ADOLESCENT SIBLING BEREAVEMENT: FAMILY FACTORS ASSOCIATED WITH ADJUSTMENT TO LOSS

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that adolescent sibling bereavement has unique implications which warrant future attention. Furthermore, the role the family plays in adolescents' bereavement process appears to be significant. This study was designed to assess family factors which are associated to adolescent sibling bereavement responses.

APPENDIX B

METHODOLOGY

Methodology

This study used the Hogan Sibling Inventory of Bereavement (HSIB) to examine the nature, intensity, and duration of the bereavement process of adolescents who had experienced the death of a sibling. The reliability and validity of the HSIB was also assessed. In addition, family cohesion and adaptability was examined using the Family Adaptability and Cohesion Evaluation Scales (FACES) III in order to determine the extent to which family cohesion and adaptability influence adolescent sibling bereavement responses.

Selection of Subjects

Subjects were acquired through The Compassionate Friends, a national self-help bereavement support group for families who have experienced the death of a child. Three Oklahoma Compassionate Friends chapter leaders agreed to carry in their monthly newsletter an overview of the study and a request for volunteers to participate in the study. Also included in each newsletter was a reply card requesting the name and address of families interested in participating in the study. Families who had a surviving child between the ages of 13 and 18 and who had experienced the death within the previous five years were eligible for the study.

A total of 875 reply cards were distributed in newsletters. The 20 families who returned the reply card then received in the mail a letter of instructions, the

questionnaires, a stamped envelope addressed to the researcher, and a card of consent. Instructions requested that the consent card be signed and returned separately to maintain confidentiality.

After sending the packet to participants, the reply cards with names and addresses were filed separately from the data. Identification numbers were placed on each form to keep family members' materials grouped together. Six families completed and returned the questionnaires. Letters were distributed to all 20 families who had returned a reply card. The letters thanked all who already returned questionnaires and encouraged others to complete and return their questionnaires.

In attempt to acquire more subjects, the Compassionate Friends chapter leaders were again contacted and asked to encourage members who qualified for the study to complete a reply card. A grief counselor and a Compassionate Friends sibling group leader were also contacted and asked to encourage qualified families to participate. One hundred and twenty-five additional reply cards were distributed to the group leaders and the grief counselor.

A phone call was made to the coordinator of the Compassionate Friends National Conference. The coordinator granted permission for the researcher to have copies of an overview of the study and reply cards distributed at the conference. One hundred reply cards were distributed at the conference.

Forty reply cards were completed and returned to the person distributing cards at the conference. The cards were then mailed in one package to the researcher. All chapter leaders and persons who returned a completed reply card were mailed the results of the study.

The unit of analysis for the study was the adolescent family. In order to qualify as a unit of analysis, families were to have completed a Family Background Form, at least one HSIB, and at least one FACES questionnaire. The sample for the study consisted of 15 families who returned the Family Background Form (21 were returned, but for six of the families the surviving siblings were not adolescents), 17 subjects who completed the HSIB, and 32 subjects who completed the FACES questionnaire.

The mean age of participating adolescents was 17.4 years (SD=1.85), ranging from 15 to 21 years. The average age of subjects at the time of death was 14.2 years (SD=2.54), ranging from 10 to 18 years. Originally, the intent was that only siblings between the ages of 13 and 18 years would complete the HSIB. However, due to the low number of respondents, the age range was expanded to between 10 and 20 years. Respondents qualified as adolescent subjects if they were within this age range either at the time of the death or at the time of completing the questionnaire.

Gender was represented by 67% females and 33% males. The mean time since death was 3.2 years (SD=2.42) with a

range from .32 to 8.32 years. All of the participants were Caucasian. The population of the area in which the family lived was reported as follows: small town with a population under 2500 (15.4%), large town with a population between 2500 and 25,000 (38.5%), small city with a population between 25,000 and 100,000 (30.8%), and large city with a population greater than 100,000 (7.7%).

The family's current religious background was as follows: Baptist (23.1%), Catholic (15.4%), Christian (7.7%), Methodist (15.4%), other Protestant (15.4%), and other (7.7%). The mean number of surviving siblings was 2.0 (SD=.95), with a range of 1 to 3 children.

Responses indicated parental marital status prior to the death as married (69.2%), divorced and single (15.4%), divorced and remarried (7.7%), one parent divorced and single and the other parent divorced and remarried (7.7%). Parents' current marital status was indicated to be married (61.5%), separated (7.7%), divorced and single (15.4%), divorced and remarried (7.7%), one parent divorced and single and the other parent divorced and remarried (7.7%). The mean number of years the parents were married was 20.58 years, with a range from 10 to 33 years.

