A Lifetime of Resilience Research: An Interview with Emmy Werner, Ph. D.

by **Kathy Marshall**

Kathy Marshall: Welcome to this program offered by the National Resilience Resource Center at the University of Minnesota. We're delighted today to have as our guest, Dr. Emmy Werner, who is a legend. You've been just so active as a resilience researcher all of these years. How did that start?

Emmy Werner: Well, the whole term [resilience] even, the concept has sort of been evolving. My interest in research really started way back in trying to find out what happens to children who have the odds against them. That was quite a while ago in the late 50's when I had graduated with a PhD. Actually, it did start right here at the University of Minnesota Institute of Child Development. I was hired to be an interviewer in the study of adolescent youth in Southwestern Minnesota. At that time people were very much interested in what happens to kids who may have hard times, and whether they developed problems. The emphasis was very much on the negative. If you have problems as an adolescent, you're going to have problems as an adult. So, in the beginning, most of developmental research was focused very much on old myths. What happens to kids who are poor or come from homes where there's alcoholism or mental illness, or a lot of discord and that's really how I came into this field.

Like many of the other people who've really now looked at the positive (certainly Norm Garmezy, here in Minnesota, is the grandfather of that research), I looked at children first with the idea that if you have a negative background, you are most likely to also develop problems as adults. But, I was also intrigued by the fact that after all, not everyone did. Maybe in that respect, fairly early, I turned my perspective around. I didn't just count how many became delinquent or whatever.

KM: How did that shift or different point of view emerge for you?

For me it emerged way back after EW: World War II. As a child I lived through WWII in Europe. It wasn't the greatest experience, but those who did survive, I think all probably shared in common the fact that they hadn't given up hope. Just think of it, just think! That's why I feel so much with children today obviously, whether they're in Africa, or right now, in Iraq. And after that war was over even though there were many child casualties, the ones who came back to school, seemed to share something in common: the fact that they were able to not look back at the bad things that had happened to them, but forward to what they could make now out of the opportunity to go back to school, even though there was rubble all around them. I probably had that sort of perspective unconsciously and brought it with me to this country.

Knowing

KM: You had a knowing there was something internal going on for those people. That sense of hope was very real.

EW: I don't know, maybe what I should say is, if you want to be really honest about how you do research and why I get interested in a phenomenon, a lot of this is really not,

laid out up in here [in intellect], one, two, three. A lot of the knowing may be deep down really in your heart rather than in your head. I think if you're a researcher who does their work because of a passion in their heart, and not just the idea, "I got to be in front on a bandwagon," I think you just sort of follow that passion, not necessarily thinking whether or not this will result in a monumental production of many volumes that other people have to read. Do you know what I'm trying to say?

KM: Yes, absolutely.

EW: I ask graduate students now, "What is it that you really like?" "What does your heart tell you to do?" I guess what I basically did when I did studies with high risk children... I was curious more maybe than some of the others [researchers] about what happened to those who didn't become casualties. Because for many years the focus on the media has been mostly on what goes wrong. The headlines are always that. I guess I'm a little ornery. I always sort of try to look at things the other way. But, what went right? This was not at the time a very conscious master plan. Do you know what I'm trying to say?

KM: It was almost an intuitive sense, following your passion. You just knew that that was the question that interested you?

EW: Well, and not just following my heart, but also following my data because *once you* start getting to know people and interview them, and do all the things researchers do, you're still given a choice about whether or not now you want to emphasize [something]. Do you see what I'm trying to say? The 20% or so that becomes delinquent against the odds, or the 80% who don't.

KM: So, you have a choice as to how you will focus ...

To some extent I think you do. It's not that you should suppress one half of what you find, but on the other hand, I think you really need to [balance things] that may be of real concern to people who need to intervene, or [look] at the things that the children or adolescents, or young adults, bring with them that helps them overcome it on their own. Maybe that sort of thing happened in the sixties or so. I remember our first time in the Kauai study on which a lot of that work on resilience is based. I was sort of surprised when we found that among all the children who had so many odds against them, a third or so didn't seem to develop any problems. So, for a while, I thought, maybe this was an error in statistical analysis.

A lot of people were so set to look for negative outcomes that anyone first reporting thought, "My God, some positive outcomes!" and wondered "Is this just a fluke? Is this just because you have a peculiar group of people far out there in the Pacific who seem to weather things better than in Minnesota?" But, by and by, in the field, different people in different places, including Minnesota, have begun to find similar trends.

And so, I think that's the wonderful part. If you're interested in research and doing research, you try to share your findings with a community of people who have equal interest. So there's a link between Kauai and Minnesota and way out now in Australia they're doing similar studies, and in Europe and in Scandinavia. You sort of grow a web that connects people who have these shared interests.

KM: The web is for influencing change.

