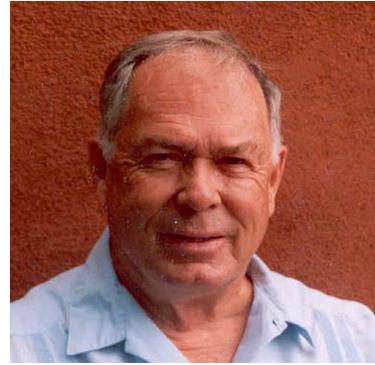


Dale Johnson

- Born in Sanish, ND
- Spouse – Carmen Acosta
- B.A. (1951) University of North Dakota, M.A. (1954) University of Kansas, Ph.D. (1957) University of Kansas



Major Employment:

- Houston Parent-Child Research Center – 1973-Present, Director
- University of Houston – 1969-Present, Professor of Psychology (Emeritus)

Major Areas of Work:

- Schizophrenia and the Environment
- Psychosocial Measures
- Families and Serious Mental Illness
- Otitis Media and Child Development

SRCD Affiliation:

- Member (1965-1998)

SRCD ORAL HISTORY INTERVIEW

Dale Johnson

Department of Psychology, University of Houston

Interviewed by Richard Rozelle

September 15, 2003

Rozelle: Let's begin by having you describe your family background, along with any childhood and adolescent experiences that may be of interest. Please include the educational and occupational characteristics of your parents, where you were born, grew up, what was your schooling like, any military experience, and early work experience.

Johnson: Well I wish my parents were here to answer this for themselves because I absolutely could not predict what they'd say. I once asked my mother if she had named me Dale after the Norwegian town outside of Bergen and she said she'd never heard of it.

My father had a high school education and a six weeks business school course. He really had hoped to be a doctor, but he was orphaned in his early teens and brought up by his two older brothers; he and his little sister were brought up by them. There simply was no opportunity to go to college. So he and his brother set out on their own to get a business going.

My mother, on the other hand, graduated at the top of her class in Kenmare, North Dakota. She was sixteen when she graduated. And then she went off to summer school at the Minot State Teacher's College and got a teaching diploma which made it possible for her to teach in a country school. She immediately had offers to teach at a school near her home. A school that had had four teachers quit during the previous year because the students were so unruly. She worked there and she lasted and prevailed, and made a big success of it. She kept on teaching at country schools, and actually didn't get her university degree until, I guess, I was off to college.

She was one of these absolutely remarkable teachers. One time she went to--was gonna teach at a country school and people at the community said, "Well, get rid of those three boys, they're incorrigible, nobody can teach them anything." After a few years of teaching at the school, the boys did finish and went on and

did one thing or another. Two of them are physicians and one's a physicist today. And all three of them look back to my mother and say, "She did it, I wouldn't have been anything." And she kept teaching--she started teaching when she was sixteen. She quit formal teaching at age 87 and then tutored children until she was ninety-five. And she died just recently at age one hundred.

My father and his brother had a hardware store in Western North Dakota. It was during the Depression and there simply wasn't any money. So my father ran a gas station for a while. When I was ten years old he was offered a job at another North Dakota town, one that was a bit more prosperous, as manager of the General Supply Company, at the wonderful salary of a hundred and twenty-five dollars a month. He rather quickly bought out the shareholders of the company. And General Supply meant that he sold Chevrolets, International farm equipment, feed and seed, hardware, and almost anything else you might need to live by. He made it into a pretty good business. He died at age fifty-four; I was in graduate school at the time.

I was born in Sanish, North Dakota, in a house my father built. Sanish was on the Sioux Line Railroad. The line ended at Sanish and the railroad never built a bridge to cross the Missouri River, it was very big. The town itself was founded as recently as 1925 and people went there with high hopes that it would not only provide access to ranching country, but to coal mines. There was a lot of coal just across the river. Everybody thought it would be great, but the Depression came along and it didn't amount to much of anything. It was ranch land cowboys and the Indians lived right on the banks of the river. In a sense, it was one of the last towns of the old west. The cowboys would come into town for dances on Saturday night and they'd fire off their pistols. It was pretty wild. Oh, I left out that my father was also a jazz musician and played whatever he could; although he stopped somewhere early in my childhood. I think my mother said, "Be serious." But he never, never gave up his love of jazz, and he was back at it, playing drums, every chance he had.

I think that my first ten years in that community, on the edge of the Dakota Bad Lands, perhaps were ideal. I had free reign to go anywhere except the river and I had a horse. I had good friends. It was endlessly fascinating. The winters were just as good as the summers, with lots of hills for skiing and sledding all around. The perfect place for a young child, I thought. I had read and loved Tom Sawyer and Huck Finn and emulated them. Always wanted to go out on the river on a raft, but knew I would face my mother's wrath if I did and so I didn't. I did everything else they did, I think.

And then--the first town, I might mention, only had three hundred and sixty people, but it had six saloons and six churches and it had a few more dogs than people and I know that because I counted them. I also knew the names of just about all the dogs, but not all the people.

Then when I was ten, we moved to the center of North Dakota, to a town called Maddock and it was completely different. Sanish was wild, Maddock was anything but wild. All Norwegian-American, two churches in town, fast music and slow music, and people were very serious about education and about keeping the town clean. A nice place and actually a better place, perhaps, for an adolescent to grow up in than the other town had been. It had seven hundred and fifty people, so it was a big move up in size.

Rozelle: What about schooling?

Johnson: Well the first school was quite interesting because it was about one-third Norwegian-American children, and a third Irish or German-American, and one third Hidatsa-Mandan Indian. Classes were large. I think we had forty children in a class. I don't know what four teachers did. But I know that I had a lot of time to just read whatever I wanted to and the teachers didn't bother me.

Actually I had lunch last summer with my first grade teacher, who found me here in Houston. She had asked her son, a physicist, to look me up on the web, and he found me in ten minutes. I was asking her about that first grade class and she amazed me by remembering every child in the class--you know all the names, Indian children, German children, everybody; knew their names, what they were doing. She had followed all of us. This is a woman in her late '80s who has taught school all her life and still remembered that first grade class.

