THE INVULNERABLE CHILD

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The concept of the invulnerable child is new to the literature of psychology. The invulnerable child is one who in a highly-stressed environment seems to be highly resilient, to survive, and even thrive in situations where most children develop mild to severe problems. The dynamics behind the concept are still poorly defined; however, the phenomenon is widely acknowledged and is becoming well-documented (Burke, 1978; Anthony, 1974; Garmezy, 1976). The identification of these children and their apparent invulnerability has emerged in several studies of children with divorced or psychotic parents, from environments with a high deliquency rate, and from families under high levels of strain. These serendipitous findings have come out of "risk" research which has attempted to identify factors which could damage children's lives, either physically or emotionally.

The concept is an exciting one for nurses involved with children and their families because it offers an entirely new direction for assessment and intervention. In other word, if it is possible to help children develop resilience in the face of a troubled environment the rewards may be large. The more usual approach which attempts to reduce the strain is often a futile exercise.

Nursing, despite efforts to focus on the well child and the well family, has almost exclusively dealt with children and families with problems. As a result, it is likely that we have developed an inflated view of the deleterious effects of a stressful environment on children. It can be concluded from studies of children at risk that most do better than expected. They may not be the best adjusted children in the world, but they turn out more or less fine. Beyond this group there is the small but significant group of invulnerable children who not only do fine — they flourish.

One characteristic of the children under discussion which singles them out from their siblings is that the invulnerable child is frequently the only such child in a family (Anthony, 1974; Burke, 1978). According to Mary Akerley (1975) there are three essential ingredients to invulnerability — genetic factors, the presence of stress, and its recognition. Interestingly, the existence of stress appears to

be a prerequisite to the development of invulnerability. Finally, the recognition, understanding, and acceptance of the stress is apparently a crucial component of the child's ability to prosper despite adverse circumstances.

This essential exposure to stress first became evident to me in my early practice and research (Ogden, 1969) with children who had sustained minor injuries. I studied these children's reactions in the emergency room. The children who responded most positively were those who had already experienced and mastered stressful situations, not necessarily of the same variety. They had a fully developed coping style for stressful situations. This is paralleled by similar finding in families with handicapped children (Burke, 1978). Those families who have a regular system for adapting to the changes and stresses of family life tend to have the children with the most advanced developmental status for their ages.

Other characteristics of invulnerable children may include innate intelligence, problem-solving ability, persistence, hidden family strengths, and a close relationship with an adult outside of the family. But as Dr. Garmezy (1976) cautions, we really cannot yet distinguish cause from effect in this matter since we are dealing primarily with speculation, usually in retrospect.

At present we really do not know why one child breaks down and another does not. We are even further from figuring out how to prevent children's problems from occurring. One frequently overlooked research strategy toward finding answers to these questions is to examine those children who do not break down under stressful circumstances.

Finally, the possibility that invulnerable children are not really so invulnerable as they appear to be must be considered. They may be paying a price that we do not fully understand and which may become apparent only in later years.

INVULNERABLE CHILDREN IN HIGHLY STRAINED FAMILIES

Like many other maternal and child nurse researchers I have been engaged in the examination of children with problems and associated risk factors rather than those children who escape or appear to cope well with stress.

The particular type of family at risk I have studied is that of the

single parent with a handicapped child.¹ Indepth interviews with 60 mothers (15 each in four categories: single parents with a handicapped child, single parents with all normal children, mothers in a two-parent family with all normal children, and those with a handicapped child) were conducted. Overall, higher levels of strain within the family unit were associated with lower developmental progress in the normal children aged 4-10 years (r=0.41, p=0.05; Burke, 1978).

Surprisingly, in opposition to the overall trend was a small group of normal children who were thriving despite their highly-strained family environment and who exhibited very high developmental quotients.² These children have been tentatively called invulnerable. Eight such children were studied.

For the purposes of the post hoc analysis, the invulnerable children were defined as those who while living in moderately high familial strain had very high developmental quotients and those in extremely highly strained families who still had above average developmental quotients. The selection of these particular eight children was done by visualization of "outliers" as represented by "o" in Figure 1. The outliers were identified after consultations with a statistician. This non-statistical approach seemed most appropriate because of the post hoc nature of the study and the lack of a conceptual definition of invulnerability in the literature.

