup> experiences in meaningful ways, and cultivated their resiliency and coping skills in order to help them contribute to building safe and caring schools along with a positive peer climate for learning. Inner Resilience Program has also hosted 14 day-long retreats for graduating seniors who began their high school careers on September 11<sup>th</sup>, 2001. These retreats gave students an opportunity to fully integrate this tragedy into their psyche. They were able to acknowledge their pain, identify the lessons learned, and look optimistically towards the future.

## II. EVALUATION METHODS

In July 2004, the Inner Resilience Program retained Metis Associates, Inc., an independent research and evaluation consulting firm in New York City, to support the evaluation activities of the Inner Resilience Program core program. Assessment of the program's goals was accomplished through a joint effort involving Metis in collaboration with program staff. This evaluation was based on a variety of assessment tools including: individual interviews with Inner Resilience Program participants; pre-test and post-test surveys administered to individuals who participated in yoga classes; standardized assessments measuring perceived stress and coping abilities, also administered to yoga class participants; pre-test and post-test surveys administered to individuals who participated in the October 2004 residential retreat; observations of the February 2005 residential retreat; and a focus group interview with key Inner Resilience Program informants. These assessment methods are described in more detail below.

*Individual Interviews:* The evaluation team conducted individual 30-minute telephone interviews in June 2005 with educators who had participated in Inner Resilience Program activities. Altogether, 19 out of approximately 44 individuals who had participated in an Inner Resilience yoga program and completed a Yoga Post-Program Form, indicated willingness to take part in a phone interview with the evaluator regarding their overall program experiences. Of these 19, the evaluator then chose a sample of 13 individuals who had participated in a wide range of Inner Resilience Program services over the past few years. In the end, 12 of these 13 participants were able to find time in their schedules to complete the phone interviews. The interview protocol was developed by the evaluator in collaboration with Inner Resilience Program staff and consisted of seven questions focusing on: participants' initial reasons for exploring the program; services that were most helpful in efforts to integrate events of September 11<sup>th</sup> and to further their recovery efforts and those of their students; specific changes they had made personally and professionally as a result of participation in Inner Resilience Program activities; and suggestions for improvement of services.

*Residential Retreat Surveys:* The evaluator developed pre- and post-retreat surveys in collaboration with Inner Resilience Program staff in order to assess the goals of a three-day residential retreat held October 15-17, 2004. These surveys were administered by staff at the beginning and end of the weekend, with explanations given about the program evaluation and the purpose of the questionnaires. The Pre-Retreat Survey consisted of five questions asking participants to reflect on what they would like to learn or gain during the retreat. The Post-Retreat Survey included ten items pertaining to what they had gained from the retreat as well as general feedback about incorporating techniques into educational practice, additional

training/support they would find helpful, general satisfaction with the retreat, and suggestions for improvement. The evaluator entered and analyzed the survey data to interpret the overall themes of participants' hopes and realizations. The results were then shared with Inner Resilience Program staff and used to reflect on and improve subsequent residential retreats as well as other services and programs. See the Appendix for a copy of the Residential Retreat Surveys.

*Observation of Residential Retreat:* The evaluator attended the February 22-24, 2005 residential retreat to observe program activities and gain a better understanding of the various services offered by the Inner Resilience Program in this setting. The information gathered was used to inform and guide subsequent evaluation efforts.

*Focus Group Interview:* A two-hour focus group interview was conducted with Inner Resilience Program administrative and program staff in December 2004. The purpose of this interview was to explore the various components of Inner Resilience Program services, results of the Residential Retreat Surveys and how these aligned with staff members' perceptions of Inner Resilience Program activities, and current assessment tools used to measure satisfaction or outcomes of the organization's services. The evaluator developed the interview protocol in collaboration with Inner Resilience Program staff and facilitated the focus group discussion. Results were compiled, shared with staff, and used to help guide the evaluation efforts of programs and services.

Data collected by Erika Malm, the Inner Resilience Program yoga instructor, were utilized to further evaluate Inner Resilience's programs and services. Carried out as part of her Master of Social Work degree at Smith College School for Social Work, Ms. Malm's thesis explored the effects of a 12-week Inner Resilience yoga program held in fall 2004 on perceived stress and coping abilities among NYC educators. This study hypothesized that program participants would show significant reductions in stress as well as improvements in their coping abilities, particularly in their emotional responses to stressful situations, as a result of participating in the yoga program. Three instruments—including two standardized, published tools and one locally developed—were administered to test this hypothesis and are described below. For the purposes of this evaluation, these instruments were also administered to individuals who participated in a 10-week Inner Resilience yoga program conducted in spring 2005.<sup>2</sup>

*The Perceived Stress Scale:* In order to measure perceptions of stress, the Perceived Stress Scale (PSS) by Cohen, Kamarck, and Mermelstein (1983) was administered to participants in the yoga program. The PSS is a ten-question scale that is commonly used to measure perceived stress or the level at which individuals view their current life situations as stressful. The questions ask individuals to rate how often they have experienced specific thoughts and feelings in the past month on a five-point scale, with "0" representing *Never* and "4" representing *Very Often*. Examples of these questions include "In the last month, how often have you felt nervous and stressed?" and "In the last month, how often have you been angered because of things that were outside of your control?" Higher PSS scores, according to the instrument's authors, are associated with "greater vulnerability to stressful life-event-elicited depressive symptoms," and

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<sup>2</sup> It should be noted that the 12-week Inner Resilience Program yoga program held in fall 2004 and the 10-week program held in spring 2005 were nearly identical in content and format, with the only difference between the two programs being the length.

“more colds” (Cohen, Kamarck, and Mermelstein, 1983). Reliability (internal reliability) of the PSS instrument is very strong, ranging from .84 to .86, and validity varies by measure and goal, but overall was moderate to strong, ranging from .31 to .76, when correlated with measures of physical and depressive symptoms (Cohen, Kamarck, and Mermelstein, 1983). The PSS is included in the Appendix with the permission of the American Sociological Association, from Cohen, et al (1983).