When I--when we moved to Maddock it was a different situation. Much, much more seriously academic all the way along. Two high schools in this town of seven hundred and fifty people. I went two years to Maddock High School and two years to the Benson County Agricultural Training School. I went to the Aggie school because it had basketball and the other school didn't. I was passionate about basketball. The teachers were pleasant and seemed to be trying but I didn't sense a lot of competence. For example, the math courses were taught by the shop teacher, and fairly often he would say, "Well, I gotta run downtown and get some welding materials, Ernie, (one of the students), would you take the algebra class and present it to the class?" and Ernie would do that. Well it was good for Ernie, but I don't think it was good for the rest of us. There was, however, one super class, and that was in agriculture. We were the champions. We won all the county and state prizes for livestock. I won--I was a town kid, but I won a prize for potatoes. We just swept everything and we learned how to tell whether one type of grain was better than another because we had twelve plots and we were using modern statistical techniques to test the results. The other thing is the Ag class taught us Robert's Rules of Order. We were grilled, trained to use this, and it has been invaluable. I don't know how many times since those years I have stood up in a meeting and said, "I rise to a point of order," and clubbed my fellow attenders with Robert's Rules. There were only twenty-four students in my graduating class. We all went to college. There were some good things about it.

My military experience was very, very brief. I was in the ROTC in college for two weeks. It was required of all freshmen at state schools at that time, I think. I was in only long enough to clean a rifle and learn how to stand at attention. Then they did the physical exam and discovered that my eyes were four hundred/twenty and that ended any military aspirations I might've had. I got the same story during the Korean War where later I was examined and they said, "You don't need to come back." I was actually quite peeved by this because I was a good rifle shot, I had trophies in trap and skeet, was a basketball player, thought I was in good shape and I was offended. But looking back at it now, I think I was pretty lucky that I didn't have to go to Korea.

Work experience, well I started working early. It was after all the Depression and I needed money. I don't think I ever shared with the family, but I needed money. And so at age eight I began running trap lines along the draws of the Missouri River. We trapped magpies and there was a bounty on them, set by the ranchers who didn't like magpies pecking at the hides of their cattle. I went on from that; I worked as a cowboy for a while and later as a farmhand, and delivered newspapers. I was a hardware clerk. During World War II I was a railroad section hand. I've been a truck driver, big trucks, little trucks, aerial photographer, photojournalist, and played semi-pro basketball. The semi is the word that's operative here because we never made much money but we won almost every game we played. And I sold used cars, good preparation for a psychologist, perhaps.

In college I had some remarkable work experiences. I was a photographer for the yearbook and the school paper. I also assisted professors of physics, of physiology, chemistry and psychology, mostly taking pictures of their lab equipment. But I worked all year in the physiology lab, assisting one of the instructors, and I liked that a great deal. What I did, essentially, was set up the laboratory apparatus and cleaned up, but I also spent a lot of time talking with this very attractive, young, female physiology professor.

Rozelle: Let's move on here to early adult experiences that were important to your intellectual development and some collegiate experiences perhaps. Whatever you feel is—

Johnson: Well that's--in a way that's a difficult question, but one immediate answer is that going to university meant that I had access to a real library for the first time. Never had one in these small towns that I lived in. Well there was a small library in Sanish and in fact I was named to be on the library committee. They weren't allowed to have a nine year old on the committee. Others said I read all the time, so I might as well be on the library committee. I was on the committee with a Frenchman who was a cowboy and wrote poetry, and a third member was the publisher of a local paper who came from Manchester, England. My high school did not have a library and so when I got to the University of North Dakota, I was just delighted to have a real library.

College was wonderful. I had no choices about where to go to university. I think my mother once suggested that I go to Concordia because maybe I could become a preacher, but I didn't think that was a

good idea. So the University of North Dakota was it, as far as I was concerned. My buddies were going there and some others from my high school class. One thing divided us immediately, when we got there, to our surprise, we were asked to write an essay, and based on the essays we wrote, we were either put into honors English, ordinary English, or bonehead. Our little group that came from Maddock hit all three of those. I was in honors English and it was almost life transforming because this professor said, "I'm going to have you write this semester, in fact, all year. This is Monday, on Friday you will turn in a short story written in the style of Faulkner, and we will do this all year, short stories, essays, poems, so forth." Most of us in the class, all country boys and girls, hardly knew who Faulkner was. But I wrote my short story and it was read to the class by the instructor. It was pure Faulkner; I think I may have had two sentences for the whole thing. It was about a young man freezing to death in a blizzard. Faulkner had said, "Read about what you know," and I knew blizzards and I knew tragedy. What a great class and what a great bunch of people that were in the class. They've gone on to do good things. I can't count the number of university professors. One of our members of that same class is Chief Justice of a Supreme Court in a southwest state. And two of them, the women in the class, are published authors.

I started out in college in journalism and learned fairly quickly that I didn't like it. I didn't like dealing with tragedy on highways. I switched to pre-med, which my father preferred. Pre-med was good. In fact I, in my senior year I was accepted by the University of Manitoba. Almost at the last minute decided I really didn't want to be a medical doctor. I just didn't see myself back in western North Dakota delivering babies, fixing broken arms, looking at sore throats. It didn't occur to me that there was psychiatry, although I knew about it, or that there were public health doctors. I somehow didn't make the connection. I switched, at the last minute, to psychology, which I had a major in, and I have to say I've never regretted that choice. I think it was a good choice.

I had other good experiences in college. I lived in a large men's dormitory at first and I was elected president of it and also elected to Who's Who on university campuses. I joined a fraternity, a typical Animal House with great parties, lots of them. I don't think they'd be legal today. But we had to find some way to enjoy ourselves in the cold and in the snow. Mostly I look back at fraternity life with just a touch of embarrassment. But on the other hand there were good things. We had our own dining room, of course, and a row of tables. One table we thought of as the head table, was sort of for intellectual discussion. People tended to drift. You could sit anywhere you wanted to and if you felt like talking sports, you went to the sports table. If politics was your thing, you went to the politics table. But most of the time a group of us sat at that table that was intellectual. And when I look at the people who were there, a couple of them are engineers and they're in very creative, design work, have been all their life. Four university professors at that table. And a couple of pretty good politicians. So it wasn't all Animal House. Oh, I left out the Air Force general who sat at that table also.

I also played a lot of basketball. Just intramural, I wasn't good enough for the varsity, but we won the intramural championship, winning thirty-two games straight. And in all modesty, we were good and that's why we won. We won big. I dated a lot of girls, really enjoyed the university social life. And in the process of dating these girls I met this young lady named Carmen Acosta and that was it, the end of any more dating. I decided I would marry her. She had made the same decision about me. I married her and we've been married fifty-one years. Her father was a professor at the university and she lived just around the block from where I was staying.