EW: I just have to level about it. I care very much about finding positive things in individuals, in the family, in the community. I'm a little bit less convinced, if I want to be very frank about it, that a lot of that change can be brought about by a national agenda.

That seems to have happened a little by now as the research findings on this "process of resilience" become more popularized. You suddenly have a lot of people who think, "We go to become resilience facilitators."

First, of all we need to think of a concept [of resilience]. The concept is not a fixed product. Whatever this term means, it doesn't mean that I give you either a pill or a shot...like a flu shot now in November. And no matter how horrible your background may have been, and how terribly depressed you were before, tomorrow morning after this is all over, you're resilient! But, unfortunately, in the interpretation of research findings that have come from people like Ann Masten and me, and Garmezy and people in England and Australia, many people sort of have jumped to this conclusion. [Some] think there is a phenomenon that seems to make it possible for children, and also, grown-ups, to overcome odds, let's get 'this', the secret weapon, and we will use it positively, and then everyone will be happy and hopeful ever after. I'm overdoing it a little bit! This emphasis does creep into a lot of programs, unfortunately, that have tried to apply the research findings.

Resilience Process

Number one, whatever you mean with resilience, it's not a trait. It's not something that you have now and forever. It's a process, and over time you see that some people, and families, seem to be able to overcome a variety of odds more easily, or more constructively, than others. If you can find a way to help those who don't have quite that, in the process, that's wonderful. *It can't possibly ever be an organized program.* If you ask how you can encourage resilience in the nation as a whole, you have got to start with some very simple like... with early good health care for everyone.

So, one of the things we find out over time in our studies, that early childhood health is a very, very, important protective factor if you face a lot of odds in your life. So, where do we put our money now? We're putting it at the end when the harm has been done ... the long term consequences, let's say, of chronic alcoholism, which takes a lot tax dollars at the end of life.

So, if I'm sounding as if programs for resilience may not really be the answer for problems, I'm not saying it isn't important to help. I think you will really have to think of stepping stones along the way that need to be provided nationally as a policy before you really then can very specially zero in on [a specific community or group]. When you look at their background you will find a high suicide rate, a high alcoholism rate, the inability probably to read beyond the 5th grade level, and so forth.

What we really need to do is to do some things earlier, and they would have to be done really beyond isolated programs within the context of national policy. And that's where I'm completely out of step because we don't have a national policy. We're the one country in the developed world that has no universal health insurance for at least children, where you start, which is where the Scandinavians started 100 years ago. We're the one country in the developing world that has no paid parental leave so that care taking, that is so important, can really take place. We are the one country in the world that has no real standards nationally for reading. I don't want to take away from what you are doing, and everyone else who practices, you know, programs in resilience, but you really need to think of the larger national context in which this operates.

KM: You're talking about a really massive systems change that begins with the commitment in the form of that national policy that starts very early.

Maternal Education

EW: Yes, let's say we know now some of the major protective factors that seem to work no matter where. One of the biggest is maternal education. No matter which studies have been undertaken, no matter what adverse conditions, it's the mothers who have more education and are more sensitive to the needs of their infants, that tend to be mothers who will eventually have children and even middle-aged offspring that can weather a lot of adversity. Ok, so here is a major protective factor.

Early Childhood Health Care

Another major protective factor that has been found all over the world is good health in early childhood. And that would include obviously, being able to prevent perinatal pregnancy complications, major pregnancy complications, to make sure that children are born not extremely prematurely, as many are right now. It's that cluster of protective factors that we know has long term consequences in the positive and the negative sense.

We know by now from a number of studies, not just our own, that it's important for the young children to have a basic sense of trust. Now, trust can come in many different ways. It's doesn't have to come necessarily even from a biological parent. It can come from interacting with a caring grandmother or grandfather or an older sibling. But, it's the sort of thing that really needs to be there before you do anything else. So, we know that. We don't need to do any more studies.

Reading

We know that over time, no matter how poor or how dislocated you are in your family, if you know how to read you'll have a great advantage. I know it's not a glamorous skill. Yet about one-fourth, between one out of four, to one out of three of our children in school cannot read at the 4th or 5th grade level. And they graduate reading at that lower level.

Faith Community, Caring Teachers

There are other studies that have shown if you have a sense of faith, if you're part of a community where you learn how to care for others, that makes an enormous difference over time. We know that if you like school, and if you've got a teacher who cares for you, that will be with you whether you're five or 50. I don't know how to put this in words. These are all things we know. We don't really have to do any more studies. It's been replicated among, in our case, among children who are Asian right here in downtown Minneapolis, among kids who are Caucasian or Hmong, in the East among Black children, in Europe among a variety of children in Scandinavia and in Australia. To some extent, the basic building stones of this process called resilience are there and they're so simple that you feel almost awkward. If we just now acted on it...