*The Coping Inventory for Stressful Situations:* In an effort to measure coping abilities, the Coping Inventory for Stressful Situations (CISS) by Endler and Parker (1999) was also administered to participants in the yoga program. The CISS consists of 48 items that measure three different coping styles, including task, emotion, and avoidance-oriented coping. Items pertaining to each of these coping styles ask individuals to indicate how much they partake in specific activities when faced with a difficult, stressful or upsetting situation on a five-point scale, with “1” representing *Not at All* and “5” representing *Very Much*. The task-oriented coping scale specifically measures “purposeful task-oriented efforts aimed at solving the problem, cognitively restructuring the problem, or attempts to alter the situation” (Endler and Parker, 1999), with items such as “Come up with several different solutions to the problem” and “Analyze the problem before reacting.” The emotion-oriented coping scale assesses “emotional reactions that are self-oriented. The aim is to reduce stress. Reactions include emotional responses, self-preoccupation, and fantasizing” (Endler and Parker, 1999). Examples of items measuring emotion-oriented coping include “Become very tense” and “Blame myself for not knowing what to do.” Finally, the avoidance-oriented coping scale measures “activities and cognitive changes aimed at avoiding the stressful situation” (Endler and Parker, 1999) with items such as “Go for a walk” and “Window shop.” Higher scores on the task-oriented coping scale indicate the positive use of task coping abilities, while lower scores on the emotion and avoidance-oriented coping scales suggest less frequent use of these undesirable coping skills. The CISS reliability (report test-retest reliability) is moderate to strong ranging from .51 to .73. The validity of this instrument was determined by analyzing the relationship between CISS and several factors, including social desirability, other coping measures, psychopathology, depression, anxiety, somatic complaints, neuroticism, extraversion, and absorption. Overall, findings show that particular coping styles are linked with congruent types of coping responses used in specific situations.<sup>3</sup> (Endler and Parker, 1999). The CISS is available from Multi-Health Systems, Inc.

*Yoga Program Forms:* In addition to the PSS and CISS instruments, participants of the two series of yoga classes held in fall 2004 and spring 2005 completed pre- and post-program survey forms developed by Ms. Malm for the purposes of her thesis research. The Yoga Pre-Program Form included nine questions regarding participants’ demographics, such as age, gender, ethnicity, and position held, as well as a question about prior yoga experiences. The Yoga Post-Program Form included 13 questions focusing on yoga and other exercise practice during the program as well as items pertaining to changes in teaching related behaviors, stress levels, and coping abilities. Finally, the Yoga Post-Program Form asked about participants’ satisfaction with the overall yoga program as well as with specific components (e.g., length of session, atmosphere). See the Appendix for a copy of the Yoga Program Forms.

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<sup>3</sup> Additional details of the validity for the CISS instrument can be found in the CISS manual, referenced in the appendix of this report.

After explaining the purpose of her research project on yoga and stress and how this study would in turn help Inner Resilience Program, Ms. Malm distributed informed consent forms that all participants signed prior to completing the PSS, CISS, and Yoga Pre- and Post-Program Forms. These instruments and forms were then administered to participants at the beginning of the first class and immediately after completing the final class of the yoga program. Once collected, scoring and data entry of these instruments were conducted by Inner Resilience Program staff following instrument specifications.

Analyses of the data collected were then conducted by the program evaluator in collaboration with Inner Resilience Program staff and the Smith College School for Social Work Research Assistant. More specifically, the evaluator conducted content analyses on transcripts of the individual interviews as well as on the qualitative data collected on the Yoga Post-Program Form. In addition, descriptive frequencies were run on quantitative data from the PSS and CISS instruments as well as the Yoga Pre- and Post-Program Forms using the Statistical Program for Social Sciences (SPSS) software. The evaluator also ran paired samples t-tests on participants' assessment scores from the PSS and CISS instruments in order to analyze pre- to post-test differences.

This report presents a summary of the individual interviews conducted with Inner Resilience Program participants and the Yoga Pre- and Post-Program Forms and PSS and CISS standardized assessments administered to yoga class participants during the 2004-2005 school year.

### **III. EVALUATION FINDINGS**

#### **A. Individual Interviews with Inner Resilience Program Participants**

As mentioned in the above section, 12 educators, including teachers, counselors, and administrators, who participated in an Inner Resilience yoga program agreed to be interviewed by the evaluator regarding their program experiences and found time in their schedules to complete the interviews. The interviews took place by phone in June 2005 and lasted approximately 20 to 30 minutes. With participants' permission, the evaluator recorded these discussions with a digital recorder, the company Escriptionist.com transcribed the tapes, and the evaluator then analyzed the content of the interviews. The results of these interviews are detailed below.

During these interviews, participants were asked to specifically talk about the Inner Resilience Program services that were most helpful in their efforts to integrate the events of September 11<sup>th</sup> and to further their own recovery efforts, as well as specific changes they had made in their personal and professional lives as educators as a result of participation in Inner Resilience Program services. All participants interviewed had experienced a range of Inner Resilience Program activities—including the yoga classes, residential retreats, Nurturing the Inner Life series, after-school workshops, and stress reduction days held at school sites—and thus were able to talk about various services offered by the program. Overall, the 12 participants interviewed expressed sincere appreciation of the Inner Resilience Program as an organization and for the

opportunity to be a part of the activities offered. As one interviewee stated, “I feel honored to be a part of this group. I feel blessed.”

### ***Helpful Aspects of Inner Resilience Program Services***

When the Inner Resilience Program interviewees were asked about services that were most helpful in their efforts to integrate the events of September 11<sup>th</sup> and to further their own recovery efforts, many individuals talked about the additional stress they felt after 9/11 that compounded the duress that educators typically face on a day-to-day basis. Overall they found Inner Resilience Program activities extremely beneficial in helping to reduce and cope with this stress. They felt that the services provided direct opportunities for relaxation, a nurturing and caring environment, a sense of community, and a place to slow down and take care of themselves. Nearly all interviewees commented on the relaxing and calming properties that they encountered, especially during the yoga classes and residential retreats.

*The yoga classes...encompass more than just exercise...with the breathing and the meditation and reflection. And I think those three things instead of just a pure exercise...brings a lot more meaning to my time... - Interview June 2005*

Some individuals who were interviewed mentioned specific components of the yoga classes and retreats as being helpful and relaxing, such as the bodywork, massage, stress reduction techniques, deep breathing, and meditation. Other activities also mentioned as being helpful in their recovery efforts were the Emotional quotient workshop by Dr. Robin Stern, the music program by Dr. Ma, Linda Lantieri's anger management techniques, conflict resolution workshops, and the Nurturing the Inner Life series.

*The retreat was so well done. It was such a range of different people when I went, very different styles, and there was such a sense of acceptance... - Interview June 2005*

In addition to Inner Resilience Program activities instilling calmness and a feeling of serenity, several interviewees also talked about the activities providing a nurturing and caring environment. More specifically, participants who were interviewed commented that the events were well planned but also flexible, giving space to each individual when needed. A non-threatening and nurturing environment was created,

allowing participants to connect with other individuals and think more deeply about caring for themselves. One participant shared, “There is just this sense of being heard and listened to and treated well. The utmost care is taken to really be good to people... it's a very powerful experience.” Another individual stated, “I've been to [Inner Resilience Program] events, and there have been people in the room that in other situations there might have been some friction. Personalities were just so different and would normally clash for one reason or another. It doesn't happen in these events, and I think a lot of it has to do with Linda [Lantieri] and the environment she creates. It is just her personality.”