Rozelle: Very good. Let's move onto the origins of your interest in child development. Can you give us a little background on that?

Johnson: Yeah, I started out really great in an undergraduate child development course. I got a C. It was one of my really bad grades in college. And I don't know why I got a C. It seemed to me I answered the questions right on the tests. The instructor sent us off to observe preschoolers in some day care and write about our observations. I was intrigued by that assignment after watching these preschoolers for a few minutes, and I began developing observation codes of what to look at, why we should look at them. I turned in my reports and I got terrible grades on them. I still think it was one of the most interesting things I did in college because I loved it. So despite the C grade, I have found that--and before that I had not knowingly ever looked at a four year old.

Rozelle: Yes. Who are your research mentors?

Johnson: Yeah, let me back up to important--sorry, let me back up just a little bit here on my individual--important intellectual development because clearly it was my parents. I had no real question about that. My mother, the super teacher, she says she didn't teach me to read. She didn't believe that children should read until they were six and she tried to discourage me, but I just read. My father was a wonderful source of intellectual encouragement because of his continual support and his surprises. I recall one day I came home and here was a cleaned up truck engine in the back yard. And he said why don't you take this apart and we'll talk every day and you can tell me what each part's for, how it makes the engine run. Well it kept us busy half the summer. My friends and I worked on that engine and hypothesized what this gimmick was for. We weren't even close most of the time. My father would come back and tell us what each part was for, how it worked, dynamically, how one part was connected to the other part. We went on like that trying to keep ahead of him. I had some very bright friends and they were good at it. He was always doing something like that and we never knew what was gonna come next. I have to think of it as being related to intellectual development.

Another part of intellectual development was growing up in the middle of twenty-eight cousins on both sides of the family, and trying to somehow keep up with that bunch. It was intellectual stimulation. They were up on things, they could figure things out. It was really something to live with them and I enjoyed it. When I see them now I still enjoy it. They're just as much fun in their seventies and eighties as they were as seven and eight year olds. They haven't changed.

Then going on, of course, intellectual encouragement--well graduate school at the University of Kansas was so different from undergraduate work at North Dakota. The faculty was incredibly different. The level of intellectual demand changed so drastically that I found myself really brought up short. I just didn't know what was happening, and I think I might have been quite demoralized if I hadn't realized that the other students, with a few exceptions, were in the same boat that I was in. They didn't have a clue about what was going on either. One of my good friends once leaned over to me and said, "Who is this guy Gus Stalt they keep talking about? Is he a German psychologist?" I knew that one Gestalt; gestalt, it's a type of psychology.

These included people like Al Baldwin who later on went off to Cornell and Harvard, and I think NYU and Rochester. He was president of SRCD at one time. He was an absolutely marvelous professor, speaking without notes and introducing us to the field of experimental psychology and statistical methods. Roger Barker was inventing ecological psychology while I was there. Lee Meyerson, who was my master's teacher and partnered with Barker in inventing somatopsychology, psychology of physical disability. Martin Sheerer was busy creating neuropsychology. I think he really should be treated as one of the founders of that whole area. But I can't leave out Fritz Heider, who had much to do with the shape of social psychology today. He was writing his book on interpersonal relations and reading us chapters in his class on social psychology. They were not only brilliant professors but they were such nice people, every one of them. I can't leave out John Chotlos and Beatrice Wright, kind people, doing a lot of different things.

As for research mentors, I have to go back to go back to North Dakota again because I did have research mentoring there that I sometimes forget about. Herman Biegel would give us complex assignments to do that required that we do factor analyses, and this is in a pre-computer age so the factor analyses had to be worked out by hand with the help of a slide rule, and very challenging. He was just consistently encouraging. He was wonderful. He was the professor who always--he lectured to big classes--always had a grand piano in the lecture hall. From time to time he would come in and say, "This is not a day for psychology; this is a day for Chopin," and for fifty minutes he would play Chopin. For a bunch of country girls and boys this was very impressive. This was something. A great guy. A confirmed eccentric, wore the same necktie at least two years. And Clifford Scott, chairman of the department helped me get into a number of really fascinating research products. I enjoyed assisting him as I sort of followed him around, helping him collect data and then analyzing them. But it showed me that psychology--psychological research could be interesting. And it had a lot to do with subsequent development.

At Kansas, I drifted over to Lee Meyerson for a masters' thesis, in part because I was interested in physical disability. My sister had a very severe hearing loss and partial cerebral palsy, and so I had a lifelong interest in the problems associated with physical handicaps. Meyerson himself was deaf and most students did not want to spend much time with him because it was difficult to communicate. I wasn't in any hurry. I liked the way he thought and so I worked with him while researching the idea of rigidity in the personality of deaf children. I spent a lot of time testing children in assessing rigidity in several schools for the deaf in the eastern Kansas area. If I remember right, what I found was that if children have some hearing they did better on all my tests than those who were completely deaf. I don't think I found much about rigidity. My deaf children didn't differ much from the hearing children. I didn't publish the research. It was accepted by a journal for publication, and then the journal went kaput, and I never resubmitted it. My other research mentor really was John Chotlos, who was director of research at the Veteran's Hospital in Topeka. John was unique among psychologists. I valued him for his quantitative abilities and his thinking about research projects. He was available to the whole staff at the VA. He was also an existentialist and phenomenologist and taught a course for Kansas students that lasted four years, fall, spring, and summer. I don't think the man ever said the same sentence twice. Of all those people at Kansas who I valued so highly for their intelligence, John Chotlos was the only real genius. He was just remarkable. Again the students who worked with him were a select group because he was a serious stutterer, and one had to be patient. It's just that when he'd begin a sentence, stuttering, you never knew how it was gonna end. He was unique. I did my dissertation under his direction on a Piagetian idea about the moral judgment of schizophrenics. I had just read Piaget's Moral Judgment book and I read it in French, and then discovered it had published in English. I used some of Piaget's questions, I adapted them for adults and I found some other questions and made up more. Research isn't supposed to be fun but I really liked that project and talking to people with schizophrenia was great.

Rozelle: Any significant colleagues that you would like to recall?

Johnson: I'm afraid I have a long list. I have been blessed by having a number of really generous, supportive, encouraging colleagues. While I was at the Veteran's Hospital, my first job here in Houston, there were people like Sid Cleveland, Bob Morton, then my colleagues in research, Paul Rothaus, Phil Hanson, Austin Lyle. We not only worked together but we were friends, we partied together, our children grew up together, and so on.

