

AAPI OnLine Development Handbook

The Adult-Adolescent Parenting Inventory (AAPI-2)[®]
Assessing High-Risk Parenting Attitudes and Behaviors

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Published by Family Development Resources, Inc.

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Rationale and Purpose of the Adult-Adolescent Parenting Inventory (AAPI)®

The primary prevention of child abuse and neglect is the single most sought after goal in the helping service fields today. Theories and hypotheses have been tested, examined and re-examined in attempts to identify the most efficient and valid ways of preventing injuries to children by their parents. Of all the primary prevention strategies tested, parenting education for pre-parent populations is often singled out as the strategy most likely to prevent initial injuries to children.

The notion that parenting education for pre-parent populations can be the most effective primary prevention strategy is based on the theory that children learn abusive parenting practices from observing their parents and/or experiencing abuse during the process of growing up. Learned patterns of abusive parenting are transmitted from parent to child and are replicated by the child upon becoming a parent in their own right. The early work of Steele and Pollock (1968), and Martin (1976) provides an awareness of the perpetuation theory of child abuse and neglect largely from their clinical cases. Parents charged with child maltreatment were required to participate in psychiatric programs to remediate their "abusive" personality traits. Clinicians found that a current theme among the abusive parent population is a reference to their own past abusive childhood histories. Over the years, similar clinical findings reported by professionals throughout the country have added increased support to the perpetuation theory of abuse.

Until the mid-1970's however, the perpetuation theory of abuse lacked an empirical database. That is, testing the theory among pre-parent populations was still lacking. From an empirical base, the questions still remained: "What percentage of abused children become abusive parents as a result of their early childhood maltreatment?"

A major stumbling block in providing an empirical support base to the theory was the lack of clarity regarding what constituted child abuse and neglect. That is, put in behavioral terms, what do abusive parents do that non-abusive parents don't do? The question served as the basis of the work which began in 1975 by Dr. Stephen J. Bavolek and his colleagues. Utilizing all available resources, an analysis of the concept of child abuse and neglect was begun. The goal was to synthesize what was generally thought to be abusive parenting practices into meaningful constructs.

A construct is a synthesis of ideas and facts into a theoretical description of related behaviors. Articles, books, and media programs were reviewed, and professionals known for their expertise in treating child abuse were interviewed. The work in conducting a concept analysis of child abuse and neglect was viewed as an important effort to the overall treatment and ultimate prevention of child maltreatment. It was felt that if the primary prevention of child abuse and neglect was ever to be a reality, then programs and strategies to prevent, assess, and treat dysfunctional parenting practices must be responsive to the known behaviors of abusive and neglecting parents. That is, there are interdependent relationships between what we want to assess, what we want to treat, and what we want to prevent. The common link between assessment, treatment, and prevention is the identification of the known parenting practices of abusive and neglecting parents.

Purpose of the AAPI

The Adult-Adolescent Parenting Inventory (AAPI) is designed to assist professionals and paraprofessionals in assessing the parenting and child rearing attitudes of adolescent and adult populations. Developed from the known parenting and child rearing practices of abusive and neglecting parents, data generated from the administration of the AAPI indicate degrees of agreement and disagreement with maladaptive parenting behaviors. As such, responses on the AAPI provide an index of risk (high, medium, low) for practicing abusive and neglecting parenting and child rearing behaviors.

The AAPI is useful in assessing individual strengths and weaknesses involved in child rearing. Research data indicate the AAPI may be useful in several ways:

1. ***To assess the parenting and child rearing attitudes of adolescents.*** Adolescents have usually developed fairly well-defined attitudes toward raising and parenting children by the time they reach junior and senior high school. As schools are continuing to recognize their responsibility for providing parenting education, the AAPI provides school personnel with useful information in recognizing students with specific learning needs in appropriate parenting and child rearing practices. As such, the AAPI-2 can be a primary preventive measure of child abuse and neglect.
2. ***To assess the parenting and child rearing attitudes of prospective parents.*** A standard practice among most hospitals and clinics is to offer prenatal child care classes and postnatal parenting classes. The instructional goals and objectives of these courses usually consist of teaching parents and prospective parents proper nutrition, general care, behavior management, etc. Information generated from the AAPI can be very useful in developing pre and postnatal instructional goals and objectives.
3. ***To assess the changes in parenting and child rearing practices after treatment.*** Agencies that provide parenting education to abusive parents often lack a valid and reliable inventory to measure post-treatment effectiveness. Pre and post assessment can provide the examiner with information regarding the attitudinal changes in parenting.
4. ***To screen and train prospective foster parent applicants.*** Current practices by county agencies in screening qualified applicants for foster parenthood very seldom incorporate the assessment of their parenting and child rearing attitudes and practices. Based on letters of recommendation, job and financial stability, and appearance of the home living conditions, individuals are often selected to parent and nurture children and adolescents who have been abused and neglected. Maltreatment of children in foster homes is all too common a story. Assessing the parenting applicants for screening and training purposes could help increase the quality of foster parent placements.
5. ***To assess the parenting and child rearing attitudes of prospective employees for child care staff, teacher aides, residential care staff and volunteers.*** An ideal use of the AAPI is to administer the inventory to individuals who will be working with children and adolescents in residential care programs, or as teacher aides, or volunteers in "Big Brother" or "Big Sister" programs. Information generated from the inventory can be used for screening and training purposes.

The Revised AAPI

The AAPI-2 represents the revision to the original AAPI developed and normed in 1978–80. Like the AAPI, the AAPI-2 has two forms, Form A and Form B that can be used to assess the parenting and child rearing attitudes and behaviors of adults and adolescent parent and non-parent populations. The validity and reliability of the AAPI-2 supports the use of the inventory as a diagnostic tool. The AAPI-2 presents new items for each of the previously existing four constructs, plus an additional fifth construct – Construct E: Oppressing Children's Power and Independence. New norm tables for parent and non-parent adult and adolescent populations are presented to reflect the current energy put into developing programs and education aimed at increasing the positive parenting skills and attitudes throughout the country.

The Handbook for the Adult-Adolescent Parenting Inventory is designed to provide professionals with background information relative to initial development, field testing, validity, and reliability of the inventory, as well as information concerning administration, scoring and interpretation of the data.

Identification of the Parenting Constructs: What the AAPI Measures

The early work of Bavolek, Kline, and McLaughlin (1979) systematized information generated from the previously mentioned sources and identified parenting patterns that lead to the development of four parenting constructs. These constructs represented a summary of theory, research, and practice put forth by scientists, researchers, clinicians, and practitioners in describing abusive and neglecting parenting practices. In recent research by Bavolek and Keene (1999), a fifth construct emerged from the research generated from the administration of the Adult-Adolescent Parenting Inventory (AAPI-2). These constructs serve as the basis for assessing attitudes known to contribute to child abuse and neglect.

Construct A: Inappropriate Parental Expectations

A parenting practice that is very common among reported cases of child abuse and neglect is the inappropriate expectations parents have for their children. Beginning very early in the infant's life, abusive parents tend to inaccurately perceive the skills and abilities of their children. Inappropriate expectations of children are generally the result of three factors:

1. Parents simply don't know the needs and capabilities of children at various stages of growth and development. Ignorant of this knowledge, expectations are made that often exceed the skills and abilities of the child.
2. Many parent who abuse their children generally lack a positive view of themselves and consequently of their children. Inadequate perceptions of self as an adult generally stem from early childhood experiences of failure, ridicule, and disappointment. These patterns of childhood failure are repeated to yet another generation where demands are made for children to perform tasks that they are emotionally, physically or intellectually incapable of performing.
3. Abusive parents generally lack the empathy that is required to determine what is an appropriate expectation for children at different stages of development. Lacking empathy, described in more detail in the following construct, is a major contributor to the inappropriate demands parents make of their children.

The effects of inappropriate parental expectations upon children are debilitating. Many children perceive themselves as worthless, as failures, and as unacceptable and disappointing to adults.

Construct B: Parental Lack of an Empathic Awareness of Children's Needs

Empathy is the ability to be aware of another person's needs, feelings, and state of being. It is the ability to place the needs of another as a priority. Empathic parents are sensitive to their children and create an environment that is conducive to promoting children's emotional, intellectual, physical, social, spiritual, and creative growth. Empathic parents understand their children from the inside, not from the outside as an interested observer.