A few interviewees emphasized enjoying the people who led and participated in the Inner Resilience Program activities, stating that there was a sense of community and connectedness. They felt the support of the staff as well as of their fellow participants, as one individual explained, “The people that participated and worked

*One of the things that I think has been very striking about [the Inner Resilience Program] is...this idea of listening, and I feel that one of the most powerful things about the project has been those opportunities to really sit and listen and be given the gift of stories of other people's lives -*

there were the most helpful. They just have a gentle spirit or concern... And you feel safe, and it is warm, and the serenity that I feel when I go in is just – it's great.” While participants relaxed in this safe, nurturing environment, they were able to get to know their colleagues on a more personal level. One participant expressed her appreciation for the community atmosphere that the Inner Resilience Program activities created, explaining, “I feel like that cohesiveness and the constant participation in a group like this is really helpful.” Another individual shared that after September 11<sup>th</sup>, she became increasingly isolated as she withdrew from the world. She found herself staying at home more often, sometimes not even venturing outside of her apartment for the entire weekend. However, this individual eventually heard about the Inner Resilience Program and began to get involved with the organization’s services. By the time of the interview in June 2005, this interviewee had attended two retreats, weekly yoga classes, and the monthly Nurturing the Inner Life series. These activities helped to remind her how important it was to get out of her home and connect with other people in the world.

### ***Changes Made as a Result of Participation in Inner Resilience Program Services***

In addition to discussing the services that were most helpful, the evaluator asked the 12 interviewees about the changes they had made in their personal and professional lives as a result of participating in Inner Resilience Program activities. Interviewees responded by talking about changes that naturally resulted from participation as well as changes that they had made or hope to make in the future. Several individuals noted that their participation in Inner Resilience Program services had led to many unexpected benefits. For example, interviewees stated that they felt calmer, more mindful, more confident, and better able to express their emotions and communicate with others. A few individuals mentioned that because of their participation, they were able to look more deeply at themselves and their needs. They learned to slow down, ask for help, and get back in touch with their personal values that guide their lives. Many mentioned feeling much calmer because of this and not reacting so quickly or getting upset when under stress. One interviewee commented about this experience, stating, “[I’m] learning to take time to step back and just think about things, and [not] be so reactionary, but just take the time to think things through... And learn to give myself the time each day to refresh me.” One participant shared an example: “I was having an issue with my son, and I went into the room, lit some candles, and I was able to just sort of meditate my way through calming myself down as opposed to getting upset and being more reactionary.” Another person stated, “Every time I’m about to stress out, I do the breathing and just an introduction to yoga and being able to have the experience has changed my focus and has helped me to go forward.”

*Now I take time  
before I leap, and  
I don't get as  
upset. - Interview  
June 2005*

A few individuals also commented that they personally felt healthier, both mentally and physically. One participant who was interviewed stated, “It [yoga practice] has made me stronger. It has made me healthier. It has made me more conscious of what I eat, how I eat, how active I am, what I do for myself. And like I said, the breathing, sleeping, everything has improved in terms of that.”

In addition to the above, interviewees mentioned several concrete changes that they had made in their personal lives as a result of participating in Inner Resilience Program activities. All interviewees indicated that they had increased their incorporation of self-care techniques in their

daily lives. However, the type of strategies each individual utilized was unique and dependent on what they found worked best for them. For example, one interviewee found that one particular Inner Resilience Program activity helped to remind him of the importance of integrating nurturing activities into his life:

There is this one little activity that they [Inner Resilience Program staff] do fairly frequently, and they ask you to do an inventory...like, Have you taken a walk? Have you meditated? Have you listened to music? Have you done various things that would be renewing? I find that I'm more attuned with that and I will try and make sure that I provide those opportunities for myself on a more regular basis. So when I'm stressed out and I'm aware of it, I'll take that walk or I'll listen to that music, or it used to be that I would have a massage like once every five years, and now basically I have one a couple of times a month if not more.

*I'm trying to live a day at a time, and that's one of the things I experienced with [the Inner Resilience Program] is just focus and center. -*

In order to sustain the positive benefits resulting from participation in Inner Resilience Program activities, many interviewees reported continuing to practice several of the relaxation strategies that they had learned, such as deep breathing and meditation, as well as other techniques (e.g., closing eyes, thinking about something positive). One individual stated that she hopes to go on a retreat at least three times a year to “renew my inner self.” Another interviewee shared a technique that she uses, explaining, “Every day I try to take ten minutes for myself at school. I have a ten-minute note that I put on my desk... every time I see this note I know it is for myself, and I try to relax.” Finally, one participant described a strategy that she uses, saying, “I’ve incorporated some of the rituals. In the past year there were relatives who passed on... I would light a candle at dinnertime... to help my children cope and give them a little ritual.”

In addition to the above strategies, more than half of the interviewees mentioned that they have continued practicing yoga, whether with a class outside of the Inner Resilience Program or a tape that they have at home. Some participants have explored additional methods of exercise, such as visiting the gym regularly, walking home every day for exercise, or joining other fitness-related classes including jujitsu (form of martial arts) or taiko (another form of martial arts that incorporates drumming).

As another form of nurturing activity, some participants found themselves revisiting hobbies that they had “put on the shelf” long ago. For instance, one participant who had played the cello for nine years but no longer included music as much in her life stated, “Listening to music and thinking about my creative sides, it has been helping me to... really look at myself and express myself more than I had been for a while.” Other interviewees mentioned reading literature again, taking time to reflect and write more, listening to self-help tapes while driving, and collecting quotes and spiritual meditations.

One last aspect mentioned by interviewees as a change in their personal lives is communicating more effectively and spending more quality time with others. The individual who mentioned that she withdrew after September 11<sup>th</sup> is making sure she frequently gets together with others. Another interviewee schedules a weekly lunch date with friends, while yet another person makes a date with her husband every Saturday. Finally, one participant who was interviewed stated that

she is working on being more assertive, and another person is trying to communicate more openly with her friends and family.

Many of the self-care techniques that participants learned about and the changes they made above also carried over into their professional lives. As one participant explained, “As a school teacher we deal with stress constantly, so I may come to work and be perfectly calm and then one thing will happen and then it seems like I become stressed out five minutes later. So it's a constant struggle, but I've developed more tools that will get me out of that stressful situation a little quicker. Or maybe even try to avoid my reaction to some of the, not necessarily avoid, but have a more positive way of dealing with stressful situations.”