Of those sampled, the mothers' and fathers' highest level of education was (30.8%/7.7%) high school, (7.7%/23.1%) intermediate or preuniversity, (38.5%/7.7%) some college, (7.7%/38.5%) graduate of four year college, (15.4%/15.4%) graduate or professional education.

The range of ages of the sibling when s/he died was 6 years to 26 years, with a mean age of 17 years (SD=5.64). The gender of the deceased sibling was represented by 69.2% males and 30.8% females. Responses indicated the following causes of death: automobile accident (30.8%), murder (7.7%), homicide (15.4%), suicide (23.1%), cancer (7.7%), and other (15.4%). Prior warning that the death would occur ranged from no warning (92.3%) to less than a year (7.7%).

Instrumentation

All persons who completed a reply card indicating their interest in participating in the study were mailed a packet of questionnaires. Each family received a Family Demographics form to assess information about the circumstances of the death of the child as well as family demographic information. Two standardized instruments were also included in the packet. First, the Hogan Sibling Inventory of Bereavement (HSIB, Hogan, 1988) is a 47-item self-report questionnaire designed to measure the sibling bereavement process. Items assess adolescent grief and personal growth. The instrument uses a stem, "Since my brother or sister died:", to preface 47 sentence endings. A 5-point likert format is used, with the choices: "Almost always true" (1), "Pretty often true" (2), "True about half of the time" (3), "Occasionally true" (4), and "Hardly ever true" (5). A few changes were made in the original HSIB for the present study. Items #43 and #47 were omitted; item #13

was reverse coded and item #39 was changed from originally being reverse coded to not being reverse coded. Using the present data, the internal consistency reliability for the total HSIB scale and the subscales, adolescent grief and personal growth, were .87, .90, and .88, respectively (n=14). The Cronbach's alphas for adolescent grief and personal growth as reported by the author of the HSIB were .95 and .90, respectively (n=158) (Hogan, 1992).

The second instrument used was the Family Adaptability and Cohesion Evaluation Scales III (FACES III, Olson, Portner, & Lavee, 1985). This tool measures family adaptability and family cohesion. The questionnaire consists of 20 items and is scored using a 5-point likert-type scale. Scale choices were: "Almost never" (1), "Once in a while" (2), "Sometimes" (3), "Frequently" (4), and "Almost always" (5). Based on the number of family members indicated on the reply card, families received one FACES III form for each member of the family , including those who were also to complete the HSIB. The internal consistency reliability coefficient (Cronbach's alpha) using this sample was .81 for family adaptability and .91 for family cohesion (n=32). The authors of FACES III reported Cronbach's alpha for adaptability to be .62 and for cohesion to be .77 (n=2,412) (Olson, Portner, & Lavee, 1985). Pearson correlation coefficients were obtained for subscales of the HSIB and FACES III questionnaires.

Analysis

Data analysis included factor analysis of the HSIB instrument. The two factors identified by Hogan (1992), grief and personal growth, were also identified in the present analysis. However, based on the current factor analysis, some changes were made from the original questionnaire for subsequent analyses. Items #43 and #47 were omitted; item #13 was reverse coded and item #39 was changed from originally being reverse coded to not being reverse coded.

HSIB scores on the two factors where then divided into groups of high, middle and low scores; high scores corresponded to those in the range of the highest one-third of the total possible points, middle scores were in the second one-third, and low scores were those which were among the lowest one-third of all possible scores.

Pearson correlation coefficients were conducted to determine significant correlations between the following: total HSIB scores, adolescent grief, adolescent personal growth, and adolescents' perceived family cohesion and adaptability. A one-way analysis of variance was also conducted on these variables. A similar analysis of variance was conducted, but with family members' perceptions of the family's cohesion and adaptability. Due to the low number of subjects, t-tests were also conducted to determine at what probability level significant differences could be obtained.

Parents' and adolescents' FACES III scores for each family were averaged to create an adolescent family score. Scores were then divided into four groups for both the cohesion and adaptability dimensions based on standardized norms for families with adolescents as provided by the authors of FACES III (Olson et al., 1985). The four groups for cohesion and adaptability are representative of the family types presented in the Circumplex Model of Marital and Family Systems: disengaged, separated, connected, and enmeshed on the cohesion dimension, and rigid, structured, flexible, and chaotic on the adaptability dimension. The chi-square test was calculated on the FACES III scores for the subscales of cohesion and adaptability in order to place family members in the 16-type family typology of the Circumplex Model.