Many professionals are of the opinion that the trait of empathy exists in children at birth and is fostered through the manner in which they are treated during the process of growing up. Parents lacking sufficient levels of empathy find children's needs and wants as irritating and overwhelming. Everyday normal demands are perceived as unrealistic, resulting in increased levels of stress. The needs of the child come into direct conflict with the needs of the parent, which are often similar in magnitude.

Lacking an empathic home life, children often fail to develop a solid moral code of conduct. Right and wrong, cooperation, and kindness are not important because they are not recognized as important values. Others are devalued as "self" takes center stage. The impact of one's negative actions on

another is muted as the ability to care about the needs or feelings of another is not important. Children with low levels of empathy are often labeled as “troublemakers” or “disobedient” and often engage in acts of cruelty to themselves, others, and animals.

Construct C: Strong Believe in the Use and Value of Corporal Punishment

Physical punishment is generally the preferred means of discipline used by abusive parents. Throughout history, the use of corporal punishment has been well documented. Rationale for the practice includes:

1. To teach children right from wrong.
2. As a parenting practice sanctioned by the proverbs of the Old Testament;
3. As a cultural practice of discipline;
4. To provide punishment for children’s misbehavior in a loving way;
5. Just simply to punish behavior; and
6. Because it produces quick results.

Abusive parents often believe children should not be “given into” nor allowed to “get away with anything.” They believe children must periodically be “shown who is the boss” and to respect authority so they will not become sassy or stubborn. Abusive parents not only consider physical punishment a proper disciplinary measure, but strongly defend their right to use physical force.

Physical attacks by the abusing parent are not often a haphazard, uncontrolled, impulsive discharge of aggression by the parent toward his or her children. To the contrary, studies appear to indicate that abusive parents utilize physical punishment as a unit of behavior designed to punish and correct specific bad conduct or inadequacy on the part of children. Much of what abusive parents find wrong with their children are the same things for which they were criticized and punished for as children, hence the punishment carries the approval of traditional family authority and an aura of righteousness.

The effects of physical abuse are demonstrated in the observed inadequate behavior of children. It is a common tendency for abused children to identify with the aggressive parent in an effort to gain some measure of self protection and mastery. Abused children often develop a set pattern of discharging aggression against the outside world in order to manage their own insecurities.

Additionally, children who see and experience recurrent serious expressions of violence in their own family learn that violence is a useful way to solve problems. These children, upon becoming parents, tend to punish their children more severely. As a result, abused children often become abusive parents.

Construct D: Parent-Child Role Reversal

A fourth common parenting behavior among abusive parents is their need to reverse parent-child roles. Children are expected to be sensitive to and responsible for much of the happiness of their parents. Parent-child role reversal is an interchanging of traditional role behaviors between a parent and child, so that the child adopts some of the behaviors traditionally associated with parents. In role reversal, parents act like helpless, needy children looking to their own children for parental care and comfort.

Although the phenomenon of role reversal is often associated with an ability to be empathically aware of the children’s needs, the two behaviors are markedly different. When abusive parents fail to show an empathic awareness of their children’s needs, the children are often left to care for themselves. Carried to the extreme, children are emotionally and/or physically neglected or abused. The emphasis is not placed on children assuming the role of the “nurturing parents” as in role reversal. In the latter situation, children are an integral part of the family functions often becoming a source of authority, control, and decision making.

The effects of role reversal on abused children are destructive. Assuming the role of the responsible parent, children fail to negotiate the developmental tasks that must be mastered at each stage of life if they are to achieve normal development and a healthy adjustment. Failure to perform any of the developmental tasks not only hampers development in succeeding stages, but also further reinforces feelings of inadequacy. Children in a role reversal situation have little sense of self and see themselves as existing only to meet the needs of their parents.

Construct E: Oppressing Children's Power and Independence

Closely aligned with the value of physical punishment and the lack of an empathic awareness of children's needs is the belief that children's independence and power needs to be oppressed. The age-old phrase "the terrible two's" most adequately describes this construct. Parents fear that if children are permitted to use their power and independence to explore their environment, or ask questions, or challenge parental authority, they will become "acting-out" and disrespectful. Hence, obedience and complete compliance to parental authority is demanded. When children's power and independence are oppressed, they are not allowed to challenge, to voice opinions, or to have choices, but rather are told to "do what they are told to do" without question. This demand for compliance to parental authority has many limitations:

1. ***Obedience breeds powerlessness.*** When independence is not fostered as a state of growth the feeling of dependence becomes a dominant personality trait. Independence fosters power – a sense of self in comparison to others and one's environment. The young child who explores is learning about cause and effect and the relationship between concepts: the "if-then law" of logic and nature. For young children, the ability to say "no" is a way of establishing boundaries and developing a sense of power, both necessary for success in life. Obedience to parental rule, however, breeds a sense of helplessness and dependence at a time when learning to be a separate being is critical.
2. ***Obedience breeds inadequacy.*** Inadequacy is the perception that self or others are "less than, incapable, or inferior." By demanding obedience, parents model that power is something to be used on others to get them to do what you want. Power is equated to control and the more power you have, the more control you exert on others. The sense of powerlessness described earlier fosters a personal sense of inadequacy, as being a decision maker for your own life is not an option. Powerlessness, excessive dependence, and a sense of personal inadequacy are common traits of many obedient children.
3. ***Obedience also breeds rebelliousness.*** History teaches us over and over again that the oppressed will rise up to be recognized. It's inevitable. The human spirit cannot be denied its existence. Power struggles acting out behavior and disobedience are all common behaviors resulting from years of obedience and complete yield to parental rule.
4. ***Obedience breeds compliance – to all.*** Doing only what one is told to do often teaches children a generalized learned response of compliance. When those in perceived power make a demand, like a child's peer group, once again the learned response is to comply. In the experimental world of teenagers, common sense to stay away from drugs and alcohol, vandalism, and crimes against the community are overwhelmed with the compliance of peer pressure. Simply, children who have been raised as obedient to authority lose their ability to withstand peer pressure. Saying "no" to drugs and other inappropriate behaviors will remain only a concept, not a practice.
5. ***Finally, obedience breeds followers, not leaders.*** Doing what you're told to do is not nearly enough to succeed in the world. Businesses look for energetic, creative employees who have visions for the future. Thinkers, problem solvers, visionaries and leaders are made from early home environments that foster those traits. Obedience as a dominant parenting practice designed to oppress children's power and independence often has long lasting devastating consequences as observed in children and adults unable to make wise choices, take the initiative, and provide the leadership critical to nurturing parenting.

Validity and Norm Development

The meaning of the respondent's raw scores is of primary consideration to the test administrator. Like most theoretical constructs in human behavior, measurement is not absolute; but rather a comparison of one individual with another, or with a group of individuals.

There are a total of six norm tables used to convert raw scores into standard scores for the purpose of understanding the meaning of respondents' scores on the AAPI-2. Standard scores used in establishing the norms for the AAPI-2 are N-stens. A sten is merely a special case of standard score; hence the name *sten* from *standard ten scale*. N-stens are derived from a close study of the percentile distribution of the raw scores. They transform from percentiles to stens according to the usual normal curve, so that 5.5 on the N-stens is the median of the raw scores and the stens are normally distributed. N-stens are best used to determine where an individual stands in relation to a normal distribution of scores.

The data in Table 1 show the sample sizes and regional distribution of cases in norm samples.

Table 1
Sample Sizes and Regional Distribution of Cases in Norm Samples

	Region				Norm Sample Size
	Midwest	Northeast	South	West	
Continental U.S. (1990 Census)	12%	24%	34%	21%	
Adult Female Parent	28%	16%	39%	17%	479
Adult Male Parent	27%	12%	34%	27%	234
Adolescent Female Non-Parent	20%	20%	40%	20%	127
Adolescent Male Non-Parent	25%	14%	37%	24%	71
Adolescent Female Parent	27%	18%	35%	20%	87

Establishment of AAPI-2 Norms

To ensure a representative population for the normative data, agencies utilizing the original version of the AAPI throughout the country were requested to participate in the study. Adult parents, both abusive and non-abusive; adolescents, both abused and non-abused; and teen parents from 53 different agencies in 23 different states contributed to the normative data.