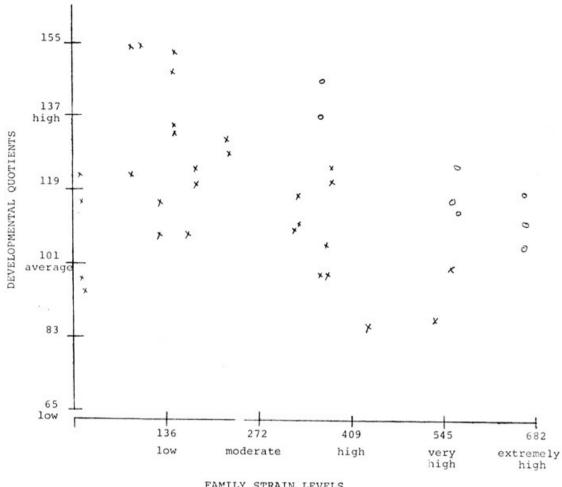
The data was collected in 1977-78 in Toronto and was demographically representative of Canada with regard to the ages of the parents, family incomes, parental educational levels, and number of children. All children in each family between the ages of 4-10 years were assessed using the Developmental Profile (Alpern and Boll, 1973). A number of assessment strategies were used to determine the relative amount of stress (or more accurately, strain)³ in the family. One of the best predictors of the children's developmental status was the

¹For the purpose of this study a handicapped child was a child who had a physical and in some cases a mental handicap which required nursing or medical intervention at least once in the previous year. The children had cerebral palsy, myelo-meningocele, muscular dystrophy, cystic fibrosis, missing limbs, etc. This research was made possible by the generous assistance of the Nursing Service Division of the Ontario Society for Crippled Children and a grant from the Canada Council.

²Developmental Quotients were derived from Alpern and Boll's (1972) Developmental Profile. The Profile is a standardized maternal questionnaire which covers the child's social, academic, physical, language and self-help skills.

³Stress is the factor that causes strain but, in common usage, the words become interchangeable.

Figure 1 Normal Children's Development Quotients and Family Strain Levels



FAMILY STRAIN LEVELS

vulnerable children

invulnerable children

adaptation scale of the Familial Systems Strain Scales which was developed for the study. This scale or the Family Adaptation System Test (FAST) is given in Appendix A.

In an examination of the nature of the familial strain to which the invulnerable children were exposed, there is some support for Garmezy's hypothesis of hidden familial strengths. On the average, the invulnerable children's families had, by definition, very high familial strain levels (more than one standard deviation above the total group). Yet the nature of their strain, however, seems much different from the norm. There was high strain stemming from problems with "the basics" that is, food, shelter, clothing, and definition of what the family is, what it does, and who it includes. However, the

families with invulnerable children had relatively lower strain from problems related to role expectations and also had strategies for dealing with changes and unusual events. These latter areas with relatively lower strain levels are probably more subtle and difficult to assess without a great deal of previous experience with families or the use of a measure such as the FAST.

Another factor which may be pertinent is the relatively small size of the families with invulnerable children. These children on the average come from smaller families than the rest of the sample. The average number of children was 2.27. One family was a notable exception with five children. Two families had only one child and the rest had two children. This finding would seem to support the notion that adult guidance is a key factor. The work of Zajonc (1978) would lead to the speculation that children with fewer siblings tend to have higher IQ's. Unless the older siblings are adolescents or adults the common assumption that the older children help the younger does not appear to be valid as far as intelligence is concerned. The smaller family size may give children an intellectual edge and thus make them less vulnerable. With respect to Anthony's (1974) conclusion that invulnerable children are frequently the only such children in a family, the data are inconclusive since two of the eight children were in the same family. The siblings in the remaining families had developmental quotients ranging from above average to low.

All the families studied lived in single-family houses or apartments. There were no extended family members present. This contradicts a frequent hypothesis that the nuclear family has innate weaknesses for which the extended family compensates. Also, none of the families with invulnerable children were in public housing.

Whether or not the invulnerable child was in a single-parent family does not appear to have been a relevant factor, but, the fact that all of the single mothers reported that it was likely that they would remarry does. The transitional single-parent families had invulnerable children but the permanently single-parent families did not.

Just as interesting as the differences are the similarities between the families with and without invulnerable children. Areas of similarity which would not appear to be factors in invulnerability are: parental age and education, religion and income. It is theoretically significant that these basic demographic variables which correlate with so much of child behavior are not likely to be factors in the

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may provide an example fostering the child's ability to cope. The smaller family size may result in somewhat more intelligent children who are thus better able to deal with their difficult and stressful environment. Lastly, one cannot rule out genetic makeup as a decisive factor.