Moving over to the university, I have to put high on my list, Larry McGaughran, then director of the clinical training program. A remarkable person and I think it was he who got me to the university and also got me moved into the chairmanship so early. Betty Welland was in the department at U of H at the time and agreed to be my associate chair when I was chairman. I couldn't have done it without Betty. Ray Franklin was the stat man then, invaluable. Two other social psychologists, Ed Willems and my interviewer, Richard Rozelle, very important in some of those early days getting research programs underway. And I add to that short list, Jerry Gratch, a developmental psychologist. We all had a role in starting the Parent-Child Development Center. More recently, Lynn Rehm, Gordon Paul, Scott Maxwell and Julia Hannay, all in the department one time or other.

And outside of the job settings were some really influential people, kind of a strange mix. Trent Wann was chairman of psychology at Rice and a consultant at the VA. I always made sure that when he came over on his consultant visits that we had at least an hour together to talk. He had a huge influence on my way of thinking about psychology. Had an influence on I think everyone who knew him, a remarkable man. Wayne Holtzman, president of the Hogg Foundation, was a long time friend who supported my research. If he couldn't fund my research, he'd call the president of another foundation and ask them if they could fund it. That's nice, that's music to my ears. Emery Cowan at Rochester was so helpful in the early days of prevention research. Henry Rempel, at the VA in my first VA trainee assignment, who got me the job in Houston. Completely out of the blue, I didn't expect it. But it turned out to be a terrific job. Margaret Mead had a huge influence on how we started the Parent-Child Research Development Center. And I talked with her, by telephone or at meetings and so on, over the years after that and I talked to her as a friend.

And then really high on the list of influential people was Mary Robinson, an economist with the Office of Economic Opportunity. The Parent-Child Development Centers were her idea. She created the structure and then turned us loose with good funding, mostly, to kind of fill in--to add to the structure and to make it operational. She was a wonderful Washington political in-fighter, and kept us funded even when the political climate had changed from the Johnson era and the war on poverty to the Nixon era, and the war on impoverished people.

Rozelle: Very good. Let's move on and take a look at political and social events that have influenced your research writing and teaching.

Johnson: I like that question, glad they have it in here. There's no doubt in my mind that a person who I hardly knew had a tremendous influence on my political development and it was my grandfather, Lars Christensen, an immigrant from Denmark. He was one of the founders of the North Dakota non-partisan league. He and other farmers thought they were being ripped off by the banks, railroads and grain elevator, people. They formed their own political party and they won. Their success has been shown in a movie called Northern Lights. I remember as a very young child, Grandfather Lars talking to his fellow retired farmers and others about politics in, not only North Dakota, but the world. He died when I was young and his influence remained on with his three sons, all of whom had a keen interest in politics, and his three daughters who had an equally keen interest in politics. They talked politics all the time at family gatherings, which were many. They claimed to be playing Whist, a card game popular in that part of the world, but it was all politics, and I and the other cousins would sit there and listen, and as we got older we could join in. But here was Scandinavian socialist politics at its best and successful in North Dakota. It was in the Depression, so politics was much on the minds of most people. To spice it all up, my father was a Republican all his life who detested Roosevelt and thought his policies were going to ruin the country. It was already ruined, but never mind that. I'm sure that my mother and he cancelled each other's votes for every--all four of the Roosevelt elections. Having him present in these arguments kind of spiced it all up because he disagreed all the time with the socialist democrat idea. He loved America--I think there were other in-law adults, Uncle Ralph, an Irishman, didn't like the democrats or the republicans because he was a communist, and he thought none of it went far enough and we ought to go farther, being an Irishman, he was wonderfully eloquent at all times. He was also so much fun, just listening to him.

Well I became--I thought I was a republican but when I went to college, then I became a democrat through the arguments provided by two of my good friends, David and Jack Madsen. I remain a registered democrat of the liberal variety. Political development that--the political issues that stand out in my own recollection mark me for my age because I think of the McCarthy area in the 1950's as one of the worst times in American history, except for the present time, and for the same reasons. It looked like the fascist right wing was in the ascendancy and that nothing could be done to stop it. As we know, McCarthy disappeared and we returned to some kind of moderation. But it was a terrible time and graduate school--now we met at the university center of students and talked politics hour after hour. We should've been talking psychology of course, but we talked politics, and we were very involved.

My wife and I became Quakers, and the Quakers were interested, not only in talking but in doing something. It's not easy being a Quaker, keeps one busy. I'm currently, I think, mildly active in politics, trying to--I'm very upset about the extreme right wing behavior of the current President and his associates like Rumsfeld, Cheney, and Ashcroft. I send off my letters to the Congress and my protests. Taos, New Mexico, is easy to do this in because so many people are opposed to the ultra-right that characterizes our nation.

I think that how this relates to what I do as a psychologist is that one of the themes that has kind of illuminated my research has been an interest in improving the lot of impoverished people. I think the war on poverty under Johnson was misguided in many ways, but the general idea of helping people get out of poverty is good, and I think that we have no reason for allowing people to live under such desperate circumstances, no reason at all.

Rozelle: Let's, for a moment, focus more on the development of your ideas in the field of child development. Did they evolve in a straightforward growing fashion or did they involve some sharp

turns and surprises along the way?

Johnson: Well I've known people who have done research and they've done the same kind of research throughout their careers and I don't see how they can do it. I've never been able to manage that. I remember a paper that Bandura wrote some years back on chance. As I recall, he starts out by telling how he met his wife. It was chance. I'm struck by the number of chance occurrences that have caused my own career path to dart about so. Maybe not as much as I'm saying, but I thought I was interested in both developmental and clinical psychology and I knew little about either one of them. I thought also I was gonna be drafted into the Army for the Korean War and so I was sort of not serious. I didn't apply to graduate school until May and I had to go to graduate school in September. My favorite schools, Berkeley, UCLA, and Wisconsin brushed me off immediately saying, "Who do you think you are, applying in May, for it's too late?"

But to my surprise Minnesota and Chicago accepted me into their developmental programs with the option of switching to clinical later, and Kansas, Kentucky and Texas accepted me into either, and I picked Kansas. Texas seemed a long ways away. But here I was on the edge of going into what were, at that time, the two leading programs in developmental psychology. I think I'm right in saying that, and I went to Kansas which wasn't a leading developmental program. I did developmental work for my masters' thesis at Kansas. I thought I would stay in that but I couldn't find any support. I needed money, I had a wife and I had a child, and I needed some money. The VA offered me an opportunity, and I could get eighteen dollars for one day a week if I went into the VA training program and my wife said, "That's enough, we can live on it," and actually we did. We had a little house trailer and we ate a lot of beans and rice. But that swerved me over into clinical full time and into adult clinical also.