Content Related Validity

Four parenting constructs and a pool of related Likert scaled test questions were developed for the first edition of the Adult-Adolescent Parenting Inventory (AAPI) (Bavolek, 1984). The AAPI-2 depended on the same four constructs for development of the test item pool. As in the first edition, statements made by parents about children formed the base of the Likert scaled items. Although the original constructs remained the same, the questionnaire items were prepared independently of the original AAPI.

One hundred twenty new items were generated and sent out for review to professionals in the various helping fields. Their task was threefold:

1. Rate each item for clarity using a five-point Likert scale.

2. Assign each of the items to one of the parenting constructs that best represents a measurement of that construct.
3. Respond to the item on a five-point Likert scale of Strong Agreement to Strong Disagreement.

Feedback from this phase of the content validity process was utilized to form Prototype I of the AAPI-2. Ninety-two items were included in the original field test. Item and factor analysis of data from the field test yielded 84 items to be considered in a wider study.

A large-scale field test of the 84 items provided a statistical justification for the release of the AAPI-2. The factorial stability of the four constructs was verified by the analysis presented in the following pages. This suggests the findings of many validity studies on the original AAPI will be confirmed for the AAPI-2.

Initial field testing of Prototype I of the AAPI-2 was conducted through a national request for agency participation. Over 70 agencies nationwide requested to participate in the study to revise and re-norm the AAPI. A total of 53 agencies from 23 different states contributed data to renorming and validating the AAPI. Prototypes 2 and 3 of the AAPI-2 were developed and field tested from the data generated through the field testing. The nearly two-year study resulted in the current version of the AAPI-2.

Some differences between items on the AAPI and AAPI-2 should be noted. First, Forms A and B of the AAPI differed in the way items were selected. In the original AAPI, Form A contained items which represented a positive assessment of children and Form B contained items which represented negative assessment. In the AAPI-2, Forms A and B are parallel and each contain both positive and negative statements. Both Forms A and B of the AAPI-2 more closely parallel the content of the AAPI Form A than the AAPI Form B.

The second notable difference between the AAPI and AAPI-2 is the identification of a fifth parenting construct - Construct E: Oppressing Children's Power and Independence.

The third notable difference between the AAPI and AAPI-2 are the higher reliabilities and lower standard errors of measure which suggest improved item content.

Construct Related Validity

As mentioned earlier, item selection was based on the constructs of the original AAPI:

- | | |
|-------------|--|
| Construct A | Inappropriate Expectations of Children |
| Construct B | Parental Lack of Empathy Towards Children's Needs |
| Construct C | Strong Belief in the Use of Corporal Punishment as a Means of Discipline |
| Construct D | Reversing Parent-Child Role Responsibilities |

The reader is referred to Chapter Two for a more detailed description of the parenting constructs.

Bavolek (1978, 1984) demonstrated that the factor structure obtained from the AAPI was similar for adult and adolescent populations. For that reason, factor analysis of the 80-item experimental version of the AAPI-2 included adults and adolescents. Data for the factor analysis consisted of 1,427 cases from a diverse population. Tables 2 to 6 contain the rotated factor loading resulting from Principal Axis analysis of the Pearson interitem correlations followed by Oblimin rotation. Each of the five tables contains the factor loadings for one factor or construct. Column 3 lists the items as they appeared in the experimental version of the AAPI-2, including the item numbers used in the form. The AAPI-2 consists of two parallel forms. Columns 1 and 2 indicate which items were used in which version and the number of each item in the parallel forms. In typical factor loading matrices, the factors appear in the order of decreasing variance. In these tables the columns have been rearranged to conform to the order of the constructs described in the Handbook for the AAPI (Bavolek, 1984).

The four constructs found in the AAPI (1984) were confirmed and are represented by the first four factors of the AAPI-2 (see Tables 2 to 6). This represents strong evidence of the generalizability and validity of these four constructs and that the AAPI and AAPI-2 are comparable measures of these four constructs. The Chronbach alpha reliabilities, presented in the tables, confirm the validity of the factors. The fifth factor (see Table 6) may also prove of value. It is cohesive enough to provide Chronbach alpha reliabilities of .80 or above.

Table 2
Factor Loadings for Factor A

Form	Item Number	Item	Inappropriate Expectations A	Empathy B	Corporal Punishment C	Role Reversal D	Power & Independence E
A	28	2. Strict discipline is the best way to raise children.	0.44	0.15	0.24	-0.11	-0.05
A	17	3. Parents need to push their children to do better.	0.29	0.09	0.21	0.17	-0.16
A	12	35. Children should be taught to obey their parents at all times.	0.53	-0.08	0.13	0.18	0.03
A	21	45. Children learn respect through strict discipline.	0.45	0.19	0.19	-0.05	-0.05
A	10	65. Good children always obey their parents.	0.30	0.29	0.04	0.19	0.00
A	34	72. Strong-willed children must be taught to mind their parents.	0.40	-0.03	0.16	0.08	-0.19
A	2	75. Children should do what they're told to do, when they're told to do it. It's that simple.	0.55	0.06	0.20	0.05	0.10
B	22	1. Give children an inch and they'll take a mile.	0.34	-0.02	0.16	0.16	0.09
B	23	12. Parents spoil babies by picking them up when they cry.	0.27	0.17	0.12	0.15	0.26
B	15	22. Children nowadays have it too easy.	0.42	0.10	0.17	0.12	0.06
B	27	35. Children should be taught to obey their parents at all times.	0.53	-0.08	0.13	0.18	0.03
B	2	60. The problem with kids today is that parents give them too much freedom.	0.47	0.09	0.08	0.06	0.05
B	39	65. Good children always obey their parents.	0.30	0.29	0.04	0.19	0.00
B	10	80. Children should be obedient to authority figures.	0.38	0.00	0.13	0.22	-0.22

Table 3
Factor Loadings for Factor B

Form	Item Number	Item	Inappropriate Expectations A	Empathy B	Corporal Punishment C	Role Reversal D	Power & Independence E
A	11	33. Children should know what their parents need without being told.	-0.02	0.50	0.07	0.36	-0.05
A	1	34. Children should keep their feelings to themselves.	-0.011	0.65	-0.01	0.00	0.13
A	19	50. Children have a responsibility to please their parents.	-0.06	0.41	0.12	0.36	-0.09
A	40	53. A good child sleeps through the night.	0.18	0.29	0.01	0.24	0.07
A	20	58. There is nothing worse than a strong-willed two-year-old.	0.19	0.30	0.06	0.24	0.12
A	6	64. The sooner children learn to feed and dress themselves and use the toilet, the better off they will be as adults.	0.14	0.30	0.10	0.29	0.01
A	39	67. Letting a child sleep in the parents' bed every now and then is a bad idea.	0.12	0.27	0.02	-0.06	0.04
A	22	70. Children who feel secure often grow up expecting too much.	0.17	0.28	0.08	0.25	0.27
A	38	78. Babies need to learn how to be considerate of the needs of their mother.	-0.02	0.34	0.14	0.34	0.08
A	16	79. "Because I said so!" is the only reason parents need to give.	0.12	0.30	0.26	-0.01	0.06
B	21	13. Parents who encourage their children to talk to them only end up listening to complaints.	0.24	0.31	-0.09	0.16	0.34
B	30	17. The less children know, the better off they are.	0.10	0.47	0.04	-0.03	0.11
B	33	26. Parents should expect more from boys than girls.	0.10	0.44	-0.01	0.09	0.21
B	14	27. Praising children is a good way to build their self-esteem.	0.05	-0.30	-0.04	-0.01	-0.28
B	13	44. Parents' needs are more important than children's needs.	-0.09	0.56	0.06	0.04	-0.03
B	1	46. Children who express their opinions usually make things worse.	0.09	0.67	0.02	-0.01	0.06
B	31	47. Two-year-old children make a terrible mess of everything.	0.30	0.35	-0.04	0.02	0.14
B	40	56. Children cry just to get attention.	0.21	0.43	0.06	0.06	0.03
B	20	66. Children should be seen and not heard.	0.06	0.52	0.09	-0.03	0.11
B	9	68. Crying is a sign of weakness in boys.	0.02	0.61	0.05	-0.01	0.15