Several of the teachers incorporated or planned to incorporate relaxation techniques, anger management, and other strategies into their classroom. For example, one teacher was so enthusiastic about her experience with yoga that she proclaimed, “I'm starting yoga [with the students] the first day of school!” She also plans to introduce meditation to her classroom, perhaps using the meditation tapes that Linda Lantieri shared with Inner Resilience Program participants. Another teacher has discovered that she can readily identify and recognize students who are experiencing anxiety and stress. She commented, “When I work with at-risk readers, I notice the anxieties in them and tell them that it's okay.” One teacher has a big, comfortable chair in the corner of the room that she offers to students expressing anxiety. “I tell them if anyone wants a quiet time, to be with himself, or wants to just sit aside and do nothing, just tell me.” A counselor taught anger management to a special education class in her school, which turned out to be a very positive experience. She plans to expand this topic to other special education as well as general education classes during the 2005-2006 school year. One teacher stated she is thinking more about her curriculum and what she can do for her students in terms of stress reduction. Finally, another participant implemented resiliency-building strategies in her classroom from a draft manual compiled by the Inner Resilience Program and distributed it to a small group of guidance counselors who began to pilot some of these strategies with their classes. This was part of the research and development phase of the Inner Resilience Program's efforts to draft a K-12 curriculum entitled, *Nurturing Resiliency from the Inside Out – Curriculum Modules for Grades K-12*.

The school administrators who were interviewed reported a slightly different way in which they had changed or plan to change their professional practices. One administrator emphasized incorporating communication and relaxation techniques into professional development as well as into her interactions with others. She explained:

I'm really going to take this information in terms of nonviolent communication, stress relief and use it as professional development, because I think it will be so useful for educators not just to get professional development and how to improve instructional practices, but also in communications [with others].

... It allows me to look at problem solving situations with many different lenses, in terms of other people's interests, in terms of mine, compromise, negotiations. And so I don't just go into a situation now. I mean sometimes I do, old habits are hard to break, but going into situations I'm really reflecting and seeing if there are alternative ways to approach situations. So it's more of a way of being, I guess.

Another administrator commented that she would like to hold monthly dinners at her school that are similar to the Nurturing the Inner Life series. She thought this would be helpful not only for seasoned staff but also could serve as an introduction for the new teachers.

Participants who completed the Yoga Post-Program Form also explained how yoga specifically had helped change their teaching practices, often reiterating many of the points made during the individual interviews as described above. For example, several individuals shared that they are now more aware of how they carry and express stress. They feel calmer, more relaxed, more patient with themselves and their students, and less judgmental overall. As one educator described, “[I’m] more patient with students. I don’t yell as much, very little in fact. I try to listen to the students more before becoming upset and am less likely to become upset.” Another respondent stated, “I feel more relaxed about my teaching and the pressures I constantly deal with at work. I feel more accepting of the challenges of teaching and better able to meet them.” In addition to feeling more relaxed, several mentioned utilizing methods in the classroom to help keep themselves calm during stressful situations, such as playing relaxing music and taking deep breaths. A couple of individuals also mentioned teaching relaxation techniques, including meditation and deep breathing, to their students as well as other staff.

### ***Suggestions for Improvement of Inner Resilience Program Services***

*Keep up the good work! - Interview June 2005*

At the close of the interviews, the evaluator asked participants about any improvements they would recommend for Inner Resilience Program services. The overall response seemed to highlight continuing and expanding the current services offered. Several individuals again expressed how much they enjoyed the Inner Resilience Program activities and hoped that these would continue.

Participants mentioned expanding Inner Resilience Program services in a variety of ways. One interviewee clearly explained the need to expand by sharing the following:

The yoga is one of the last activities that I’ve participated in, and many people were interested and some people were not able to because it was overbooked, and sometimes the room is a little too crowded and things of that sort. So it’s not that what they’re doing needs fixing so much, it’s that they’re doing it so well that they need to be able to provide bigger spaces and more sessions and things of that sort. So they’ve kind of, I don’t want to say they’ve created a need, but they have certainly tapped into the fact that there is a great need and I think with the resources that they have that they’re doing an incredible job.

Two additional individuals reiterated the above participants’ sentiments by pointing out that the yoga classes were getting quite full. One person suggested offering more flexible schedules of activities stating, “There’s a Thursday piece with Robin Stern that I’ve wanted to go to for the longest time but I can’t make Thursdays in the evening, and I’m sure I’m not the only one.” This interviewee also suggested offering the yoga classes through the summer instead of ending in May to “help us to continue, and those who are new at yoga may not have the motivation to continue on their own.”

In addition to offering more services and services at different times, a few individuals suggested offering reflective workshops, follow-up sessions, or a reunion to “continue the work that has already been done during the retreat” as well as to reconnect with other participants who attended the retreats. Several interviewees also suggested working more in the schools by offering team building between teachers and administration, recruiting principals and assistant principals to get involved in order to instill a school-wide change, and working directly with teachers in the classroom to help them implement aspects of the program, especially with resiliency-building lessons at the high school level and conflict resolution lessons in all grades.

Furthermore, two individuals who were interviewed expressed the desire to incorporate more Inner Resilience Program activities in their schools in general. One person stated, “[It] would be nice if this were a part of the staff development that we need to do - incorporate meditation, yoga, or something to start the professional development. Each time we meet we’d have someone lead us into a meditation or a visual [guided imagery techniques] or [self] massage or something so that we are taking care of ourselves first and then go on.” Another expressed a similar wish in a slightly different way, explaining, “I would love if there were other ways to bring the work of Inner Resilience Program into schools that... didn't necessarily have to be during staff development time... There are already a number of people who go to the yoga classes and the people loved the stress reduction day, but I just really feel that I adore my teachers and they work so hard... I feel like if there was a way for them to have access to some of what's happening, it would be incredibly powerful.” This particular interviewee suggested that there be some sort of communication regarding ways to integrate aspects of the Inner Resilience Program into schools, such as “...a summary of the options of stress reduction - I know we get e-mails, but maybe something in writing that just lays it out.”

### ***Summary***

Overall the 12 individuals who participated in interviews with the evaluator expressed satisfaction and gratitude for their experiences with the Inner Resilience Program. The interviewees emphasized that the relaxation strategies, nurturing environment, sense of community, and safe place to explore self-care and renewal strategies were the most helpful aspects of the program in terms of facilitating their recovery efforts. In order to continue their ability to cope and manage the daily stress they experience, participants indicated that they had made several changes in their personal and professional lives, including finding ways to react more positively in difficult situations, incorporating a range of self-care techniques, communicating more effectively and spending more quality time with others, and incorporating relaxation techniques in their classrooms to help students combat anxiety and stress as well. Finally, the participants who were interviewed suggested continuing and expanding the excellent work and services that the Inner Resilience Program has offered over the past four years.