T-tests were conducted to determine if the elapsed time since death influenced responses. Families were divided by way of a median split into two groups: those who experienced the death within the previous three years (group 1) and those who experienced the death more than three years ago (group 2).

Limitations

The method included averaging family members' FACES III scores to obtain a family FACES score. Although a score acquired in this manner is more inclusive of family members'

perceptions of their family, the score is not truly representative of a family score.

The sample selection was limited in that all were acquired through a self-help bereavement group. Families who choose to associate with support groups may be different with respect to their family adaptability and cohesion than families who do not seek the help of support groups. Similarly, those few who participated may also in some way be different than the other members of the support group who did not opt to participate.

The small number of subjects also creates another limitation in the study. The empirical characteristics of the scales used in this study suggest that the present researcher can reliably describe this sample. However, due to the small sample size, all concluding statements regarding the results are not intended to be generalized to the larger population.

APPENDIX C

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APPENDIX D

SUPPLEMENTAL TABLE

Table 8

Family Demographics

Variable	f	%	Mean	SD
Age of Adolescent	15		17.4	1.9
15 Years	2	13.3		
16 Years	5	33.3		
17 Years	1	6.7		
18 Years	3	20.0		
19 Years	1	6.7		
20 Years	2	13.3		
21 Years	1	6.7		
Age of Adolescent at Time of Death	15		14.2	2.5
10 Years	2	13.3		
11 Years	2	13.3		
13 Years	2	13.3		
14 Years	1	6.7		
15 Years	2	13.3		
16 Years	3	20.0		
17 Years	2	13.3		
18 Years	1	6.7		
Age of Child Who Died	13		17.0	5.6
6 Years	1	7.7		
11 Years	1	7.7		
12 Years	1	7.7		
14 Years	2	15.4		
18 Years	3	23.1		
19 Years	2	15.4		
20 Years	1	7.7		
26 Years	2	7.7		

Variable	f	%	Mean	SD
Gender of Adolescent	15			
Male	5	33.3		
Female	10	66.7		
Time Since Death Occurred	15		3.2	2.4
.32 Years	1	6.7		
.40 Years	1	6.7		
.48 Years	1	6.7		
.65 Years	1	6.7		
2.07 Years	2	13.3		
2.32 Years	1	6.7		
3.40 Years	1	6.7		
3.65 Years	3	20.0		
4.65 Years	1	6.7		
5.07 Years	1	6.7		
7.24 Years	1	6.7		
8.32 Years	1	6.7		
Cause of Death	13			
Auto Accident	4	30.8		
Murder	1	7.7		
Homicide	2	15.4		
Suicide	3	23.1		
Other	3	23.1		
Gender of Child Who Died	13			
Male	9	69.2		
Female	4	30.8		

Table 8 (Continued)

Variable	f	%	Mean	SD
Prior Warning of Death	13			
No Warning	12	92.3		
Less Than a Wk.	0	0		
Less Than a Mo.	0	0		
Less Than a Yr.	1	7.7		
Over One Year	0	0		
Number of Surviving Children	13		2.0	0.9
1	5	38.5		
2	2	15.4		
3	5	38.5		
Missing	1	7.7		
Parents' Marital Status Prior to Death	13			
Married	9	69.2		
Separated	0	0		
Divorced, Single	2	15.4		
Divorced, Remarried	1	7.7		
Widowed	0	0		
Widowed, Remarried	0	0		
One Parent Divorced, One Remarried	1	7.7		
Parents' Current Marital Status	13			
Married	8	61.5		
Separated	1	7.7		
Divorced, Single	2	15.4		
Divorced, Remarried	1	7.7		
Widowed	0	0		
Widowed, Remarried	0	0		
One Parent Divorced, One Remarried	1	7.7		
No. of Years Parents Married	13	20.6		7.6
10 Years	2	15.4		
12 Years	1	7.7		
18 Years	2	15.4		
21 Years	2	15.4		
22 Years	1	7.7		
25 Years	2	15.4		
32 Years	1	7.7		
33 Years	1	7.7		
Missing	1	7.7		
Ethnic Background	13			
Afro-American	0	0		
Asian-American	0	0		
Caucasian/White	13	100		
Native American	0	0		
Hispanic Descent	0	0		
Other	0	0		

Table 8 (Continued)