Table 4
Factor Loadings for Factor C

Form	Item Number	Item	Inappropriate Expectations A	Empathy B	Corporal Punishment C	Role Reversal D	Power & Independence E
A	23	23. Sometimes spanking is the only thing that will work.	0.11	0.04	0.76	0.00	-0.13
A	25	29. A good spanking lets children know parents mean business.	0.06	0.07	0.76	0.05	-0.07
A	5	41. Spanking teaches children right from wrong.	0.04	0.00	0.87	0.00	-0.03
A	37	43. A good spanking never hurt anyone.	0.02	0.12	0.70	0.02	0.00
A	18	48. Time-out is an effective way to discipline children.	0.21	-0.04	-0.36	-0.11	-0.20
A	24	54. Children can learn good discipline without being spanked.	0.01	-0.08	-0.62	0.04	-0.14
A	9	55. A certain amount of fear is necessary for children to respect their parents.	0.16	0.26	0.33	0.10	-0.08
A	32	62. Hitting a child out of love is different than hitting a child out of anger.	0.06	-0.01	0.70	-0.02	-0.10
A	31	71. Children need discipline, not spanking.	0.11	0.03	-0.72	0.02	-0.16
A	15	77. It's OK to spank as a last resort.	0.15	-0.07	0.77	0.01	-0.14
A	26	8. Spanking teaches children it's alright to hit others.	-0.01	0.07	-0.68	-0.12	-0.12
B	32	11. If you love your children, you will spank them when they misbehave.	0.10	0.02	0.71	0.00	0.07
B	19	16. Strong-willed toddlers need to be spanked to get them to behave.	0.05	0.17	0.65	0.00	0.07
B	28	21. Mild spankings can begin between 15 and 18 months of age.	0.07	-0.02	0.72	0.02	-0.07
B	11	36. You cannot teach children respect by spanking them.	0.00	0.07	-0.76	-0.02	0.01
B	18	38. Children who are spanked usually feel resentful towards their parents.	0.10	0.06	-0.73	0.00	0.09
B	6	49. Children who bit others need to be bitten to teach them what it feels like.	0.15	0.18	0.33	0.04	0.17
B	36	51. Never hit a child.	-0.02	0.00	-0.70	0.13	0.03
B	5	6. Spanking children when they misbehave teaches them how to behave.	0.03	-0.03	0.79	0.06	0.09
B	29	61. If a child is old enough to defy a parent, then he or she is old enough to be spanked.	0.21	0.01	0.70	0.04	0.02
B	37	69. Children who are spanked behave better than children who are not spanked.	0.11	0.03	0.70	-0.01	0.06
B	12	9. Children learn violence from their parents.	0.05	0.01	-0.35	-0.08	-0.22

Table 5
Factor Loadings for Factor D

Form	Item Number	Item	Inappropriate Expectations A	Empathy B	Corporal Punishment C	Role Reversal D	Power & Independence E
A	7	20. Children who are one-year-old should be able to stay away from things that could harm them.	0.10	0.12	0.00	0.38	0.16
A	35	24. A good child will comfort both parents after they have argued.	0.06	0.08	0.05	0.59	0.14
A	29	28. Children should be their parents' best friend.	0.18	-0.21	-0.03	0.63	0.24
A	27	37. Children should be responsible for the well-being of their parents.	-0.13	0.38	0.04	0.49	0.02
A	13	4. Children should be aware of ways to comfort their parents after a hard days work.	-0.03	0.10	0.10	0.66	-0.06
A	33	57. In father's absence, the son needs to become the man of the house.	0.09	0.35	0.01	0.40	0.09
A	3	76. Parents should be able to confide in their children.	0.01	-0.19	-0.01	0.69	0.06
B	24	10. Children should be considerate of their parents' needs.	-0.05	0.10	0.05	0.50	-0.27
B	16	18. Children should be the main source of comfort for their parents.	0.15	0.03	0.04	0.60	0.14
B	3	31. Children should offer comfort when their parents are sad.	-0.03	-0.08	0.04	0.82	-0.02
B	34	32. Older children should be responsible for the care of their younger brothers and sisters.	0.10	0.24	0.09	0.46	-0.16
B	38	42. Children should know when their parents are tired.	0.00	0.26	0.08	0.45	-0.16
B	7	5. Children need to be potty trained as soon as they are two years old.	0.17	0.00	0.24	0.38	0.18
B	25	57. In father's absence, the son needs to become the man of the house.	0.09	0.35	0.01	0.40	0.09

Table 7 contains Pearson correlations between factors and forms. The correlations of principle interest are the underlined values, the correlations between corresponding factors for Form A and Form B. These diagonal values range from .80 to .92, providing evidence of the comparability of the two forms. In addition, the diagonal values are in all cases larger than the off-diagonal values, providing evidence of convergent validity. It should be noted, however, that the off-diagonal values are substantial and sometimes not much less than the corresponding diagonal value. Thus evidence of discriminate validity is weak. This is probably because of the highly correlated nature of the underlying constructs. The best estimates of correlations between factors representing constructs are found in the lower right corner of the table, correlations between factors when both Forms A and B are used. The highest of these correlations is .75 between Factors B and D (Empathy and Family Roles).

The lowest of these correlations is .49 between Factors A and E (Appropriate Expectations and Power and Independence).

Reliabilities and Standard Errors of Measure

Two estimates of internal reliability are reported for each factor in Table 8. The Spearman-Brown statistic is widely used and is reported for each factor and each form. Chronbach's alpha statistic is more robust and is also reported. They have similar values. It will be noted that the reliabilities for combined Forms A and B are substantially larger than for the individual forms. Users who need high reliability are encouraged to use the combined scores even though the correlations between the individual forms and the combined forms are high, ranging from .88 to .97.

Table 8 provides estimates of standard errors of measure for both raw and standardized sten scores. For research purposes, the raw scores may be of more interest than the sten scores of the combined forms than for Form A or B alone. This does not hold true for the raw scores because of the larger standard deviation of the Form A and B scores.

Table 6
Factor Loadings for Factor E

Form	Item Number	Item	Inappropriate Expectations A	Empathy B	Corporal Punishment C	Role Reversal D	Power & Independence E
A	36	13. Parents who encourage their children to talk to them only end up listening to complaints.	0.24	0.31	-0.09	0.16	0.34
A	4	14. Children need to be allowed freedom to explore their world in safety.	-0.13	-0.14	0.00	0.01	-0.45
A	14	19. Parents who nurture themselves make better parents.	-0.11	0.01	-0.14	-0.19	-0.42
A	8	30. Children should be potty trained when they are ready and not before.	-0.04	0.02	-0.17	-0.21	-0.27
A	30	7. Children who receive praise will think too much of themselves.	0.17	0.19	0.08	0.17	0.36
B	26	15. Consequences are necessary for family rules to have meaning.	0.11	-0.12	0.06	-0.11	-0.44
B	4	39. Children who learn to recognize feelings in others are more successful in life.	0.05	-0.09	-0.16	0.08	-0.45
B	17	40. Parents expectations of their children should be high, but appropriate.	0.10	-0.20	-0.03	0.09	-0.45
B	35	59. Rewarding children's appropriate behavior is a good form of discipline.	0.12	-0.19	-0.13	-0.07	-0.37
B	8	74. Parents who are sensitive to their children's feelings and moods often spoil them.	0.26	0.20	0.15	0.11	0.28

Table 7
Correlations Between Forms A and B

		Form A					Form B					Forms A+B				
n = 1498	Factor	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
Form A	A	100														
	B	0.64	1.00													
	C	0.62	0.61	1.00												
	D	0.61	0.77	0.55	1.00											
	E	0.54	0.67	0.51	0.65	1.00										
Form B	A	0.84	0.69	0.63	0.67	0.61	1.00									
	B	0.57	0.83	0.56	0.66	0.69	0.64	1.00								
	C	0.61	0.60	0.92	0.54	0.52	0.62	0.56	1.00							
	D	0.66	0.77	0.58	0.87	0.62	0.70	0.66	0.56	1.00						
	E	0.42	0.56	0.44	0.54	0.80	0.50	0.61	0.45	0.49	1.00					
Forms A+B	A	0.93	0.67	0.65	0.63	0.50	0.93	0.60	0.64	0.67	0.36	1.00				
	B	0.57	0.94	0.59	0.70	0.60	0.64	0.92	0.59	0.69	0.49	0.66	1.00			
	C	0.58	0.59	0.97	0.51	0.45	0.59	0.54	0.97	0.54	0.37	0.65	0.61	1.00		
	D	0.60	0.78	0.57	0.94	0.56	0.66	0.66	0.55	0.94	0.42	0.67	0.75	0.57	1.00	
	E	0.45	0.68	0.54	0.62	0.90	0.56	0.72	0.55	0.56	0.88	0.49	0.69	0.52	0.58	1.00