### **B. Evaluation of the Yoga Program**

The yoga program being evaluated was offered to Inner Resilience Program participants during the 2004-2005 school year, with one taking place in fall 2004 and the other in spring 2005. Classes met once per week for 1.5 hours and lasted for 12 weeks in the fall and 10 weeks in the spring. Following the Hatha Yoga tradition, each session included breathing exercises,

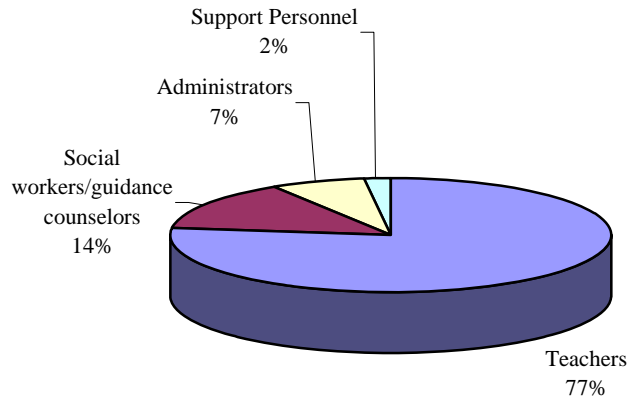
meditation, standing and seated yoga asanas (poses), and relaxation exercises. In addition to focusing on learning the poses, alignment, moving fluidly between poses, and breathing, the two programs emphasized ways in which students could apply their knowledge learned through classes to situations outside of yoga, such as paying closer attention to their breathing, using the breath in stressful situations, and becoming aware of and releasing tension in everyday life.

As mentioned above, several of the interviewees discovered many positive benefits resulting from their experiences with the yoga program. This section takes a more in-depth and quantitative look at this aspect of Inner Resilience Program services. As presented in the Evaluation Methods section of this report, three assessment tools—including the PSS, CISS, and Yoga Program Forms—were administered to measure the outcomes of this program, and the results are described below.

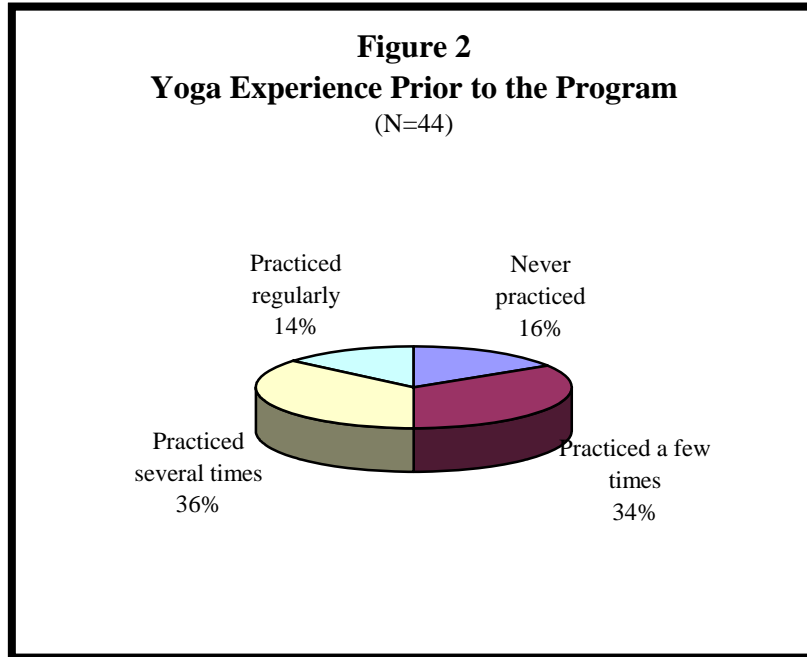
### ***Demographics of Yoga Participants***

Altogether, 44 New York City public school educators participated in either the fall 2004 and/or spring 2005 Inner Resilience yoga program, with 24 of these 44 individuals (55%) participating in both programs. As depicted below in Figure 1, more than three quarters (77%) of participants identified themselves as teachers who taught a wide variety of subjects, while nearly one quarter held positions such as principal, assistant principal, and administrator, as well as other professions including secretary, social worker, and guidance counselor. The vast majority (91%) of these participants were female, whose ages ranged from 25 to 61 years with a median age of 39. Furthermore, slightly more than half (55%) of these individuals identified themselves as Caucasian, 30% as Asian/Pacific Islander, 11% as Hispanic, and 2% (one person each) as African American and other ethnicities.

**Figure 1**  
**Positions Held by Respondents**  
(N=43)



As shown in Figure 2 below, half of the individuals who completed the Yoga Pre-Program Form indicated that they had never practiced yoga before or had practiced a few times. In addition, more than one-third (36.4%) had practiced several times while 14% practiced regularly.



### *Satisfaction With Yoga Program*

On the Yoga Post-Program Form, all participants who responded to the questions regarding satisfaction with various components of the yoga program indicated that their overall experience was that the classes were *extremely* or *very helpful*. In addition, as shown in Table 1 below, the majority (79% to 95%) also commented that they found the length of sessions, atmosphere, hands-on adjustments, and verbal instruction to be *extremely* or *very helpful*. Finally, all 43 participants responding to this section on the form stated they would recommend the Inner Resilience Program yoga classes to a friend, suggesting a very high satisfaction rate with the yoga program overall.

**Table 1**  
**Satisfaction with Specific Components of the Yoga Program**

How helpful were these components? (N = 43)	Very/Extremely Helpful	Helpful/Somewhat Helpful	Not at All Helpful
Length of sessions	36 (83.8%)	7 (16.2%)	0 (0%)
Atmosphere	34 (79.1%)	9 (20.9%)	0 (0%)
Hands-on adjustment	41 (95.4%)	1 (2.3%)	1 (2.3%)
Verbal instruction	40 (93.0%)	3 (7.0%)	0 (0%)

## ***Impact of Yoga Program***

As described in the Evaluation Methods section, Ms. Malm's thesis study hypothesized that the yoga program would help reduce participants' overall stress levels and increase their positive coping abilities, especially in terms of emotion-oriented coping as measured by the CISS instrument.<sup>4</sup> In order to discern the impact that participation in the yoga program had on these two areas of stress and coping skills, the evaluator reviewed data collected from the Yoga Post-Program Form along with the results of the PSS and CISS instruments for the group of 44 individuals who participated in the fall 2004 and/or the spring 2005 series of yoga classes.

As Table 2 below shows, the vast majority of participants indicated on the Yoga Post-Program Form that the yoga program had an effect on their level of stress as well as on their coping abilities. Overall, three fifths (60%) of participants thought the program had a *tremendous* or *great* effect on their stress levels while nearly half (47%) indicated that the program had a similar effect on their coping abilities.

**Table 2**  
**Effect of Yoga Program on Participants' Stress Levels and Coping Abilities**

<b>Did the program have an effect on these factors?</b> (N = 43)	<b>Had a Tremendous/Great Effect</b>	<b>Had a Somewhat/Little Effect</b>	<b>Did Not Have an Effect</b>
Stress Level	26 (60.4%)	15 (34.9%)	2 (4.7%)
Coping Abilities	20 (46.5%)	19 (44.2%)	4 (9.3%)

The above findings were further supported by the results of the PSS and CISS instruments. The scores on these two instruments were analyzed by comparing the results of the pre-test instruments completed prior to starting the yoga program with the results of the final post-test instruments taken upon completion of the classes.<sup>5</sup> Findings for the group of 44 individuals are presented in Table 3 below. It should be noted that the desired direction for the PSS overall score is a decrease from pre- to post-test, indicating a reduction in perceived stress. On the CISS, the desired direction for the emotion and avoidance-oriented coping scale scores is also a decrease from pre- to post-test, representing a decrease in the use of negative coping behaviors related to emotions and avoiding stressful situations. On the other hand, the desired direction for the task-oriented scale score is an increase from pre- to post-test, indicating an increase in the use of positive problem solving coping skills.