And then of course I stayed with the VA program and at the end of the program I was casting about for jobs. We would've preferred the mountains or maybe the American Northwest. There were no jobs in either developmental or clinical and then Henry Rempel, who I mentioned earlier, said there was a job opening in Houston, at the VA Hospital. I gave it some serious thought. It's one of the best research hospital programs in the country. They've got some terrific people there. And I called the chief and said I was interested. Rempel had already talked to him. The chief said, "Do you like to fish?" and I said, "No, I don't know anything about it." "What about camping?" And I said, "We're campers, we like to camp." "Good. Do you like the beach?" I said, "I've lived in North Dakota and Kansas, I don't know about beaches." He said, "You'll love it." And he said, "Do you think you'd like to go to beach parties?" And I said, "I'm sure I would." He said, "You've got the job." [Laughter] A remarkable interview. I thought this is my kind of man, I think I can work with him. Well it turned out he was a wonderful chief. I was, after some years at the VA, I was considering a university position and I had some good inquiries, but all of a sudden out of the blue, I got an offer from the University of Houston, but they wanted to hire me as a developmental psychologist. Their developmentalist was retiring and they wanted to keep the job open. So Larry McGaughran said, "You can do developmental, can't you?" And I said, "I'm gonna have to brush up, but yes." So I took the job and moved across the bayou to the University of Houston. Well is that a straight path? No. That's not a very straight path.

There were other things. When I moved to Kansas, I thought I was going to a psychoanalytic school. I had read everything I could about and by Freud when I was an undergraduate and I wanted to focus on psychoanalysis. Kansas was perhaps the leading school teaching in the psychoanalytic tradition with its ties to Topeka and the Menninger Institute. When I got there, I discovered Roger Barker had been chairman. He'd thrown out all the psychoanalytic people and now it was completely Lewinian and Gestalter. In the first day of class Martin Sheerer said, "There are two problems with American psychology, psychoanalysis and behaviorism," and then spent the entire year demolishing both of them and then being sorry that he had demolished them and ran out of arguments, he hired behaviorists and psychoanalysts to teach us so that we could keep the argument going. An argument for Martin Sheerer was everything.

There was no psychoanalytic influence there anymore. I avoided classes in group dynamics. I didn't think I was interested at all. There wasn't a word about prevention. Nothing on cross-cultural influences. And so in a sense, I was totally unprepared for what I did later in many ways. I was well prepared in the

existential-phenomenological psychology, but nobody in American psychology was doing it and I was aware of that. However, at Kansas we discovered Piaget and Sheerer again had written an early chapter explaining Piaget to American readers, in the *Handbook of Social Psychology*, in 1954. We memorized that chapter preparing for comps. We knew it was going to be vital because it was really a great chapter. Then we took comps and there wasn't a question on Piaget.

The theme that runs through all this is the early training was on Lewinian and ecological way of thinking about psychology. I'm sure that has stayed with me. I'm finishing a paper right now on schizophrenia and the environment. To move beyond relapse prevention to recovery in schizophrenia, we have to improve environments that people live in and make them more encouraging and supportive, and it's pure Lewinian, but it isn't at all psychoanalytic.

Rozelle: Any other influences in your work in this life?

Johnson: Well I think hitting Kansas at a time when Roger Barker and Lee Meyerson, and Beatrice Wright had just founded somatopsychology and had written a very important book on it, was influential. A small group of students kind of fell in with them and some stayed with them longer than I did. We developed a keen interest in sensory handicaps, such as deafness and blindness, and took the psychological studies of these problems seriously. My work with deaf children I found not only illuminating but challenging. Meyerson, himself, was a marvelous mentor, had all the time in the world for me, told me my first draft for my masters thesis was as close to hopeless as he'd ever seen, but if I would follow some of his suggestions, we could make it into something. I was devastated because I thought I could write, but you know working with someone who could write better than I didn't hurt one bit. He was good. The end of the thesis project, my wife and I were having dinner with Meyerson and he turned to my wife and said, "What would you like to do now that Dale has finished his masters thesis?" And she said, "We'd like to go to Mexico." She is Hispanic and fluent in Spanish. And he said, "Why don't you?" And she said, "We have no money." And he said, "Why don't you write a grant proposal and get some money?" And I said, "Oh, where to?" And he said, "Try the American Foundation for the Blind. They've got some money." I did this in two days, and it was funded in four days, and we got seven hundred and fifty dollars to go and study the social situation of the blind in a Mazahua Indian village off in the mountains west of Mexico City. We went with our eighteen month old baby, red haired, blue eyed, big--and we studied the social situation of the blind in this village and lived on a dollar a day, and that included a full-time maid. We couldn't pay her any more because her brothers would've been offended. We did a good job on it. We just had a great time, really under primitive conditions, to say the least. But there are many things my wife is really good at. She could just throw herself into a community like that. We went back there thirty some years later and I drove into this little village town, I stepped out of the car, and a guy looked up to me and said, "Johnson?" We went over and here were the people that had been so helpful for us. They were still there, although changed. One family had ten children, nine are now professionals: doctors, bankers, etc. One wasn't; she was the one they gave to the church, she was the nun. But they remembered us, and they were so terribly kind back all those years ago. That had to do, of course, with some of my early interest with child development. There were blind children as well as blind adults so they all figured into our work.

My interests have changed. I see my first interest in psychological research as being in the culture and psychology area and partly by chance because it was out of the blue that we got this grant. When establishing myself as a clinical psychologist at a VA hospital, I got a call from one of the Kansas professors, Bert Kaplan. He asked if I had any vacation time coming. I said, "Yes I have." He said, "How about coming out and helping me with a Navajo project, in New Mexico?" And I said, "Yeah." He said, "We're gonna look at how the Navajo think about mental disorders, how they classify them, take a completely emic position instead of an etic position, which would be characterized by using the diagnostic and statistical manual." I said, "Sure, when do we start?" I didn't even check with my wife. And off we went and we did that four summers with three young children--our youngest was maybe a year and a half when we started this. We lived with the Navajo and Bert liked to sit in the little town that was the center of our research and interview people, experts in Navajo who came in. I would go out and talk with people who were thought to have a mental disorder, thought by the Navajo to have a mental disorder, and so I traveled all over, talked with everybody. It was great. We published on that. It turned out to be quite a good paper. It's been reprinted many times.