Table 8
Standard Errors and Internal Reliabilities

		Constructs				
		Parental Expectations A	Empathic Awareness B	Corporal Punishment C	Role Reversal D	Power and Independence E
AAPI-2 (1999): Form A + Form B						
Standard Errors of Measure	Raw	3.35	2.82	2.14	3.00	2.05
	Sten	0.66	0.53	0.40	0.57	0.75
Internal Reliabilities	Chronbach Alpha	0.89	0.93	0.96	0.92	0.86
	Spearman Brown r	0.88	0.95	0.96	0.89	0.87
AAPI-2 (1999): Form A						
Standard Errors of Measure	Raw	2.38	2.43	2.51	2.27	1.64
	Sten	0.85	0.80	0.57	0.77	0.89
Internal Reliabilities	Chronbach Alpha					
	Spearman Brown r	0.82	0.84	0.92	0.85	0.80
AAPI-2 (1999): Form B						
Standard Errors of Measure	Raw	2.38	1.90	2.39	2.43	1.53
	Sten	0.85	0.69	0.57	0.85	0.89
Internal Reliabilities	Chronbach Alpha	0.82	0.88	0.92	0.82	0.80
	Spearman Brown r	0.81	0.90	0.93	0.80	0.82
AAPI (1984): Form A						
Standard Errors of Measure	Raw	1.48	2.09	3.40	3.29	--
	Sten	0.85	0.87	1.00	1.10	--
Internal Reliabilities	Chronbach Alpha	0.82	0.81	0.75	0.70	--

Criterion Related Validity

Inappropriate and abusive child rearing parenting practices are learned. Children and adolescents who have been abused are likely to repeat learned, abusive parenting and child rearing practices when they become parents. Although there is a sharp legal distinction made between abusive or neglecting parents and other parents, abusive and neglecting behaviors exist on a continuum. Some parents are more abusive or neglecting than others. Scores on each of the five constructs of the AAPI-2 significantly discriminate between parents who are known to be abusive or neglecting and those who are believed to be non-abusive or neglecting.

The experimental version of the AAPI was used by many groups, including parents who were known to be abusive or neglecting. The means, standard deviations, and sample sizes of the groups used to determine whether scales on the AAPI-2 discriminated between abusive/neglecting and other parents are reported in Table 9. Scores for the five constructs are the raw scores that would be found if both Form A and Form B were taken.

Table 9
Abusive/Neglecting vs. Other Parents: Sample Sizes, Means and Standard Deviations

	n	mean	s	mean	s	mean	s	mean	s	mean	s
Non-Abusive and Non-Neglecting Male	225	43.72	9.20	82.69	9.20	80.52	16.23	49.61	9.39	41.65	4.73
Non-Abusive and Non-Neglecting Female	677	49.59	9.10	88.58	7.94	89.58	15.15	56.16	8.55	43.71	4.55
Abusive or Neglecting Male	29	38.62	6.47	78.41	10.04	72.14	10.42	43.69	8.35	37.17	4.08
Abusive or Neglecting Female	58	40.95	8.51	81.66	9.88	79.45	14.40	49.43	8.62	39.72	5.25

Table 10 summarizes the results of the ANOVAs. For each of the five constructs, the mean scores for the abusive/neglecting group were significantly lower than for the other parents. Males had lower mean scores than females for each of the constructs. The lack of a significant interaction indicates that the differences between abusive/neglecting parents and others were similar for both sexes, even though males generally scored lower than females.

Table 10
Analysis of Variance for Abusive/Neglecting vs. Other Parents

	df	Factor A		Factor B		Factor C		Factor D		Factor E	
		F	p	F	p	F	p	F	p	F	p
Abuse/Neglect vs. Other	1,985	40.23	<.001	30.64	<.001	25.56	<.001	36.32	<.001	1242.84	<.001
Male vs. Female	1,985	14.30	<.001	20.33	<.001	20.01	<.001	34.26	<.001	368.02	<.001
Interaction	1,985	2.67	0.10	1.71	0.19	0.23	0.63	0.15	0.70	4.29	0.65

The data generated from the administration of the AAPI-2 to abusive and non-abusive adults, and to abused and non-abused adolescents support the diagnostic and discriminatory validity of the inventory. Diagnostic validity is defined, for purposes of the AAPI, as the ability of the inventory to assess parenting strengths and weaknesses in five areas of parent-child interaction. Discriminatory validity essentially means the ability of the AAPI to discriminate between the parenting behaviors of known child abusers and the behaviors of non-abusive adults within the general population. Also, the ability to differentiate between the parenting practices of abused and non-abused adolescents within the general population.

Diagnostic Capabilities of the AAPI with Adolescents

The diagnostic validity of the original AAPI with abused and non-abused adolescents was initially established utilizing teens enrolled in public high schools located in Utah and Idaho. The AAPI was administered to 2,541 adolescents in grades 10, 11, and 12. Raw data were converted into factor scores as a unit of standardization for interpreting respondent's scores in each of the four parenting patterns. The data presented in Table 11 displays the range of factor scores for each of the four parenting constructs. Factor scores have a mean of zero and a standard deviation of one.

Table 11
Factor Score Distribution by Construct: Non-Abused Adolescents

Construct	Min. Score	Max. Score	Range	Variance	Std. Dev.	-3	-2	-1	0	+1	+2	+3
Expectations	-3.319	2.461	5.780	0.7812377	0.8838766	.17	2	11	69	11	7	0
Empathy	-2.600	2.985	5.585	0.7818298	1.8842144	0	.9	12	74	12	1	0
Physical Punishment	-3.286	2.360	5.646	0.7634039	0.8737299	.08	1	11	75	12	.6	0
Role Reversal	-3.330	2.263	5.593	0.7324291	0.8558208	.26	1	10	77	11	.5	0

A review of the data in Table 11 indicates approximately 13% of the non-abused adolescents had factor scores -1 or more standard deviations below the mean in each of the four parenting constructs. The further the factor scores deviate below the mean, the more unlike the attitudes are in comparison to the peer group. Approximately 13% of the adolescents expressed attitudes that reflected more abusive behaviors than their peers. Conversely, factor scores +1 and +2 standard deviations above the mean indicate attitudes that exceed the mean attitudinal standard set by the group. The further the score falls above the mean, the less abusive, or the more nurturing the expressed attitude.

Discriminatory Abilities of the AAPI with Adolescents

Preliminary investigation of respondent's total raw construct scores gives indication of the discriminatory ability of the inventory. That is, within the population of adolescents responding to the inventory, total construct scores were deviating from the group mean score by 2 and 3 standard deviations above and below the mean. The intent was to determine whether adolescents who have been identified as abused would differ in their responses from adolescents who had not been identified as abused. To test the expectation that the inventory could discriminate between both abused and non-abused adolescents, the inventory was administered to 91 adolescents with known histories of abuse who were currently housed in an institution in Idaho. A control sample of adolescent scores was randomly chosen from the data generated from the non-abused adolescent population. If the cyclic concept of child abuse perpetration is accepted (the abused child will grow up to be the abusive parent), then additional construct validity could be obtained if the scores on the inventory for the abused and non-abused populations were significantly different.

Multivariate analysis of variance (MANOVA) and discriminant function analysis were utilized to determine if the scores of the two adolescent populations were significantly different. The MANOVA would indicate if the abused and non-abused populations mean scores were significantly different. The general principle of the discriminant function is that the scores of the two groups will be weighted in such a way as to maximize the difference between the means relative to the variance within the two groups (Guilford, 1956). The result would be an F ratio which would indicate the maximum difference.