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<sup>4</sup> Due to the nature of the yoga interventions, it was not expected that participants would experience improvements in task and avoidance-oriented coping as measured by the CISS instrument. However, a statistically significant difference between pre- and post-test measurements were found on the task-oriented coping scale, as shown in Table 3.

<sup>5</sup> For the group of 24 individuals who participated in both the fall and spring series of yoga classes, the *final* post-test was the assessment that was taken after completing the spring 2005 series.

**Table 3**  
**PSS and CISS Results from Initial Pre-test to Final Post-test**

Assessment Tool (N=44)	Mean Pre-test Score	Mean Post-test Score	Mean Difference
<i><b>PSS Assessment</b></i>			
Overall Score	19.05	15.36	3.68***
<i><b>CISS Assessment</b></i>			
Task-oriented Coping Scale	49.20	52.45	3.25*
Emotion-oriented Coping Scale	50.80	46.11	4.68**
Avoidance-oriented Coping Scale	54.27	54.80	.52

\*Results are statistically significant at  $p \leq .05$ .

\*\*Results are statistically significant at  $p \leq .01$ .

\*\*\*Results are statistically significant at  $p \leq .001$ .

Overall, as shown in Table 3, participants reduced their stress levels as evidenced by a statistically significant reduction of perceived stress on the PSS from a mean score of 19.05 at pre-test to 15.36 at post-test. This result suggests that respondents felt less stressed by current situations in their lives as a result of participating in the yoga program. As expected with this group of NYC public school educators, the pre-test and post-test means fall above the average norm for females (norm = 13.7) and males (norm = 12.1), indicating that this group of 44 individuals have a greater amount of perceived stress in their lives than the average person in the United States. Even so, as mentioned above, the overall PSS score decreased significantly in the desired direction from the beginning of the yoga program to the end of participation.

On the CISS, statistically significant results were also found on the task-oriented and the emotion-oriented coping scales, indicating that participants improved their task-oriented coping skills (evidenced by an increase in scores) and emotion-oriented coping abilities (evidenced by a decrease in scores) from the beginning of the yoga program to the end of participation. More specifically, while participants scored an average of 49.20 on the task-oriented coping scale at the beginning of the yoga program, their mean scores<sup>6</sup> increased in the desired direction to 52.45 at the completion of the program. This finding suggests that respondents were better able to focus on problem solving when faced with a stressful situation as a result of participating in the yoga program. Again, as expected for this group, the pre-test and post-test means fall below the average norm for females (norm = 58.60) and males (norm = 58.56). Even so, the overall task-oriented coping scale mean score increased significantly in the desired direction from the beginning of the yoga program to the end of participation. On the emotion-oriented coping scale, participants scored an average of 50.80 at the time of the pre-test and decreased their mean scores in the desired direction to 46.11 by the end of the program(s). This finding suggests that respondents had more positive emotional responses when faced with a difficult situation as a result of participating in the yoga program. The mean scores at pre- and post-test also fall above the norm results for females (norm = 42.57) and males (norm = 39.21), but again the overall mean score for the emotion-oriented coping scale decreased in the desired direction from the beginning of the yoga program to the end of participation. No statistically significant differences were found on the avoidance-oriented coping scale.

<sup>6</sup> The CISS mean scores presented in this report are mean T-scores as determined by the instruments' scoring specifications.

In addition to reviewing the results of the 44 individuals who participated in the fall 2004 and/or spring 2005 series of yoga classes, the evaluator analyzed the scores of the 24 individuals who participated in *both* series. As Table 4 presents below, these participants had somewhat similar results as the group of 44 individuals presented above, particularly on the overall PSS score and the emotion-oriented coping skills scores. More specifically, these 24 participants reduced their overall perceived stress level as evidenced by a statistically significant difference between the PSS October 2004 mean pre-test (19.29) and the April 2005 post-test mean (15.38). In addition, participants improved their emotion-oriented coping skills as evidenced by a statistically significant difference between the CISS October 2004 mean pre-test (49.79) and the April 2005 post-test mean (45.04). These results suggest that individuals felt less stressed by current situations in their lives and had more positive emotional responses when faced with difficult situations as a result of participating in the yoga program. Although the overall PSS scores and CISS emotion-coping oriented scores fell above the norm results for males and females, these scores had significantly decreased in the desired direction from fall 2004 to spring 2005. Statistically significant differences between mean scores on fall 2004 and spring 2005 CISS assessments were not found on the task-oriented or avoidance-oriented coping scales.

**Table 4**  
**Individuals Participating in Both Series of Yoga Classes**  
**Results from Fall Pre-test and Spring Post-test**

Assessment Tool (N=24)	Mean Pre-test Score 1 (Oct 2004)	Mean Post-test Score 1 (Jan 2005)	Mean Post-test Score 2 (Apr 2005)	Mean Difference between Initial Pre-test (Oct 2004) and Final Post-test (April 2005)
<b><i>PSS Assessment</i></b>				
Overall Score	19.29	15.63	15.38	3.92*
<b><i>CISS Assessment</i></b>				
Task-oriented Coping Scale	49.54	51.54	52.25	2.71
Emotion-oriented Coping Scale	49.79	44.54	45.04	4.75*
Avoidance-oriented Coping Scale	54.17	55.21	54.58	.42

\*Results are statistically significant at  $p \leq .05$ .

In addition to presenting the October 2004 pre-test and April 2005 post-test scores, Table 4 above shows the January 2005 post-test scores on the PSS and CISS. These data reveal an overall progression of improvement from October 2004 to April 2005 on the overall PSS score. In October 2004, the mean score was 19.29, which then decreased to 15.63 by January 2005 and decreased again, although slightly, to 15.28 by April 2005. This pattern suggests that while the greatest impact of stress reduction resulting from participation in the yoga program may take place within the first 12-weeks, subsequent instruction and practice continues to support these initial gains as well as to facilitate further improvement of stress levels, albeit at a slower rate.

It is interesting to note that although there was not a statistically significant difference between October 2004 and April 2005 mean scores on the task-oriented coping scale as there was for the group of 44 individuals who participated in the fall 2004 and/or spring 2005 yoga program, the data in Table 4 show a slight progression of improvement on this scale. In October 2004, participants' mean score was 49.54, which increased to 51.54 by January 2005 and increased even further by April 2005 to 52.25. It could be that the smaller sample size of 24 individuals was not powerful enough to reliably (i.e., at the .05 level of significance) detect the changes on this scale as found with the group of 44. Indeed, with both groups the mean difference between pre- and post-test measurements on the task-oriented coping scale was the smaller change among the PSS overall scores and the CISS task-oriented and emotion-oriented coping scales.