KM: You are speaking to the common sense supports and the research was necessary to document that. Now we have, in a sense, a public policy challenge. Can we commit to those supports?

EW: I think you put that very nicely and Kathy, that's about what it is.

What research did show that one didn't know before --and the hopeful part-- is that positive change can take place, not just in school and all of the organizations we have set up for children, it can take place before they get into school, and most importantly, also afterwards.

A lot [of those] we studied recovered once they went into their 20's and 30's, and even 40's. But, it was because they took from the community other resources, whether it was the church, or community college, or a caring group of neighbors. There are many avenues to creating building blocks outside regular organizations. And maybe that's the problem ... that most of the people who are now pushing resilience as a process don't necessarily interact with [what is] around them.

I didn't do anything astounding. I looked to see what people utilized who were able to overcome the odds. And when you look around, you find that a lot of that doesn't take place in an organized setting. It requires a commitment from either a county or a state, or ultimately, the country, to do these little basic things. There you can grow more from that.

KM: What would you say is the most valuable outcome or finding from the decades of work that you have done?

EW: The most basic thing really is that unless very young children do have that sense of basic trust that can still develop within the first 18 months of life, they're going to have a little harder time facing life's adversities. That's not a very astounding finding, but when you look over time at differences between people who overcome a lot of adversity whether it's in their teens or adolescence, or later on, the difference between those who do and don't lies back there. There's just no doubt about it.

The second key finding would be the importance of basic communication skills. It comes back to making sense out of reading books. Those who are learning about the printed word, falling back on that printed word sometimes in times of adversity when no one else is around, have a great advantage in overcoming adversities in their life than those who don't.

KM: You used the phrase, "having access to books when no one else is around." That

implies to me that you value a reflective quality that is human when we're healthy.

EW: Yes.

KM: There is something internal to the individual. What have you noticed about that quality or capacity to affect someone's long term situation?

EW: You mean being a reflective person?

KM: It is something about personal mental health and mental wellbeing or spirituality. You talk about trust and how important that is in the very early months of a child's development. You talk about communication. When I asked you about your own beginning interest in resilience, you pointed to a sense of hope as being very influential.

Inside-Out Process

KM: What have you noticed in your decades and decades of research about that inner world? Parker Palmer calls it the *inner landscape*.

EW: Well, a person's inner landscape is determined to some extent by what you bring to it. I think to some extent, we have neglected that part when we talk about prevention. The process of resilience and programs that try to foster it are up against individual differences. It seems to me that whole research is really a research on individual differences.

Now, we know from the start, and I'm not trying to say that this is necessarily all genetic, that there are large individual differences in impulsivity in children, and in this ability to reflect, and in the ability to problem solve, and the ability to reach out and look for support in others. Those are all clusters of building blocks that lead to resilience.

I would say a child that is lucky enough to have a set of genes that makes him or her active and sociable, that has someone around in his or her family that truly accepts him as he or she is, whether it's a grandmother or a sibling, or the natural parent, will develop this inner landscape, easier than a child that may be, doesn't have some of these temperamental dispositions.

What we're getting back to now is also genetic dispositions that help you be more intelligent, and do help in some problems. I'm not trying to say that resilience is an IQ, but I'm saying that almost all studies have shown that it's truly helpful if at least you have average problem-solving ability. If you have that, then you can begin to think about the consequences of your actions and you are then not so easily led into dealing with people who push you into actions or decisions or friendships that are not particularly positive.

Let's take for instance, a look at children who become delinquent. It's true that many children who come from poor homes, or homes that are disadvantaged in other ways, whether alcoholic or psychotic or so, will become "delinquent." They might act out all kinds of things for a brief period of time during the teens. But, then when you look later on what happens to most of delinquents they actually are fine. They don't become criminals. Some 90% of people, who have delinquent records, do not have criminal records. Now, what turns them around? What turns them around is oftentimes a change in the landscape. Ok, they joined the Army. They go on to a junior college. They have a different set of friends. They joined a church. They marry a spouse that's more stable. But, they still need to be intelligent enough to make those choices.

Yes, everyone can be helped to have more access to these building blocks that lead to resilience. **But, you're going to have**

individual differences in the results of your interventions, just as you have in reaction to adversity. And I really think that anyone who is interested in starting a program needs to be humble enough to accept it.

What we do know from the few programs that have been evaluated, is that you tend to change whatever capacities you want to foster to the degree of about one-third of a standard deviation. That's about all we know from evaluation research. You know, we know that even in Head Start and all the other programs, we can help, but we don't make a genius out of someone who isn't. So, you sort of have to try to come to grips with that. We have to say there are very basic things we can do for everyone, and we haven't done enough of that. That's a policy thing.