Multivariate Analysis of Variance

The first procedure employed was a multivariate analysis of variance (MANOVA) using BMDPV Program (UCLA, 1977). The means (x) and standard deviations (Std. Dev) for the two groups, abused and non-abused, are set for by factor in Table 12. The results of the MANOVA are displayed in Table 13.

Table 13
Multivariate Analysis of Variance

	Sum of Squares	Degrees of Freedom	Mean Square	F	Tail Probability
Mean	56.88	1	56.88	23.07	0.00
Group	65.47	1	65.47	26.55	0.00
Sex	40.01	1	40.01	16.23	0.00
Group & Sex	3.01	1	3.01	1.22	0.270
Error	1190.92	483	2.47		

Discriminant Analysis

In addition to the MANOVA results, interest existed in the degree to which individual factor scores could be used to discriminate between abused and non-abused adolescents. To this end, BMDP7M (UCLA, 1977) Stepwise Discriminant Analysis was employed.

The means (x) and standard deviations (Std. Dev.) for the two groups are set forth in Table 14. The results of the Stepwise Discriminant Analysis are found in Table 15.

Table 14
Factor Scores by Construct: Abused and Non-Identified Abused Males

Group	%	Std. Dev.	%	Std. Dev.	%	Std. Dev.
Factor I – Construct A	-.16	.91	-.59	.83	-.28	.89
Factor II – Construct B	-.25	.85	-.81	.80	-.41	.84
Factor III – Construct C	-.28	.86	-.66	.82	-.39	.85
Factor IV – Construct D	-.24	.90	-.67	.78	-.36	.87

Review of the upper half of Table 15 indicates that F ratios for all factors are significant ($p < .001$) suggesting that any factor could be used effectively to predict membership in either of the two groups. Because the F ratio was highest for Factor II, this was the initial variable entered into the Stepwise Analysis. The results of Step #1 are found in the lower half of Table 15. The reader will note the utility in using Factor II (Construct B) by assessing the size of the F ratios of the remaining three factors in the Step 1 Analysis. Because none of these are significant, it was concluded that no gain in predictive precision would be made by adding the additional factors in further steps. Thus, it was concluded that factor scores based on performance on the inventory items associated with Construct B would be sufficient to discriminate between the target groups, abused and non-abused adolescents.

Table 15
Stepwise Discriminant Analysis

		F to Remove DF = 1,288	F Ratio*	F to Enter DF – 1,287
Step Number: 0	Factor I – Construct A Factor II – Construct B Factor III – Construct C Factor IV – Construct D		13.44 25.94 11.45 13.83	
Step Number: 1 Variable Entered: II Factor B II Factor B 25.938* * $p < .001$	Factor I – Construct A Factor III – Construct C Factor IV – Construct D		.42 .06 1.50	

Diagnostic Capabilities of the AAPI with Adults

The initial diagnostic capabilities of the AAPI with an adult population were established with groups of abusive and non-abusive parents in Wisconsin. The AAPI was administered to 24 parents charged with physical abuse by the Department of Social Services and 47 non-abusive parents with children attending a local preschool. The ages of the parents ranged from 26 to 40 years.

The data presented in Tables 16 and 17 display the range of factor scores within each parenting construct for both populations of parents: abusive and non-abusive.

Table 16
Factor Score Distribution by Construct: Non-Abusive Adults

Construct	Minimum Score	Maximum Score	Range	Variance	Std. Dev.	% of Responses				
						-2	-1	0	+1	+2
Expectations	-0.4560000	2.0379992	2.4939985	0.4730774	0.6878041	0% (0)	19% (9)	62% (29)	15% (7)	4% (2)
Empathy	-0.6900000	1.9499998	2.6399994	0.3014633	0.5490568	2% (1)	15% (7)	66% (31)	17% (8)	0% (0)
Physical Punishment	-0.9450000	1.7019997	2.6469994	0.4392842	0.6627852	2% (1)	17% (8)	66% (31)	15% (7)	0% (0)
Role Reversal	-1.0649996	2.4119997	3.4769993	0.5865737	0.7658810	4% (2)	9% (4)	70% (33)	17% (8)	0% (0)

Table 17
Factor Score Distribution by Construct: Abusive Adults

Construct	Minimum Score	Maximum Score	Range	Variance	Std. Dev.	% of Responses				
						-2	-1	0	+1	+2
Expectations	-0.9920000	1.8699999	2.8619995	0.6190224	0.7867798	0% (0)	17% (4)	71% (17)	8% (2)	4% (1)
Empathy	-1.4159994	1.4059992	2.8219986	0.5197957	0.7209686	4% (1)	8% (2)	71% (17)	17% (4)	0% (0)
Physical Punishment	-1.1919994	1.7259998	2.9179993	0.4828203	0.6948527	0% (0)	17% (4)	75% (18)	4% (1)	4% (1)
Role Reversal	-1.2639999	1.8049994	3.0689993	0.4638082	0.6810347	4% (1)	8% (2)	67% (16)	17% (4)	4% (1)

A review of Tables 16 and 17 shows a range of attitudinal differences among both parent groups. About 70% of abusive parents expressed similar attitudes towards parenting and child rearing. 12% to 17% of the attitudes expressed by abusive parents, however, fell -1 and -2 standard deviations below the group mean. The further a score falls below the mean, the greater the likelihood for abuse. Additionally, between 8% and 21% of the attitudes expressed by abusive parents fell +1 and +2 standard deviations above the mean, indicating more appropriate, less abusive attitudes than the standards set by the majority of the abusive parents.

Approximately 66% of the non-abusive parents expressed similar attitudes towards parenting and child rearing. 13% to 19% of the scores generated from non-abusive parents, however, fell -1 and -2 standard deviations for their peer group indicating acceptance of more abusive attitudes. 15% to 19% of the scores fell +1 and +2 standard deviations above the mean of the group indicating acceptance of more appropriate nurturing behaviors.

A review of the scores generated from the administration of the AAPI to abusive and non-abusive parents show a range of attitudinal similarities and differences. Although the vast majority of the

attitudes expressed within both groups showed common beliefs about parenting, 12% to 19% of abusive and non-abusive parents expressed attitudes dissimilar to their peers. This variability of scores is expected and sought since parents usually express varying degrees of acceptance or non-acceptance of parenting practices. The variability of scores supports the diagnostic validity of the inventory to assess differences and degrees of opinions regarding parenting and child rearing among both abusive and non-abusive parents.

Discriminatory Abilities of the AAPI with Adults

Scores generated from the administration of the AAPI to abusive and non-abusive parents in Wisconsin were utilized in determining the initial discriminatory capability of the inventory with adults. Scores on the AAPI of abusive parents were compared to the scores of non-abusive parents to determine differences of parenting attitudes.

The data in Table 18 list the mean factor scores of both groups per parenting construct. The data in Table 19 display the results of the analysis of variance (ANOVA) utilizing the BMDP2V (UCLA, 1977).

Table 18
Mean Factor Scores by Construct: Abusive and Non-Abusive Adults

Group	Abusive Adults		Non-Abusive Adults	
	%	Std. Dev	%	Std. Dev.
Construct A	0.04071	0.78678	0.47336	0.68781
Construct B	0.05200	0.720697	0.88951	0.54906
Construct C	-0.01071	0.69485	0.44840	0.66279
Construct D	0.30987	0.68104	0.92362	0.76588

Table 19
Analysis of Variance: Abusive and Non-Abusive Adults

	Sum of Squares	Degrees of Freedom	Mean Squares	F	Tail Probability
Construct A					
Mean	4.19851	1	4.19851	8.05	0.00
Error	35.99903	69	0.52173		
Construct B					
Mean	14.08319	1	14.08319	37.63	0.00
Error	25.82266	69	0.37424		
Construct C					
Mean	3.04366	1	3.04366	6.71	0.01
Error	31.31203	69	0.45380		
Construct D					
Mean	24.17259	1	24.17259	44.30	0.00
Error	37.65009	69	0.354565		

The data generated from the ANOVA presented in Table 19 indicate significant differences exist between the mean factor scores of abusive and non-abusive parents in each of the four parenting constructs. That is, the parenting and child rearing attitudes of abusive parents are significantly more abusive than attitudes of non-abusive parents.