But the second area--I completely changed areas, then at the VA I was offered the job of director of the patients training lab, which was essentially a small group research program. So for four years I set about becoming a social psychologist, very seriously I read only social psychology. I did small group research, ran that program. Then at UH in '68 or '69 we were searching for money for our grad students and one of the new child clinical faculty, Paul DoKecki had heard about some poverty money that was available. So we wrote up a brief proposal, sent it off, and we got funded. That was the beginning of the prevention research and that whole line that has occupied my time since then. And then I got into schizophrenia and families research. I'll come back to that later.

What is most significant? I guess the prevention work is the most significant in terms--has most relevance for this interview. It was certainly developmental. But I'd like to think that my work in the field of schizophrenia as it affects families is significant. And if I have any reputation internationally it is with schizophrenia.

Rozelle: Let's move on to personal research contributions, Dale. What were your primary interests in child development at the beginning of your career?

Johnson: My first interest was kind of a follow up on my sister's deafness. I thought I could develop as a researcher and possibly a clinician in working with physically handicapped children. Kansas, as I mentioned earlier, had a remarkable group of people. Meyerson himself is deaf. Roger Barkar had a severe hip problem of some sort. And as I mentioned, I got away from that because I really needed the money and there weren't any paying research opportunities in the child area, and I went with the VA. And then fortunately psychology had a very bad job market. I got an offer of a job in Houston, at the VA hospital there, and it turned out to be quite a remarkable place for research. Research was valued. The chief, Bob Morton, had attracted a number of top notch people: Bill Fairweather, who later developed the Achievement Lodges, a social psychologist had been there working. Seymour Fisher was on the research faculty, and of course Seymour would write a research book every year. And Sid Cleveland, a remarkable--remarkably capable researcher was there; very active. And there were other people who were scholars like George Faibish. I think it was an unusual place, and I loved it. I really liked that place.

It wasn't all research. I floundered; I really couldn't get anything going. I did a number of small projects and some I sent off and had published and others I didn't. I didn't have a field that I liked. It was partly because I was moving around. I was working with psychotic patients for a while. Then I was assigned to be the neuropsychologist and each time I was moved off into something else. Then the chief of the service decided to go in--decided first to start the highly unusual research-oriented treatment program based on human relations principals, a small group program. After getting it underway he announced he was leaving. He was going off to be a business consultant in psychology. He asked me to be the director and then sent me off for training in small group research; sent me to great places in a hurry. I directed that project for four years and then continued as a consultant for about twenty years.

I made it a research program; saw to it that it had another psychologist on the staff, Paul Rothaus was assigned to work with me. When I left we had data on two thousand men who had been in two hundred groups, each for twenty days. We had more data than we could ever use, but we certainly made use of what we did have. We published a lot on that. It is important for me because it was my first exposure to systematic research. We laid out a line of research and we did it and we had excellent support; although there was also a lot of criticism from psychiatry. But that was taken care of by my superiors. So that was kind of the beginning. We wrote the first treatment manual.

Cross-cultural research has always interested me and I was--my bags were always packed. I was ready to go and do this but I couldn't get money. We finally got an NIMH grant to do the same kind of thing we did with the Navajo, but now with the Sioux of North and South Dakota. But it was so hard to get money for cross-cultural research I decided I had to look into something else, and this something else turned out to be the Parent-Child Development Centers. And that's what I'll talk about. Also, just in passing, I'd like to mention that after most of the Parent-Child Development Center work had been done I was asked to evaluate a similar program in San Antonio, Avance' it was called, a parent child education and support

program. I did get nicely funded for that by Carnegie Corporation. I mention that because I think we did a kind of model evaluation job on it. There are only a few things I would change in retrospect. There were a few things I would've done in addition, but we couldn't do everything.

More recently, I've been affiliated with a group of pediatricians at the University of Texas Medical Branch in Galveston, looking at the long-term affects of otitis media on child development. We began with seven hundred newborns and have followed them to age seven. I not only learned more about otitis media than I ever thought I needed to know, but the research group is just a terrific bunch. I mean we've just enjoyed each other so much, with all of our meetings. I'm still working on the school age data. At this point I'm pretty much on my own in doing that. I think my prevention work of developmental significance was the--focused on the Houston Parent Child Development Center and I'll go into that just a little bit here.

As I mentioned earlier Mary Robinson in Washington drafted the original specifications. We had to begin in the first three years of the child's life, and ninety percent of the sample had to be in poverty. If they were minority, that would be good. We had to involve the mother as the teacher to a large degree, and the child. If we wanted to include the fathers that was okay. She also laid out that we would be supported in developing the program, evaluating it, and disseminating it, and that we would have essentially all the resources we needed for consultation from experts around the country.

This all sounds marvelously good except Nixon was elected President and all of it was going to be cut just after we were getting going. Mary Robinson saved the day on that. I was called to Washington and grilled an entire day by Young Americans for Freedom. They were young men with dark suits, dark ties, and all day long they grilled me about poverty, about the program, and everything, and I survived and we got the money. I won't forget that day though. But we made a decision--we made a couple of decisions. I was chairman of the department. We were looking for money to support grad students. We really didn't have much from the university then. We had good young faculty at that time, lively, a lot of interests and I thought it would be good if we, as a faculty, would put this together, and we did. We met endlessly and my interviewer, Richard Rozelle, was one of those people that had to put up with all those meetings. Jerry Gratch was there, and a bunch of graduate students who threw themselves into this. As it happens, several of them were fluent in Spanish at the time.

We decided early on we would work with Mexican-Americans and did that for two reasons; one, we tried a pilot program with poverty individuals in general. If we had African-American people and Hispanic individuals in the program the language was English only. The Hispanics were left out, and it wasn't working. So we made a decision to only go Hispanic, which meant Mexican-American. And the other reason is that they were completely neglected by the poverty program and everything else. There were no programs--no public programs for Mexican-Americans in Houston at that time, despite having a huge Mexican-American population. There was a third reason and it had to do with my wife's Hispanic status and her own research in the Hispanic community, which she had really loved doing. She was working for the city at the time as a demographer, and so I asked her to lay out where in the city we can find the most--the greatest density of low-income Mexican-Americans. And she drew me a map and we used that. That was our area and that got us going.