There are some very particular things you can do for every human being and that will vary greatly with what that human being brings to it as well. A lot of the programs that deal with resilience prevention or intervention don't look at that individual part of the equation. They still look at each child as a box and you put [something in the slot and out comes a resilient child]. What we do know, the important thing we found over the years is that people really make their own environment. I don't mean to say that people should be blamed for poverty, or should be blamed for alcoholism, or the major social problems, but depending on what that *person makes out of it,* the number of stressful life events can increase and decrease over time quite substantially.

So, it is really, it's like a spiraling [castle] stairway where I grew up as a child. You have to try to walk a child or groups of people slowly from one step of the stairway to the other while recognizing that some of them will get it earlier than others and faster than others. But, that doesn't mean you should do it for everyone.

And that's, where maybe the future of the research lies. We have to look much more at both the promise but also the limits of deliberate intervention. *All these studies that we've done were studies [of] people who did it in spite of it.* There was no resilience intervener there. They grew up in families that were tough, and somehow they made something out of it.

KM: In those studies, particularly in your Kauai study, what can you say about the process of meaning making that individuals seemed to go through? The individual ultimately is the one who puts meaning...

EW: ...who tries to make sense out of their lives.

KM: ...they're making sense from the inside out.

EW: Right. And of course, one of the important factors is also that most of the young people certainly that pull through develop that sense of meaning, and a more internal locus of control along the way. So, at some point they would say, "Okay, my life is tough, but I'm going to make sense out of it and I'm going to overcome it." I would assume people differ greatly in the way they make meaning out of their lives.

Spirituality

Some people need to do it in the form of organized religion. The importance of the church in the community as a place where one can foster resilience has been underestimated. Maybe not among the good Lutherans of Minnesota, but you know as you probably know, most researchers are basically sort of apolitical and they don't think of religion as a big deal. If anything, they think of it as maybe a detractor. But, certainly what you do find, yes indeed, among especially children from poor homes and children who don't go to the

university, that being a member of a community of faith gives the meaning.

So, what makes the meaning Well, we realized that it isn't necessarily even a particular faith. I don't want to denigrate any faith, but it seems whether you're Catholic, or Lutheran or Buddhist, or Jewish, it's more what that faith provides for you as an emotional support, as a way indeed of making sense of your life and your suffering, and also as a way to help you become a chain that you yourself give back something to others who have given to you. That's a very, very important part of the community of faith that should be more appreciated by people that either want to foster resilience or study it. Absolutely.

KM: That would be a very valuable area for future research to explore.

EW: Yes. It shouldn't be dogmatic.

KM: In the work that we do, we're always quite careful to separate religious matters from spirituality.

EW: Right. You have it.

KM: In your studies, what have you found people saying about spirituality?

People over in Kauai ... who got a lot out of a community of faith or religion said, "It makes me feel that I belong some place." So, we're back to a sense of having other people who share the same [things]. They would say, "It makes me feel as if no matter what I do or suffer there is some light at the end of the tunnel." I think we will emphasize more of the concrete. "I know that being a member of the Jehovah Witnesses means I've got a group about me. We meet; we hand out papers. I have a job to do; I'm a part of another group and that gives me meaning." So, those themes come through in people who value whatever you may call it, spirituality or community of faith. It's a very,

very important part in their lives. It becomes very important quite early, usually towards the end of the first decade of life and through adolescence. But it doesn't have to be a particular denomination, no, not at all. But, the ones who seem to be in a sense the healthiest won't emphasize that much what the community can do for them. "Okay, that made me feel that I ought to be helping someone else." required helpfulness. Being of some service is something that ran through the lives of the resilient kids that we study all the way to midlife.

Self-righting

KM: Can you talk about self-righting?

EW: The self-righting tendency isn't really an invention of mine. It's something that is part and parcel of behavioral biology. As you study organisms and certainly as you study young children and growing people you see that unless there is serious brain damage, or unless you are literally born without a brain, and unless the environment is just so adverse that nothing can flourish, the vast majority of human beings seem to veer toward a form of basic normal development.

In other words, what we have sort of taken for granted -- that everyone who has been faced with a problem will be a casualty--is just not so. There is built into us, through many millions of years of evolution, the ability to bounce back. That's a biological given.

New Research Perspective

KM: When you were beginning your research how different was your perspective, and what happened to you because of it?

EW: I was totally unaware that what I was doing was of any value. We were doing the study out there on an exotic little island, and my worry was that my results as I was beginning to publish them would never be

replicated. That's the key really in research. [I feared] I had loused up my data and no one would ever publish it, or send it to the journal of "unreplicable" results! So if you're really curious, you wanted definitely to know right from the beginning whether you're alone. "Is this picture really something that's just in here, or is there something real out there?"