Additional Diagnostic and Discriminatory Validity of the AAPI

The Adult-Adolescent Parenting Inventory (AAPI)[®] is designed to assist professionals and paraprofessionals in assessing the parenting and child rearing attitudes of adolescent and adult populations. Developed from the known parenting and child rearing practices of abusive and neglecting parents, data generated from the administration of the AAPI indicate degrees of agreement and disagreement with maladaptive parenting behaviors. As such, responses on the AAPI provide an index of risk (high, medium, low) for practicing abusive and neglecting parenting and child rearing behaviors.

The AAPI is useful in assessing individual strengths and weaknesses involved in child rearing. The standard that is set is derived from the inappropriate attitudes and practices of parents who have abused and neglected their children. Research has found that such standards cut across all cultures and ethnic boundaries. Years of research with the AAPI in numerous studies has identified a number of specific uses.

1. ***Assessing the parenting and child rearing attitudes of adolescents and young adults prior to parenthood.*** Adolescents and young adults have usually developed fairly well-defined attitudes towards raising and parenting children by the time they reach and graduate from high school. As society is continuing to recognize its responsibility for providing parenting education, the AAPI provides school personnel with useful information in recognizing students with specific learning needs in appropriate parenting education, and sensitivity to cultural differences that exist among pre-parent populations. As such, the AAPI can be utilized as a primary preventive measure of child abuse and neglect. Data generated from the initial research with the AAPI supports the use of the inventory as an assessment tool.

Additional research utilizing the AAPI to assess the parenting attitudes of adolescents was conducted by Bavolek (1983). The AAPI was administered to 2,415 Black high school students enrolled in six schools located in the inner City of Baltimore. The purpose of the study was to assess the differences in parenting attitudes among Black male and female teens. Data gathered from the administration of the inventory found approximately 10% to 12% of the adolescents responding to the inventory fell 1 to 4 standard deviations from the mean in each of the four assessed parenting patterns. Approximately 10% of the scores ranged from +1 to +3 standard deviations above the mean. Scores generated from adolescents incarcerated for various juvenile offenses indicated the greatest risk for abuse while adolescents enrolled in the local high school for pregnant teens indicate more positive, less abusive attitudes. Males, regardless of background, expressed significantly ($p < .001$) more abusive attitudes than females regardless of background in each of the four parenting constructs. The data further indicated that the younger the adolescent the more abusive their expressed attitudes toward parenting and child rearing.

Meza-Lehman (1983) administered the AAPI to 200 Mexican-American and Mexican born adolescents in Chicago, Illinois. The purpose of the study was threefold: 1) to assess the parenting attitudes of Mexican-American and Mexican born adolescents, 2) to assess parenting differences between males and females, and 3) to assess differences between self-responses and subject-perceived maternal and paternal responses. The AAPI was administered to 132 males and 69 females, students at Monica High School in the Chicago area. Results of her study indicated significant differences were found between males and females in all four constructs. Males were significantly more abusive in Empathy and Corporal Punishment ($p < .001$) and in Expectations of Children and Role-Reversal ($p < .05$).

Significant differences were found in self-scores of females and the scores relating to their perceptions of their fathers. These differences were found in Corporal Punishment ($P < .001$) and Expectations of Children ($P < .001$). Significant differences ($P < .001$) were also found in female self-scores and perceptions of their mothers' scores in Corporal Punishment and Role Reversal. Males expressed significant differences ($P < .02$) from their mothers and fathers in Expectations of Children and Corporal Punishment.

Murphy (1980) in her research, sought to study two research questions: 1) is it possible to identify college students with attitudes that might lead to inadequate parenting; and 2) are students with these attitudes related to any particular set of demographic characteristics? The demographic factors include age, sex, parenting status, religious preference, academic major, ethnic background and socio-economic background.

The Adult-Adolescent Parenting Inventory was sent to all 2,000 of the freshmen and senior students at the University of Denver. The student scores were compiled to give a total score of 32 to 150 (by giving a numerical value of 1 to all Strongly Agree answers and a value of 5 to all Strongly Disagree answers). A panel of 12 experts was asked to set a cut-off score below which intervention would be necessary. That scores was 91; and 26 of the 761 fell below that score. Student scores were also analyzed in the various demographic items within each construct.

The results of the study identified a range of parenting attitudes from "appropriate" to "high risk for abuse." Overall, freshmen attitudes were significantly more abusive ($p < .02$) than the parenting attitudes of seniors. When sex was analyzed, males expressed significantly more abusive attitudes than females. The findings are consistent with the findings of previously mentioned studies which indicate males tend to express attitudes towards parenting and child rearing that are consistently more abusive than the parenting attitudes of females, regardless of age and race.

In numerous studies, age appears to be a contributing factor in the assessing of the risk levels of abuse in pre-parent and parent populations. Bavolek (1980) found non-abused teenagers expressed significantly ($p < .01$) more abusive parenting attitudes in each of the four parenting constructs of the AAPI than non-abusing parents. Furthermore, teenagers with recorded histories of abuse by their parents expressed significantly more abusive attitudes towards parenting and child rearing than older adolescent mothers. Age and corresponding risk levels of abuse are also supported by the work of Goldberg and Hochmuth (1987), who studied the parenting attitudes of pregnant adolescents in the Milwaukee, Wisconsin area, found that pregnant adolescents expressed significantly ($p < .05$) more abusive attitudes on the AAPI than the adult non-abusive norm group of the inventory.

The findings of research conducted with the AAPI continually support the need for teaching parenting education to pre-parent populations as the major effort for preventing the maltreatment of children.

2. ***Assessing the parenting attitudes of parent populations for treatment and prevention purposes.*** A second practical use of the AAPI is to study the impact of programs designed to treat and prevent child abuse and neglect. Many agencies teaching parenting education to parent populations as after-the-fact treatment and as before the fact prevention often lack an objective device that effectively measures the impact of their curricula in promoting positive parenting practices. Since the goal of assessment is to offer some education to reduce the assessed deficiencies, there exists an interdependent relationship between what is assessed and what is taught. The four parenting constructs of abusive parents which form the theoretical basis of the AAPI also serve as the basis of intervention.

In the spring of 1981, a two-year project was funded by the National Institute of Mental Health designed to develop and validate a treatment and prevention program based in the four known patterns of abusive parenting developed from the research of the Adult-Adolescent Parenting Inventory. The treatment program was designed for abusive parents and their abused children to meet for 2 ½ hours, one day a week, for 15 consecutive weeks. With the exception of a 20-minute snack activity, both parents and children 4 to 12 years were involved in separate programs meeting concurrently.

Pre and post test data gathered from the administration of the Adult-Adolescent Parenting Inventory (AAPI) indicated a significant ($p < .05$) positive increase in the parenting and child rearing attitudes of abusive parents (Bavolek & Comstock, 1984). These changes in attitudes reflected more appropriate developmental expectations of children; an increased empathic awareness of children's needs; a decreased belief in the use of corporal punishment; and an increase in appropriate parent-child role distinction.

Data generated from the AAPI from abusive parents one year after completing the program indicated maintenance of empathic attitudes towards children's needs, and a clear differentiation of appropriate parent-child roles. Attitudes regarding the use of corporal punishment and inappropriate developmental expectations of children showed slight increases (Bavolek & Comstock 1983).

Bavolek and Bavolek (1985) field tested and validated a comparable program for parents and their children birth to 5 years of age. Families enrolled in Head Start programs in a seven-county area in Wisconsin participated in an innovative program designed to increase their parenting and nurturing capabilities and reduce the risk for child maltreatment. Like the program for parents and their children 4 to 12 years of age, the goal of the program for parents and children birth to five years of age was to reduce the risk of abuse by building nurturing skills. The four parenting constructs of the AAPI once again served as the basis for developing the goals, objectives, and activities of the program. Parents and their children birth to five years of age enrolled in both home and center-based programs. Data generated from the assessment indicated a total of 260 adults were pretested in home-based and center-based programs. Sixty-six percent (N = 171) participated in the post test assessment. Utilizing the AAPI as one unit of measurement, Bavolek & Bavolek (1986) found parents expressed a significant increase ($p < .05$) in their ability to be empathically aware of their children's needs and a concomitant significant decrease ($p < .05$) in their beliefs regarding the value of corporal punishment as a means of punishing behavior and in reversing parent-child role responsibilities. The data also showed that the parents expressed significant increases ($p < .05$) in their appropriate expectations of children and in their knowledge of appropriate alternatives to corporal punishment.