There were other Parent-Child Development Centers. Of the original ten, three survived the Nixon cuts. We had meetings, research meetings together a lot of the time. I'll say now what the Houston Parent Child program was about; we could have had a three year program, but decided to go with children age one to three. I couldn't believe that people would stay in the program for three full years. So take one to three, hitting on a lot of language development toddlerhood presents and interesting child management problems, let's not miss that. We thought the first year would be awfully important to things like nutrition, contraception, and language development. Then two of the people working in our project, Dokecki, and a grad student, Martha Frede, came in one day and said, "We've got it, we know how to do it. Let's have the first year where they're in the home, the second year in the center." And I thought, brilliant, brilliant, let's do it. We added to the first year a program for the entire family, weekend sessions, about four of them during the year. And these would be based on human relations principals. In the second year then, in the center, we added home management skills: sewing, cooking, and language classes. We hired a linguist and he was involved in all of this.

We got material--first of all we borrowed a lot from the first generation of prevention researchers; people like Susan Grey, David Weikart, Frank Palmer, Ira Gordon. We were shameless in borrowing their stuff. We used Frank Palmer's entire curriculum then for our second year program for the children. Dave Weikart was an invaluable consultant. But we did another thing. We decided we would base our curriculum on basic developmental research. So I think it was one of the first pure examples of translation research. I reviewed the literature on longitudinal studies that showed change--parental behaviors associated with changes in child intelligence. It was a small literature then and it hasn't gotten much bigger since then. But it was there and it was very clear in that it showed that children who grow up with parents who were warm, encouraged verbalization, were not too critical, and so forth tend to get brighter. And we based our curriculum on that. I've always been pleased that we did that because it seemed to be an important step.

Another thing we did that was terribly important was to form an ongoing participant advisory council. We had to have, by the standards that Washington set for us, an advisory council, and we won. It was made up of the usual social workers, hospital directors, politicians, so forth. They did occasionally meet with us, but their contribution was minimal. The contribution of our on-going parental council was excellent. We trained them in group behavior, back to Robert's Rules of Order, taught them how to run a committee meeting, and how to hold these sessions. They were enormously helpful.

We also built into the curriculum what we called the wild card, and it was that each year we would ask the mothers and the fathers what they wanted added to the program, because they knew what the program was. We outlined the whole thing at the beginning. The mothers immediately said, "We want courses in sex education because we don't want our daughters to be as ignorant as we were about sex." So we said, "Fine, we can do that." And we asked the dads what they wanted and they said, "Do vasectomies hurt? We want to know more about contraception. You know we Mexicans get too many children. You know and you can tell us vasectomies don't hurt, it would change our lives a lot." We had classes--we brought in a wonderful Hispanic doctor who taught them all about the options. We did that every year and it wasn't--these were the common themes. This is what they really wanted to hear about--or they were some variation of that. And it was an important thing to do because it really got the families involved in the curriculum as well as just the regular program. It was bicultural and bilingual, all of the staff working with families were fluent in Spanish and English and they were, with a couple of exceptions, thoroughly bicultural. We had some Anglo people who were completely fluent in Spanish, but obviously they were Anglo. We worked with the mother, father, child triad. All of the educational experiences occurred in more than one setting. They heard about cognitive development and learned how to do things that would help their child become good learners. In the home, we did it again, somewhat different from in the center. We did everything in more than one setting. We--the whole thing was manualized, twelve volumes of curriculum materials. We hired university movie people to make an orientation video, which is actually quite good.

On the research side, we randomized and randomization wasn't done much at that time. We not only randomized, we added another feature. It had to do with explaining to the potential participants what the program is like and what the control is like. And after getting agreement from them to participate, no matter which they went into, we assigned them to groups. They knew what the options were, where they would end up. Nobody protested. I think that was a bit of an improvement on the design.

Another part of the research is that everything was multi-measure. We looked at everything from more than one point of view. If we had it on paper and pencil measures, we certainly had behavioral measures and it was multi-trait. We looked at a number of things. We carefully examined what the goals of the program were and then we developed measures to assess attainment of each of these goals. I find, even today, that a lot of programs simply don't do that. And if they don't I don't know how they can tell where they're at or where they've been. I think that's an important thing to do. It certainly paid off for us. We also have had follow-ups. We've tested children and mothers, not fathers, at--intake at age one, again at age two and at the end of the program, age three, then again in preschool years, again in elementary, and then the most recent was with the children in high school.

Another thing we did that is easy to overlook was that we used a number of quantitative methods in our

analysis that turn out to be somewhat different. As far as I can tell one of our publications was the first publication using Manova in the child development literature. I think it's the first. I can't find anybody who preceded us. One of the reviewers of our papers said this is the wave of the future. I loved him for it. Scott Maxwell, of course, put us on the map. I think we also published first in the developmental literature using structural equation modeling. Again, that was Maxwell. I'm not sure about this, but I think it was. In any case, these were excellent methods for our use--I mean for our needs at the time.

We only disseminated the program once. It was part of the contract, but it ran out of money; we never finished doing evaluation of the dissemination in San Antonio. My impression, having made many visits and having looked at the first year data, is that it was a better program than the one in Houston. The staff were following the manuals better, so in a sense here's a replication that shows greater fidelity than the original. I think that was true. I was sorry we didn't get to see more data on that, but money's money. I haven't really pressed for more disseminations. I'm not sure that mothers or families today would do a two year program which requires being at home in the first year and coming to the center four days a week, because most women today, including Hispanic women, are employed and don't have time for it. Now I'm maybe wrong on this because the Avance program has women coming in one day a week for two years and they have low drop out rates. They're largely Hispanic, although not entirely. They've got Avance in Texas, Southeast and South Central, and in other parts of the country. So I may've been wrong on that but I haven't tried disseminating the PCDC because I haven't had the staff to do it. It's not my nature, despite my background in selling used cars, to sell something, but it would not be impossible to do. I have all the manuals on disk. I have staff members still here in Houston who are willing to go out and do the training, and it could be done.

Rozelle: Dale let's proceed now on your institutional contributions. First of all, would you please elaborate on the institutions that you worked and the dates which you have been there?

Johnson: I've always thought of myself as having only two jobs, but there maybe more. I spent three years with the VA system in Kansas and Missouri, as a trainee, as a student, and then seven years with the VA Hospital, 1957 to 1964, here at Houston. Then the University of Houston ever since. So really VA Houston and the University of Houston, two jobs. But I spent a year as a lecturer--Fullbright lecturer at the University of Bergen in Norway in '73, and a shorter period of time at the University of Istanbul in Turkey in '74.