I really have felt throughout my professional life that the wonderful thing if you do longitudinal studies is that you get periodically rediscovered. They discover you when you publish something on infancy, and then ten years later on childhood, and eventually, to mid-life. I think most of the people who do research for the fun of it, which I have, don't worry about whether they're [accepted].

You worry about whether your data are really true. You have to make sense out of it. So you worry about whether the sense you have is shared by someone else, or whether you just have a schizophrenic slant on what you find.

Surprising Discoveries

KM: What did you discover that surprised you?

EW: Well, what did surprise me, [were the] first findings, which had to do with the children who had four or more high risk factors against them. When we looked at them at least in the first 10 and 15 years we found that so many did not have any of the problems that were predicted on the basis of their background. They didn't turn out to be delinquent or have mental health problems. And when those first findings were published, I basically thought, "Oh, my God, maybe we used the wrong statistics." No, I'm overdoing it a bit. But, you're so focused on finding problems, you're surprised you don't find problems.

KM: It was truly surprising to you?

EW: There was such a high proportion already by the time they got through adolescence, doing so well against all those odds-- poverty, parental alcoholism, psychopathology, and a lot of disharmony in the home. Then what surprised us next is the high proportion of people who had problems in adolescence, understandably in part because they grew up in this high risk setting, who then recovered without any intervention in their 20's and 30's by making use of the things that the community had to offer spontaneously.

But I want to say that at the end, there's still about one out of six in this group who have problems. Other studies find the same. They may not always be the same one out of six; there may be people in different decades that have different problems. But, when you look at that group, the biological risk factors are overwhelming, not so much the social and the psychological.

Those ones who remain vulnerable over time--and there I really do want to put in a plea for future research--tend to be almost to a man or woman offspring of alcoholics. Alcoholism still is the highest risk factor we have. Some 28% of all children born in this country have at least one or both parents who sometime during the time they grow up, between birth and 18, are abusing alcohol. That's an enormous number of people....28%. With all the emphasis on resilience, I see very few programs, by the way, which focus on this particular group. I'm not saying that they all will have problems, but over time, you see they do tend to develop a higher proportion of problems as they move from childhood to adolescence into adulthood. And of course here you've got the interaction between a genetic vulnerability, probably to alcoholism, and the disarray in their home that leads to it. So, the one out of six that still have problems at midlife now, a very high proportion are offspring of alcoholics, who now, themselves are alcoholic.

And on the other hand there are a few who are offspring of parents who have the basic psychiatric diseases that have a strong genetic base, namely, bipolar, manic depressive and schizophrenia. It doesn't mean that they all will have problems, but they are more vulnerable throughout adulthood. So, those are the sort of things that hang over you, so to say.

And the other thing that we find, and that the British are beginning to find too, are the children who are born, not just necessarily prematurely, but low birth weight for gestational age. The children who are really so tiny of course now are being saved. With multiple pregnancies due to extra hormones to fertilize we have many more now. By the time they get into their 40's or so, just from a health point of view, they are much more vulnerable to all kinds of diseases. So, *the long term vulnerabilities are really in biological risk factors* -- I'm not trying to take away from the psychological--over time, then in the psycho-social risk factors.

KM: In one sense, the hopeful side of that is that those things that are not biological tend to be areas where we can expect that we can be supportive and assist someone.

EW: Absolutely. I have no doubt that the future will bring all kinds of possible, hope for those who carry that biological vulnerability. But I want to go on record and [stress] these three areas—(alcoholism, low birth weight and premature birth). This is, I think, where the next decades should bring an enormous hopefully positive breakthrough for these children and their parents. When I look at intervention programs I find there are very few for the highest high risk group. It's very odd.

Helpers

KM: One of the things that you mentioned in the book that I find interesting, is that when you asked folks who were the most

helpful people for them, you ended up saying, we're very humbled to discover that it was not the mental health professionals, the psychologists, sociologists, but it was informal.

Very much so. We asked this question repeatedly. We asked it at age 10, and at 20, and at 30 and at 40. We asked them to rank in order who had been most helpful. And what comes in very much so is always obviously someone in the family. Next to it a friend, kin and teachers very much so. The role of the teacher is not just as someone who teaches you how to read, but who cheers you on; it's very important. And then for some, people in the church. And yes, the mental health professions of any ilk, whether they're psychiatrist, or psychologist, or social workers, ranks about like pets. Except [pets were] of course cheaper! Yes, they ranked about number 12, together with the dog.

Humor

KM: How does humor play into this?

Oh, I think it's essential, but that's very difficult to measure. Ann Masten did her Ph. D. dissertation on humor; that part of her work is just so important and actually should be brought out more. But how do you teach a sense of humor? A sense of humor can assist you. Number one, you do have to, it seems to me, have your wits about you. You do have to be fairly, I don't mean to say smart, but you have to be smart enough to see that you've got a problem. And that you have to laugh about it rather than cry. I think it does help to have it. I grew up on the Rhine where they grow a good wine, but I do think there's probably a heritable part in it if your family laughs instead of cries. You learn how to use laughter rather than crying and complaining as defense mechanisms. It would be fun to try. I just don't know whether you can really teach a sense of humor. But, I think children, very,

very early [have a sense of humor]. You can see this in toddlers.