Finally, the emotion-oriented coping scale mean score decreased in the desired direction from October 2004 to January 2005 but then increased slightly by April 2005. However, it should be noted that the overall difference in scores on this scale between October 2004 and April 2005 was still found to be statistically significant. Again, this slight increase could be due to the small sample size of 24 individuals, meaning that such a difference could disappear with larger samples. It should be noted that the post-test data for the fall class were collected the week following the educators' winter vacation, and the post-test data for the spring class were collected at the end of the term, prior to the educators' spring vacation.

In addition to the findings on the PSS and CISS mentioned above, the Yoga Post-Program Form asked participants whether they noticed any changes in their teaching-related behaviors since starting the program. Altogether, 83% stated they had noticed differences in their practices. As mentioned in the Individual Interview section above, these changes included feeling calmer, more relaxed, more patient with themselves and their students, and less judgmental. In addition, several respondents incorporated various relaxation methods (e.g., playing music, breathing, meditating) in their classroom to help keep themselves and students calm during stressful situations.

### ***Summary***

Data from the Yoga Post-Program Form and PSS and CISS instruments suggest several positive results for individuals who participated in the yoga component of the Inner Resilience Program. Overall, the 44 participants who participated in the fall 2004 and/or spring 2005 yoga program expressed high satisfaction with their experiences of the programs as well as with the specific components. In addition, results from the PSS and CISS assessments indicate that as a result of participating in the yoga program, these individuals felt less stressed by the current situations in their lives, were better able to focus on problem solving when encountered with stressful circumstances, and had less negative emotional responses when faced with a difficult situation. The group of 24 individuals who participated in both the fall 2004 and spring 2005 yoga program had similar results as the group of 44 described above, showing reduced perceived stress in their lives as well as improvement in the utilization of more positive emotional responses when encountered with stressful circumstances. Furthermore, the data indicate improvement of stress levels in participants over time from October 2004 to April 2005, suggesting that extended participation in the yoga program helped individuals sustain lower levels of perceived stress.

#### **IV. CONCLUSION**

In summary, the feedback and outcomes that the evaluator gathered from individuals who had participated in various Inner Resilience core program activities over the past few years revealed several positive findings. Individual interviews with program participants and the Yoga Post-program forms suggested high satisfaction with various program activities. Individuals found that the most helpful aspects of program services in terms of facilitating their recovery efforts since the tragic events of September 11<sup>th</sup> included the relaxation strategies, nurturing environment, sense of community, and safe place to explore self-care and renewal. As a result of participating in Inner Resilience Program activities, individuals expressed that they had made several changes in their personal and professional lives. Assessment instruments further supported this self-report. Overall changes included reducing perceived stress in their lives, reacting more positively in difficult situations, focusing on problem solving when faced with stressful circumstances, incorporating various self-care techniques, communicating more effectively and spending more quality time with others, and incorporating relaxation techniques in their classrooms to help students combat anxiety and stress. Finally, the participants who were interviewed suggested continuing and expanding the excellent work and services that the Inner Resilience Program has offered over the past four years.

**Appendix A**  
**References in Report**

Cohen, S., Kamarck, T., and Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 386-396.

Endler, N. and Parker, J. (1999). *Coping Inventory for Stress Situations (CISS): Manual*. Canada: Multi-Health Systems, Inc.



**Appendix C**  
**Yoga Post-Program Form**

**PERSONAL INFORMATION (POST-PROGRAM)**

**Please complete the questions below. This information will be used for research purposes only.**

Inner Resilience Program Code Name: \_\_\_\_\_

Today's Date: \_\_\_\_\_

How long have you been teaching? \_\_\_\_\_ (number of years)

1. Of the twelve sessions offered, how many Inner Resilience Program Yoga classes did you attend?

(write in number of classes) \_\_\_\_\_

2. In between Inner Resilience Program Yoga classes, did you practice what you learned in class on your own?

---

1	2	3	4
Never practiced	Practiced a few Times	Practiced several times	Practiced regularly

3. In between Inner Resilience Program Yoga classes, did you take other Yoga classes?

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1	2	3	4
Never	a few times	several times	regularly

4. In between Inner Resilience Program Yoga classes, did you take other exercise classes?

---

1	2	3	4
Never	a few times	several times	regularly

5. In between Inner Resilience Program Yoga classes, did you participate in other Inner Resilience Program programs?

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1	2	3	4
Never	a few times	several times	regularly

6. Have you noticed any changes in your teaching related behaviors since starting the Yoga program?    Yes                  No

If yes, please explain:

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7. Do you believe this program has had an effect on your level of stress?    Yes    No

8. If you answered yes to question 7, how much of an effect do you feel the program had on your level of stress?

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1	2	3	4
It helped very little	It helped somewhat	It helped a great deal	It was a tremendous help

9. Do you believe this program has had an effect on your coping abilities?    Yes    No

10. If you answered yes to question 9, how much of an effect do you feel the program had on your coping abilities?

---

1	2	3	4
It helped very little	It helped somewhat	It helped a great deal	It was a tremendous help

11. Using a scale of 1-5 please rate the following: (circle the number)

The length of the session:

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1	2	3	4	5
Not at all Helpful	Somewhat Helpful	Helpful	Very Helpful	Extremely Helpful

The atmosphere:

---

1	2	3	4	5
Not at all Helpful	Somewhat Helpful	Helpful	Very Helpful	Extremely Helpful

The hands-on adjustments:

---

1	2	3	4	5
Not at all Helpful	Somewhat Helpful	Helpful	Very Helpful	Extremely Helpful

The verbal instruction

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1	2	3	4	5
Not at all Helpful	Somewhat Helpful	Helpful	Very Helpful	Extremely Helpful

The overall experience:

---

1	2	3	4	5
Not at all Helpful	Somewhat Helpful	Helpful	Very Helpful	Extremely Helpful

12. Would you recommend the Inner Resilience Program Yoga classes to a friend?      Yes  
No

13. Any additional Comments/Suggestions:

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## Appendix D Perceived Stress Scale

### Perceived Stress Scale

Sheldon Cohen

**The *Perceived Stress Scale (PSS)*** is the most widely used psychological instrument for measuring the perception of stress. It is a measure of the degree to which situations in one's life are appraised as stressful. Items were designed to tap how unpredictable, uncontrollable, and overloaded respondents find their lives. The scale also includes a number of direct queries about current levels of experienced stress. The PSS was designed for use in community samples with at least a junior high school education. The items are easy to understand, and the response alternatives are simple to grasp. Moreover, the questions are of a general nature and hence are relatively free of content specific to any subpopulation group. The questions in the PSS ask about feelings and thoughts during the last month. In each case, respondents are asked how often they felt a certain way.