Rozelle: Very good. Let's move on to the discussion of various research sites and organizations which you've been involved. You've had an extensive involvement both on the local, national, and international level, and that continues to this day. Please describe your role with these various faculties and the changes in these units that occurred during your time there. What objectives were being pursued, what were your achievements and frustrations, and the role you believe was played by that organization in the history of child development research?

Johnson: Well the time at the VA Hospital, particularly in the small group research program was sort of a unique position, I was the first psychologist in the VA system to be the administrator of a hospital ward, and to have a psychiatrist working under me. I had two first rate psychologists working with me in the program. I was able to hand pick the psychiatrist who was a great guy. What I liked about him was that he was a superb physician and lots of our patients had many physical problems. But it was a first and I've talked to some VA people now and they're trying to get this instituted. My chief, Morton, with the blessing of the hospital director made that possible.

Going to the university, I was really new to academia with little experience teaching and certainly not much experience with academic politics. Then being thrown into the chairmanship as an associate professor without tenure was somewhat audacious and risky, but I knew that I had enough publications to get tenure when the time came. I knew that they picked me for this because the university department was at war--a department at war and with different camps. They weren't getting on well. There were some very bright people that were doing terrific work, but they weren't working as a department. So when I was suggested for the program, I had faculty support for chairmanship. The dean was delighted and he told me what he wanted, but I also knew what I wanted. I wanted to operate the program. I wanted better faculty. I wanted

a better facility. We were crowded into a small building and I wanted better facilities, more space, better space, better research labs. I wanted it to be a functioning and cohesive department. I think that I had some success. We had nineteen people in the department when I started and twenty-seven when I left. The biggest challenge--well there were two big challenges. One was getting better salaries for the faculty, and I had mediocre success at that. But the other one, bringing in good faculty was difficult. We tried hard and we really made some awful mistakes with some people and I don't see how we could have predicted their total lack of performance. I won't go into it. But we also found some people who did well and we were nothing but pleased with them.

I've had other administrative offers, but I decided that six years of being chairman was enough. The dean encouraged me to look into becoming a dean. I couldn't think of myself sitting in all those committee meetings anymore and putting up with whining faculty. And I said, "No, dean, thank you, I want to do research, and that's what I really want to do." And he was highly supportive of that.

I directed the developmental program, briefly, and I also directed the clinical program also for just--I think each was a couple years. I don't think in either case I did major harm, but I didn't do any major good either. As for the developmental program, Jerry Gratch joined the program eight months after I did. I came in January, he came the following fall. And we were the developmental program for some time. Finally the faculty voted to expand it. We spent a lot of time looking at really interesting candidates, and finally did go up to six or seven people.

Rozelle: We will continue now, our questioning, into the personal notes, the personal interests, the way that family and friends have had bearing on your scientific interests and contributions.

Johnson: Well I don't just sit at the computer and work, I also remodel the house, I'm in the process of redoing my ugly garage into what people say looks quite a bit like the Alamo, but I've exaggerated the steepness of the peaks in the bell tower, and I did that on purpose. A metal sculptor in Taos right now is staying in our house and in return he is making me a metal Viking to put on top of the whole thing. I said no angels, but a Viking would be fine. Okay, so anyway, I do that.

And I'm a member of the local archeological society. Last January I organized a tour to Mexico. Seventeen of us went to Mexico City and Oaxaco. In ten days we saw a large number of ruins in the Mexico City and Oaxaco area, had a great time. And we ate at some of the best restaurants anywhere, quite a successful trip. We live well in Taos with hikes every Saturday morning, skiing, and many other things to do.

As for contributions or influences of my family on my research, of course I have to mention my wife, Carmen. Her degree, her PhD is from the University of Texas, in public health here in Houston, is in epidemiology and demography. But she also did graduate work at--here at the University of Houston and at Rice. And she played an important role in the early days of the Parent-Child Development Center and a major role in independent research we've done with American Indians in Mexico, Guatemala, and in the United States. A part of her contribution has been her fearlessness. You know I'd say when we were invited to go out and work with the Makah Indians on the Olympic Peninsula, in Washington, are you interested, and she'd say, "Sure let's go." We'd go out and camp in the rain for a month and it takes a certain hardiness. We did not have a vacation as a couple until our children were adolescents because we always were doing research on vacation time. And then one--the first year we did, we left the children with their grandfather and went off and climbed the two big volcanoes in central Mexico, El Popo and Ixtla. So that was vacation.

She is known for her research on the Zuni Indians and some interesting work on public health aspects of breast feeding that she's done over the years. She's done a bunch of other things too.

My children have had an influence on me and I cannot quite imagine teaching courses in child development without having children under foot. To see them as colicky, as all three of ours were, developing quickly, becoming social creatures it seemed immediately, and within years standing with the chairman of the Rice math department, discussing mathematics, in my older son's case, or seeing my younger son playing in an animated way all day, for several days, with a Norwegian child, neither of whom had any problem with not

having a common language. By seeing my daughter as a young girl in the Guatemala highlands, going out for a couple of days, coming back speaking Spanish is just a wonderful thing to see. And they've been tremendously supportive as children over the years and they still are.

And my daughter calls when she has problems regarding academic politics et cetera, and we discuss them. The daughter has a PhD in Linguistics and is at the University of Texas, at Austin. She directs a program that collects and puts on electronic files languages of American Indians et cetera, in Central and South America. The youngest child, Paul, is a landscape architect and has his own business in Austin. He's the family artist. And our oldest dropped out of Harvard, at age nineteen, where he was majoring in mathematics and philosophy. He developed schizophrenia, and has been terribly disabled over the years, but is doing quite well now in a group home in Southern California. He spends a lot of time with us. I once asked him what he thought of Harvard, he said, "Harvard was fun, schizophrenia is hard."

And of course our involvement with the National Alliance for the Mentally Ill, I at the international level, my wife at the local and state level, very much, has been because of my son and finding better services for him. We had thought that by becoming very active advocates we could make some changes. I'm not sure that's possible but I haven't given up. So I continue, now as President-elect at the World Fellowship for Schizophrenia and Allied Disorders. Our mission is to help people in under-developed countries, develop family organizations. Schizophrenia, bipolar disorder, and major depression exist everywhere in the world and family organizations are quite necessary. So we have thrown ourselves into this.

Rozelle: Well thanks so much, Dale, for all of the reflection and accounting of your career, which I should add continues at full pace.