Prevention Funding

KM: So many folks in prevention have just a horrible time figuring out how to keep their program funding. How on earth did you find the resources to keep a study going for 40 years?

EW: I will have to tell you, and this is not good for those in prevention, I didn't really spend that much money. A lot of it in the beginning had to do with the support for getting the basic data took the most money. That was really a joint undertaking by my campus, the School of Public Health at Berkeley, and people in Hawaii. This is a secret that I probably shouldn't let go. To do follow ups it doesn't necessarily cost that much money if you can cut out the overhead. In other words we had at each stage along the way an enormous number of volunteers who helped out in the community. There also were students of many different ethnic backgrounds who helped. The cost of the follow-ups was not that horrendous at all. In fact, it was probably so small that it wouldn't pass as a credible, a grant application today.

When you apply for grants you have all this overhead... 50% or so. I think doing research in this field, and I would think doing prevention work in this field, doesn't necessarily have to cost that much. *It takes much more of an investment of time and of peoples' caring rather than money.* But in most programs the cost doesn't go into helping the people become resilient, it goes into maintaining the services. Salary, now [that's] a choice. If you want to build an organization for which you have lots of overhead, then probably your programs won't last long, and you will never find out whether you ever made a difference.

But, you don't have to build, *if you want to utilize volunteers, ordinary folk with humble beginnings, you can do a lot.* Let me give you an example.

They have a program called Sister Friend at the University of California at Davis where former teenage mothers, (teenage mothers have always been singled out as a vulnerable group), volunteer to put in about a year's work with a young, new pregnant woman who is about to become a teenage mother. They go with her to the doctor; they make sure she keeps all her prenatal care arrangements. They go with her to the delivery. They make sure the baby gets all the shots needed. They make sure she doesn't drop out, or she gets a GED. It's completely voluntary, and it actually has been called quite effective on a number of very basic indicators. It doesn't say "We want to foster resilience." But it says, "We kept the mothers in school because it is very important that they graduate. We made sure that the babies got early health care." That is a building block. They also attended class where they were taught formal parenting skills and it shows up on the various infant tests they give their children. That program actually doesn't cost the city anything except maybe a couple of hours each month where the Sister Friends get together. They exchange their experiences and also get some help finding out about community resources.

Another one of the most effective programs is Big Brothers, Big Sisters. People volunteer for up to two years on a one-to-one basis with a so-called high risk child. The national data has shown that it's cut down on delinquency rates and up to 50% or so on dropout rates, and it's raised the reading skills of the children involved more than 50%.

Those are the ways in which you can translate findings in research into real live growth. For that you don't have to write a big grant. This is where I have to honestly say, I think people who are in intervention work might ask

themselves, I am sorry to say, "Why are you in it in the first place? Are you in it because it's a thing?" I notice a lot of previous social workers are now resilience coordinators. Then it gets political. Then you can begin to see why maybe other people think, "Is this necessary?"

Our choice about what to politicize or not, has to do with what really matters--health care, parental leave and such. These I do really think require a fair amount of common sense. Look at your community and ask, "Who are the key people who could be of help but would do it on a voluntary basis and give time and care?" But then of course a number of institutions in this country would lose their [reason for being].

[Difficult] financial conditions might actually get us through it. This is the difficulty with this research. A lot of people use it in many different ways. Some use it to build big organizations. Others say it's proven, "You can do it yourself, so let's not do anything." The truth is it's somewhere in the middle.

But, what we know from the few studies that have evaluated programs that seem to work is that the ones with the least overhead usually accomplish the most. The emphasis was consistent time and caring, and making it relevant to that particular community not the amount of money. I have a sense that probably is the way things should work in the future. I would highly recommend that people might look at what Dave Hawkins put together (Communities that Care).

But, there is a need, I think, to link up more of these [community folks]. I know of groups that do intervention in the early period. They do all kinds of stuff, let's say for the extended Head Start and then the records lie there, and the school has no idea next door what they have on the children.

The programs that work the best, it seems to me, are the ones that link together at least two or three different parts of the community: public health, education, community service. But that's all I can judge by looking at the literature.

Future Books

KM: Are you writing a book we're going to see in the future?

EW: I've been writing a number of books. Actually, my sideline now is writing about children in history. I've done a number of books on children who have overcome great adversities in history, children of World War II and the Civil War. There's one coming out on the Revolutionary War. I've been intrigued about, after all, that children cannot have been challenged just today. They lived through a hell of lot before now whether it's the Civil War, the Revolutionary War. So for the fun of it, I've done a number of books. I guess four now or five on children in history

KM: What is the one that is yet to come?