SPECULATIONS ON THE NATURE OF THE RELATION-SHIP BETWEEN FAMILIAL STRAIN, DEVELOPMENT AND INVULNERABILITY

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IMPLICATIONS FOR PRACTICE AND RESEARCH

Although the so called invulnerable child is as yet only beginning to be understood, there are some clear implications for research and practice. When we are assessing and intervening with families who have a child with a problem, we should examine the other siblings closely. There may be an invulnerable child amongst them and clues as to how to deal with the child with the identified problem may emerge from a study of the invulnerable child's coping style. What is different between the vulnerable and invulnerable siblings' environment? Has the vulnerable child been protected from stressors? When intervening in families under strain, we should consider allowing as much of the impact of that strain as they can tolerate to fall on the children. Learning how to work a problem through with adult help would appear to stand them in good stead for later crises.

When assessing families, we should consider the use of assessment measures such as the Family Adaptation Systems Test (FAST). This would enable us to identify areas for intervention if there are large discrepancies between actual and expected family roles and adaptation strategies.

In our research we must examine more than just the children with problems. This goes beyond the use of control groups, because invulnerable children become lost in these control groups, and could skew the results. I suggest at least three groups, those with a problem, those without, and those who should have a problem according to the conceptual framework of the study but do not. Theory building should be enhanced by the careful examination of results from the latter, invulnerable group.

Where conceptual frameworks are clear, the additional expense and effort of longitudinal studies are clearly indicated. We are probably dealing with very subtle long-term effects which are not easily detectable in retrospective studies.

CONCLUSIONS

The nature of the invulnerable child is still largely to be discovered. If the factors that contribute to invulnerability can be further identified and a strategy developed which will enable nurses in our practice and research to apply the findings to more troubled children, we are headed in an exciting and hopeful new direction.

REFERENCES

Akerley, Mary S. The invulnerable parent. Journal of Autism and Childhood Schizophrenia, 1975, 5, 275-281.

Alpern, G. D. and Boll, T. J. Developmental profile manual. Indianapolis: Psychological Development Publications, 1972.

Anthony, E. James. The syndrome of the psychologically invulnerable child. In E. S. Anthony and C. Kaupernich (Eds.), The child in his family: Children at psychiatric risk: III, New York: John Wiley & Sons, 1974.

Burke, Sharon Ogden. Familial strain and the development of normal and handicabbed children in sinale and two barent families. Doctoral disserta-

handicapped children in single and two parent families. Doctoral dissertation, University of Toronto, 1978.

Garmezy, Norman. Children at risk: The search for antecedents of schizo-

phrenia: II Ongoing research problems, issues and interventions. Schizo-phrenia Bulletin, 1974, 9, 55-125.

Garmezy, Norman. Vulnerable and invulnerable ihildren: Theory research and intervention. Catalogue of Selected Documents in Psychology, 1976, 6,

Murphy, Lois Barclay. The widening world of childhood paths toward mastery. New York: Basic Books Inc., 1962.

Ogden, S. L. The injured child and the nurse. Relationships between observable coping behavior, verbal behavior, and other selected factors. Unpublished Masters Thesis, University of Washington, 1969.
Sullivan, J.; Coroles, Y. and Mernfield, P. The UTAH stress scales. University of Utah, in preparation, 1976.

Zajone, R. B. Family configuration and intelligence: Variations in scholastic

Zajonc, R. B. Family configuration and intelligence: Variations in scholastic scores parallel trends in family size and spacing of children. Science, 1976, 192, 227-236.

RESUME L'enfant invulnérable

Une analyse postérieure des données relatives à des enfants provenant de 60 familles a permis de constater que huit de ces enfants devaient être considérés comme invulnérables; il s'agit d'enfants vivant dans des milieux où ils sont soumis à de hauts niveaux de stress. Ces enfants avaient malgré tout atteint des niveaux de développement relativement élevés. Toutefois, dans leurs familles, les stratégies régissant l'adaptation au changement et aux situations imprévues étaient claires. Ce facteur essentiel a été mesuré au moyen du Family Adaptation System Test (FAST), dont l'administration et l'interprétation sont décrites dans les instructions, qui sont reproduites. A partir de la bibliographie et des résultats de l'étude, les enfants invulnérables font l'objet d'une caractérisation, plusieurs hypothèses sont examinées et certaines observations pertinentes à la pratique et à la recherche sont formulées.

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