**Evidence for Validity:** Higher PSS scores were associated with (for example):

- failure to quit smoking
- failure among diabetics to control blood sugar levels
- greater vulnerability to stressful life-event-elicited depressive symptoms
- more colds

**Health status relationship to PSS:** Cohen et al. (1988) show correlations with PSS and: Stress Measures, Self-Reported Health and Health Services Measures, Health Behavior Measures, Smoking Status, Help Seeking Behavior.

**Temporal Nature:** Because levels of appraised stress should be influenced by daily hassles, major events, and changes in coping resources, predictive validity of the PSS is expected to fall off rapidly after four to eight weeks.

**Scoring:** PSS scores are obtained by reversing responses (e.g., 0 = 4, 1 = 3, 2 = 2, 3 = 1 & 4 = 0) to the four positively stated items (items 4, 5, 7, & 8) and then summing across all scale items. A short 4 item scale can be made from questions 2, 4, 5 and 10 of the PSS 10 item scale.

**Norm Groups:** L. Harris Poll gathered information on 2,387 respondents in the U.S.

Norm Table for the PSS 10 item inventory

Category	N	Mean	S.D.
Gender			
Male	926	12.1	5.9
Female	1406	13.7	6.6
Age			
18-29	645	14.2	6.2
30-44	750	13.0	6.2
45-54	285	12.6	6.1
55-64	282	11.9	6.9
65 & older	296	12.0	6.3
Race			
white	1924	12.8	6.2
Hispanic	98	14.0	6.9
black	176	14.7	7.2
other minority	50	14.1	5.0

## II. PERCEIVED STRESS SCALE

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate by circling *how often* you felt or thought a certain way.

Name \_\_\_\_\_ Date \_\_\_\_\_  
 Age \_\_\_\_\_ Gender (*Circle*): M F Other \_\_\_\_\_

0 = Never 1 = Almost Never 2 = Sometimes 3 = Fairly Often 4 = Very Often

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 1. In the last month, how often have you been upset because of something that happened unexpectedly? .....                 | 0 | 1 | 2 | 3 | 4 |
| 2. In the last month, how often have you felt that you were unable to control the important things in your life? .....     | 0 | 1 | 2 | 3 | 4 |
| 3. In the last month, how often have you felt nervous and "stressed"? .....  | 0 | 1 | 2 | 3 | 4 |
| 4. In the last month, how often have you felt confident about your ability to handle your personal problems? .....         | 0 | 1 | 2 | 3 | 4 |
| 5. In the last month, how often have you felt that things were going your way? .....                                       | 0 | 1 | 2 | 3 | 4 |
| 6. In the last month, how often have you found that you could not cope with all the things that you had to do? .....       | 0 | 1 | 2 | 3 | 4 |
| 7. In the last month, how often have you been able to control irritations in your life? .....                              | 0 | 1 | 2 | 3 | 4 |
| 8. In the last month, how often have you felt that you were on top of things? ...  | 0 | 1 | 2 | 3 | 4 |
| 9. In the last month, how often have you been angered because of things that were outside of your control? .....           | 0 | 1 | 2 | 3 | 4 |
| 10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them? ..... | 0 | 1 | 2 | 3 | 4 |

Please feel free to use the *Perceived Stress Scale* for your research.

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#### References

The PSS Scale is reprinted with permission of the American Sociological Association, from Cohen, S., Kamarck, T., and Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 386-396.  
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**Appendix E  
Residential Retreat Pre-Survey**

**Inner Resilience Program  
Reflection and Rejuvenation Retreat  
October 15-17, 2004**

*1. What drew you to participate in the Reflection and Rejuvenation Retreat being held this weekend?*

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*2. What do you hope to gain personally and professionally by participating in this retreat?*

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*3. Do you currently practice any relaxation, reflection, or self-care techniques in your life (e.g., yoga, meditation, journaling)? If so, which ones and how often?*

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*4. Are there any particular areas that you hope to learn about or focus on during the Reflection and Rejuvenation Retreat?*

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5. Please answer the following questions about your background:

- a) What is your gender? \_\_\_\_\_
- b) For how many years have you been an educator? \_\_\_\_\_
- c) For how many years have you been at your current school? \_\_\_\_\_

**Thank you for your time. Enjoy the retreat!**

**Appendix F  
Residential Retreat Post-Survey**

**Inner Resilience Program  
Reflection and Rejuvenation Retreat  
Retreat Reflection Survey  
October 15-17, 2004**

1. How helpful do you believe the Reflection and Rejuvenation Retreat was in accomplishing the following program goals...

	<b>Extremely helpful</b>	<b>Moderately helpful</b>	<b>Not at all helpful</b>
A. increasing participants' awareness of factors that contribute to stress and their impact on health and performance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. teaching relaxation techniques and self-care tools that can be incorporated into participants' daily life?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. exploring reflective approaches to experience and express grief, pain, and anxiety, both individually and with others?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. enabling participants to reconnect with their own sense of deeper meaning and purpose that originally led them to education?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. How helpful was the Reflection and Rejuvenation Retreat in enabling you to accomplish your personal goals for this experience?

Extremely helpful     Moderately helpful     Not at all helpful

Comments:

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3. What new awarenesses and/or skills did you gain (if any) as a result of participating in the retreat (e.g., relaxation techniques)?

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4. What strategies and/or concepts presented in the Reflection and Rejuvenation Retreat do you plan to incorporate into your life to continue the practice of relaxation, reflection and self-care?

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4a. What challenges, if any, do you anticipate to incorporating these techniques into your life?

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5. What ideas, strategies and/or techniques presented in the Reflection and Rejuvenation Retreat do you plan to incorporate into your educational practice?

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5a. Please provide one or two examples of how you envision incorporating these into your educational practice.

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5b. What challenges, if any, do you anticipate to incorporating these techniques into your educational practice?

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6. What other kinds of training/support would be helpful in order to sustain and build on the relaxation, reflection, and self-care techniques you have learned at the Reflection and Rejuvenation retreat this weekend?

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7. Staff facilitation and individual sessions offered at the retreat:

How would you rate the following...	Excellent	Good		Poor	Not Applicable
a. Communication with the Inner Resilience Program Office regarding information related to this retreat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Presenters/facilitators of the retreat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Individual reflection session	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Individual bodywork session	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Retreat accommodations, travel, and meals:

How would you rate the following...	Excellent	Good		Poor	Not Applicable
a. Accommodations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Travel arrangements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Meals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. How would you rate your overall experience of the Reflection and Rejuvenation Retreat?

*Excellent*

*Good*

*Fair*

*Poor*

**Comments:**

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10. What suggestions do you have for making the retreat even better? \_\_\_\_\_

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*Thank you for your time and thoughts!*