EW: That would be the one from Cornell, *In Pursuit of Liberty*, coming of age during the American Revolution. It's a big jump backwards. But during the Revolution, half of all Americans were children. They were only below the age of 16. So, I'm looking at how they managed this whole process of becoming an independent country, fighting the war and so forth. It's somewhat of an extension of this, but it's going backwards. Maybe I'll do some more of this.

The first one I did is on was the pioneer children who walked across the country. I thought they showed a certain amount of resilience from the Midwest to California. And then I did one on the children in the Civil War. They were some half a million child soldiers in the Civil War. And then I did one on the children of World War II through the

eyes of innocents. And they're all out in paperback, and one on the Danish Jewish Children who were rescued 60 years ago by the Danes. It's quite an extension backward of my interest in resilience.

Research Opportunities

KM: You really have fun writing books, don't you?

EW: Well, I have fun telling stories. I'm not someone who builds, unfortunately, large organizations. I think for researchers or practitioners, I would say, there are three major areas that we really need to pay attention to that are right under our nose, especially here in Minnesota.

If you want to test resilience, you take a look at *someone who comes from Ethiopia, or Somalia*. Right here she's mopping the floor now in the Radisson, and comes alone and is plunged into a blizzard in Minnesota and survives and smiles. And probably in 20 years she will be a representative in a Senate in Minnesota, just like the Hmong have here. They came from a place where there was not even a written language.

We have these folks right here with this migration around the world. [This provides] an enormous reservoir of young people who have weathered everything...civil war, loss of their relatives, plunked from one continent into another, and who are now our citizens. I think we should take a good look at what makes them survive and thrive.

I think that's a major, major area which hasn't been [examined]. I think it's beginning now with their studies in the Minnesota schools. But I think young researchers may find quite an amazing life story when they look at our recent emigrants to the country because they freely overcome so many things that are so different even from Swedes and Norwegians who settled Minnesota. [This includes]

different race, different religion, different climate, a horrific background in wars. I was talking to an Ethiopian student the other day in the cold who said, "Oh, I just learned when I got here finally, my brother has died in the last war." And he wants to write about it! I think we need to learn from them a lot.

And I do think we need to look more specifically now at also some of the *genetic aspects* of what makes resilience. I don't mean to say, you know, 50% of what's in Kathy is genetic and 50% is environment. There are some studies now done that look at children who have been abused over time. Where, you would think very many of them will end up abusing or being delinquent. They find in a New Zealand longitudinal study there's differences, literally, in some of the genetic makeup. Their genetic makeups have a different degree of serotonin and

neurotransmitters.

Now, that doesn't mean ...one will be resilient and the other one won't, but it's beginning to give a sense [of what] that derives from the genetic makeup such as through your cardiac and neurological activity. There are these large individual differences that really need to be taken into account if you study this phenomenon. That doesn't mean that we couldn't in some way either prevent or help, but it does mean that we have to be very humble in making claims through prevention program.

I hope, someone like you who does the information and the bridge building would emphasis that with others. It gives hope, you know. The study gives hope, but it also can lead to, I'm sorry to say, to snake oil salesmen, false hope. If you say, "We know this all now," that would be much worse.

KM: Ann Masten, in one of her recent articles makes a really nice statement about

having a sense that there's so much that we don't know.

EW: Oh, absolutely. I don't know how the [resilience] phenomenon got hold. I have no idea. But, I might want to write sometime. How on earth did they suddenly seize on this? It must have had something to do with economics and politics, obviously. The first research came out in the 60's and 70's, right, and then it wasn't in. And suddenly it became in. Beginning in the late 80's then it became a bandwagon and I hope it would be out soon so we can get on with it.... But, it's dangerous if it becomes a fad.

KM: If we're talking about a serious growing interest in a body of people that is growing in a healthy good way, I wonder in my own mind sometimes if what you said in the beginning about hope might not be related to that.

I remember many years ago, doing a conference here in the Cities where local folks hoped 100 people would come. We ended up having 400. It was simply a conference on the topic of resilience. And what I recall about that day, was that people talked so much in the morning about being very tired and burned out in their jobs and rather hopeless. These are some of the folks that I think that you're talking about today, but they began to sense that there might be reason to believe in the long run they could make some difference with children....

EW: And you certainly wouldn't want to have them lose that hope.

KM: I think that nucleus with hope, is one of the things that makes that movement survive.

EW: I think by now, probably since it's become a bandwagon, there has to be some ways to channel that hope into realistic

directions. One of which is indeed, a political action. It doesn't matter what party.