Both programs, the Nurturing Program for Parents and Children 4 to 12 Years[®] and the Nurturing Program for Parents and Children Birth to Five Years[®] are being utilized throughout the country as effective intervention and prevention programs.

3. **Screening potential foster parents, child care staff, and day care workers.** Current practices by the majority of state and private organizations in the selection of foster parents and other paraprofessionals, to work with abused children seldom include an assessment of their parenting and child rearing attitudes. The expectation of these paraprofessionals, however, is that they will establish a nurturing and therapeutic relationship to reduce the impact of the maltreatment on the child's overall development. Research (Bavolek 1980) in assessing the parenting attitudes of foster parents in Wisconsin underscores the importance for screening prospective foster parents based on their expressed parenting and child-rearing attitudes. The purpose of the study was to assess the expressed similarities and differences in the parenting and child rearing attitudes of abusive, non-abusive, and foster parents in Wisconsin. It was felt that such assessment could lead to: 1) the identification of foster parents whose attitudes towards parenting and child rearing are high risk for physical abuse; and 2) the establishment of a high-risk standard of parenting attitudes which could be utilized for screening prospective foster parents. Utilizing the Adult-Adolescent Parenting Inventory, the results of the study showed variability in scores of +2 to 4 standard deviations among foster parents in all four parenting constructs - Expectations of Children, Empathy, Physical Punishment, and Role Reversal. Intergroup comparisons indicated the attitudes expressed by foster parents were significantly more abusive ($p < .001$) in all four constructs than the expressed attitudes of non-abusive parents. When compared to abusive parents, foster parents were significantly ($p < .001$) more positive in their empathy towards children's needs, and less likely to reverse parent-child family roles. However, no significant differences were found between abusive parents and foster parents in their inappropriate expectations of children and in the utilization of physical punishment as a means of discipline.

Although additional research needs to be conducted with a much broader foster parent population, the preliminary research appears to support the need to assess parenting attitudes for screening purposes among prospective foster parents.

4. **Examining the factors associated with abusive parenting that increase our knowledge of child maltreatment.** A fourth practical use of the inventory is for research purposes to broaden the knowledge base of factors contributing to the treatment and prevention of child abuse and neglect. In a research study linking child television

program watching with family dysfunction, Price (1985) found a relationship between children's viewing of television programs and parents' responses to the AAPI. Children whose parents tended to express abusive parenting attitudes viewed more violent cartoons; more violent programs in general; more super-hero programs; and more "loner-type" programs. Price notes that the findings were especially consistent for male children.

Gordon and Gordon (1986) evaluated the relationship between the Adult-Adolescent Parenting Inventory and the Minnesota Multiphasic Personality Inventories (MMPI) "At-Risk" Scale and whether these scales accurately predict potential child abuse and response to psychotherapy and assess parenting skills. Twenty-three clients were involved in counseling and attended from one to twenty-one counseling sessions. The subject included correctional clients and/or their affected family members. During the course of psychotherapy, each subject completed the AAPI and the "At-Risk" Scale of the MMPA. Review of the data indicates that individuals classified at risk for potential child abuse on the "At-Risk" Scale of the MMPI obtained poorer scores on the AAPI.

Minor, Karr and Jain (1983) utilized the AAPI and MMPI to assess the prevalence of abusive parenting attitudes in a male prison population. The purpose of their study was to examine the relationship between parenting attitudes and personality characteristics. After randomly selecting 49 valid Minnesota Multiphasic Personality Inventories (MMPI), subjects were administered the Adult-Adolescent Parenting Inventory. Inmates' AAPI data were compared with the normative AAPI data. Multiple regression analyses were used to predict subjects' AAPI responses from their MMPA protocols. Results revealed that inmates displayed significantly more abusive attitudes than the normative group on all AAPI constructs except Physical Punishment, for which the reverse result was obtained. The type of offense was the only demographic variable which revealed significant effects...psychopathological factors which represented the best combinations of significant predictor variables for each AAPI construct were identified. Although sizable amounts of variance were explained by the combinations for the Expectations and Empathy constructs respectively, the findings suggested that factors other than those related to personality characteristics contributed strongly to the variation in prisoners' abusive attitudes.

Green and Calder (1978) examined the responses of 150 adolescents attending high school in Utah on the AAPI with responses to the Eysenck Personality Questionnaire. They found a significant ($p < .05$) negative relationship between responses on the Psychoticism sub-scale of the Eysenck and the responses of the AAPI. Also, no significant relationships were found between responses on the AAPI and the sub-scales of Neuroticism, Extraversion, or Lie.

Summary and References

Assessing the parenting and child rearing attitudes of parent and pre-parent populations is clearly a major step towards the employment of effective empirically-based child abuse treatment and prevention strategies. However, data gathered from the administration of the Adult-Adolescent Parenting Inventory (AAPI-2)[®], like any self-report inventory, need to be interpreted cautiously.

As on any self-report measure, respondents may provide socially acceptable answers rather than respond in a truthful manner. This is particularly true when contingencies and consequences are directly related to a person's "score" on the inventory, by minimizing the importance of the "score" and by accentuating the desire to help replace deficient parenting attitudes with more appropriate ones, more truthful responses are likely to be gathered.

Any score on any inventory should never serve as the sole determiner of some action to be taken against or for any respondent. This is as true of the AAPI as it is for the AAPI-2. A battery of assessment strategies designed to gather information on several aspects of a person's functioning should always be considered. Despite the test's validity and reliability, the information generated from one inventory is not nearly as valid as information gathered from several sources. When information from several sources is available, decisions regarding intervention can be made with a higher degree of accuracy.

The AAPI-2 is not a predictor of future abusive parenting beliefs but rather an assessment of current parenting beliefs and practices. At their best, responses to the AAPI-2 provide an index of how a particular person would parent a child give current conditions. As time passes, individuals change and so do the conditions under which one would parent. Clinicians should constantly be aware of changing environmental conditions and how these conditions impact positively or negatively on parenting patterns. And finally, responses to the AAPI-2 provide the clinician with specific parenting strengths and weaknesses of a client. Researchers need to be sensitive to the obligation we all have to treat and prevent maltreatment in children. Used in conjunction with effective family-based parenting education programs, responses on the AAPI-2 can help families learn to live in more harmonious nurturing ways.

Updated research can be found on the web by logging onto www.nurturingparenting.com in Research & Validation.

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He received his doctorate at Utah State University in 1978 and completed a post-doctoral internship at the Kempe Center for the Prevention and Treatment of Child Abuse and Neglect in Denver, Colorado. He has held university faculty positions at the University of Wisconsin - Eau Claire, and the University of Utah. Dr. Bavolek has received numerous international, national, state and local awards for his work, including induction in 1989 into the Royal Guild of the International Social Work Round Table in Vienna, Austria, and selection in 1983 by Phi Delta Kappa as one of 75 young educators in the country who represent the best in educational leadership, research and services. In addition, he was selected by Oxford Who's Who in 1993 as a member of the elite registry of extraordinary professionals and in 1998 as a member of the elite registry of extraordinary CEO's. Dr. Bavolek was also Mental Health Professional of the Year of Northern Wisconsin in 1985 and Child Advocate of the Year in Utah in 1991. In 1980, he was recognized by the Military Order of the Purple Heart for outstanding research and services to the handicapped.

Dr. Bavolek has conducted thousands of workshops, has appeared on radio and television talk show programs, and has published numerous books, articles, programs and newsletters. He is the principal author of the Nurturing Parenting Programs[®], programs to treat and prevent child abuse and neglect, and the Adult-Adolescent Parenting Inventory (AAPI-2), an inventory designed to assess high risk parenting attitudes. Dr. Bavolek is President of Family Development Resources, Inc. and Executive Director of the Family Nurturing Centers, International.

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First Edition
ISBN # 1-57202-109-8

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Published by: Family Development Resources, Inc.
Asheville, North Carolina; Park City, Utah
Phone: 1-800-688-5822 MST (International Calls 435-649-5822)
Email: fdr@nurturingparenting.com
www.aapionline.com