That's how these basic things [change]. For admission to the European Union countries have to have health insurance for their people, paid political and paid maternal leave and so on. If we could eventually get to this... for the nation as a whole, that's an issue we need work on. The other issues is looking at each community and asking "Who are the people that have sort of acted as protective buffers for children anyhow?" "How [can we] bring them in ... to do more of it."

KM: How do you bring the organizations together so they go in one direction, and ideally with that sense of hope?

EW: But, then once you have an organization, you always have competition. And someone will be more hopeful than somebody else. But, you know, it's, it has worked. I mean, one of the best books on it.... came out a decade ago looks at programs that work and whether you call it resilience or anything else, it always is a new group of people who care and give their time.

Then there are people who are able to cut across professional boundaries and volunteer. And then there's someone who has enough sense to say, "Let's do it one step at a time." That's the wonderful thing about the research; it does show you can bring about change at many different times, not just in schools. And I would think using the community colleges, which were a major turnaround for many people in this study, is an important step too.

We find as they get older and are in a hospital for an extended period of time, it's amazing how many of them begin to think, "Where in the hell did I [go wrong]? Where am I going?" For a number of them, an extended hospital stay was sort of a way to re-evaluate their lives. Here might be a place to have someone be there as an echo and listen. And [we can] of

course, use the churches in many ways. So, it's more than just the school, from kindergarten to high school.

KM: You talked about the importance of a community of researchers that you connected with over the years. I'm really hearing the need for a community of professionals, or practitioners, and volunteers to be coming together on a long term basis.

EW: It depends very much, of course, on mobility in the community.... But, somewhere in the end, it does really come down to a couple of people who'll hold it together, who will say, "Enough! If I don't get this grant now, this is so important that it's worth at least spending my time and my caring!"

KM: I recall my husband saying to me at a time when some federal funding was coming to an end, "If it really matters, then keep going." That's what I see that you've done.

EW: Oh yes, of course. It really doesn't matter what you call this thing [resilience]. I mean it's an interesting word, it really comes from engineering. It means basically you build a bridge so that it bends and doesn't break. Beyond that, it [resilience] offers the hope that change is possible.

Resilience and Retirement

I think in terms of research, it's very fun to look at changes among the aging population. You see now, amazingly different ways in which people find themselves responding to retirement, or the empty nest syndrome. I'm sure it is a lifelong process. You can still give hope very much it seems to me, to the end.

KM: If you had your druthers, would we see another book that would come out and say *Journeys from Childhood to Old Age?*

EW: Eventually it will, but someone else will have to write this, but it will be there. In the last chapter, it can be in a few little outlines about what we might want to do in that area. We ought to match up retired people with young people to give hope. A lot of the programs that have done that have been very effective.

KM: We've covered a lot of territory today, and I really thank you.

EW: You're very welcome, Kathy.

Future Hopes

KM: I would like to ask you one last question. You sit in front of me, you're 74.

EW: Dear Lord, yes.

KM: Thanksgiving is coming and I'm grateful for this opportunity to know you and learn from you, to read your books, and be guided from a distance. I'm curious, when you think about the future of the universe...of children after your time...what do you pray for? What would you wish for?

EW: Definitely that they all know how to laugh, a sense of humor certainly would be a happy future. What do I pray for? A recognition... it's so simple minded... that we're all in the same boat, that any of the differences we fight about now in wars, whether it's religion or politics, are absolutely totally irrelevant. This is so because we certainly know from our DNA work and the human genome, that we really, truly are all alike. (And pretty close to those nice friends the chimpanzees, by the way, so we should be kind to them.)

I hope that we will discover that we are each our brothers and sisters keepers. But, certainly, that we stop putting people into categories, whether they're black, or white, a Republican or Democrat, a Muslim or a

Christian. That's where we're going right now. We're putting everyone back in a box. So, let's hope we all get back together in a boat and sail away to the next planet.

KM: Well, I'm just really happy to have had this opportunity with you.

EW: Thank you, Kathy.

KM: And thank you. You touched my heart. As our session comes to a close, is there something you'd like to leave us with?

EW: Well, hope of course, as you know. Those of you who occasionally read my books may see that I always start with a poem at the beginning and then at the very end when I run out of things to say. And in this book here, the *Journey from Childhood to Midlife*, the poem is taken from Barbara Kingsolver, who is a great lady, a wonderful writer. This is what she says:

"To embrace one possibility after another, that is surely the basic instinct. If the whole world of the living has to turn on the single point of remaining alive, that point of endurance is the poetry of hope."

There you are hope, the thing with feathers, that Emily Dickenson wrote which we shall never lose.

KM: Thank you for being our guest today. We've been privileged to hear Emmy Werner at age 74 reflecting on always finding hope. Thank you.

EW: I need now Kleenex. I wonder what I'll be like at 94. I hope I will still have hope.

Kathy Marshall and Emmy Werner November 2003