Variable	f	%	Mean	SD
Mother's Education Status	13			
Graduate or Professional Ed.	2	15.4		
Graduate of a 4 Year College	1	7.7		
Some College	5	38.5		
Intermediate or Pre-University	1	7.7		
High School	4	30.8		
Grade School	0	0		
No Education	0	0		
Do Not Know	0	0		
Father's Education Status	13			
Graduate or Professional Ed.	2	15.4		
Graduate of a 4 Year College	5	38.5		
Some College	1	7.7		
Intermediate or Pre-University	3	23.1		
High School	1	7.7		
Grade School	0	0		
No Education	0	0		
Do Not Know	1	7.7		

Variable	f	%	Mean	SD
Where Family Lived the Most Years	13			
Farm	0	0		
Non-Farm Rural Residence/Village	0	0		
Small Town (Population Less Than 2500)	2	15.4		
Large Town (2,500 - 25,000)	5	38.5		
Small City (25,000 - 100,000)	4	30.8		
Large City (Greater Than 100,000)	1	7.7		
Missing	1	7.7		
Family's Income Last Year	13			
Under $7,000	1	7.7		
$7,000 - 9,999	0	0		
$10,000 - 14,999	0	0		
$15,000 - 19,999	1	7.7		
$20,000 - 24,999	2	15.4		
$25,000 - 29,999	0	0		
$30,000 - 34,999	0	0		
$35,000 and Over	8	61.5		
Missing	1	7.7		

Table 8 (Continued)

Variable	f	%	Mean	SD	Variable	f	%	Mean	SD
Family's Current Religion	13				Frequency of Church Attendance	13			
Baptist	3	23.1			More Than Twice a Week	1	7.7		
Catholic	2	15.4			Twice a Week	4	30.8		
Christian	1	7.7			Once a Week	4	30.8		
Episcopal	0	0			Twice a Month	0	0		
Jewish	0	0			Three or Four Times a Year	1	7.7		
Lutheran	0	0			Only for Weddings and Funerals	0	0		
Methodist	2	15.4			Never	3	23.1		
Other Protestant	2	15.4							
Not Listed	2	15.4							
Missing	1	7.7							

SD = Standard Deviation

APPENDIX E

INSTRUMENTS

FAMILY BACKGROUND FORM

Please do not put your name on this form.

1. Please identify all persons who live in your household and include information about the child who died.

Household Members Write the relationship of each person to the child who died (e.g. father, aunt...see below*)	**Date of birth** (day/month/year)	**Sex** (circle)
1. child who died		M F
2.		M F
3.		M F
4.		M F
5.		M F
6.		M F
7.		M F
8.		M F
9.		M F
10.		M F

*Uncle, brother, grandmother, sister, mother, grandfather, cousin, others (please specify).

2. Age of child when he/she died: _____

3. Month and year of death: _____

4. Cause of death: _____
_____

5. Did you have any prior warning that the death would occur? (Check most appropriate.)

_____ 1. No warning
_____ 2. Less than a week
_____ 3. Less than a month
_____ 4. Less than a year
_____ 5. Over 1 year

6. Number of surviving children: _____

7. What was the parents' marital status before the death? (Check one.)

____ 1.	Married	____ 4.	Divorced, remarried
____ 2.	Separated	____ 5.	Widowed
____ 3.	Divorced, single	____ 6.	Widowed, remarried

8. What is the parents' current marital status? (Check one.)

____ 1.	Married	____ 4.	Divorced, remarried
____ 2.	Separated	____ 5.	Widowed
____ 3.	Divorced, single	____ 6.	Widowed, remarried

9. Length of time parents married: _____

10. Where has the family lived the most years? (Check one.)

____ 1. Farm
____ 2. Non-farm rural residence/village
____ 3. Small town (population under 2500)
____ 4. Large town (population 2500-25000)
____ 5. Small city (population 25000-100,000)
____ 6. Large city (population over 100,000)

11. What was your approximate family income for last year? (Check one, estimate if not sure.)

____ 1.	Under $7,000	____ 5.	$20,000-24,999
____ 2.	$7,000-9,999	____ 6.	$25,000-29,999
____ 3.	$10,000-14,999	____ 7.	$30,000-34,999
____ 4.	$15,000-19,999	____ 8.	$35,000 and over

12. What is the highest level of education for:

Mother	Father		
_____	_____	1.	Graduate or professional education
_____	_____	2.	Graduate of four year college
_____	_____	3.	Some college
_____	_____	4.	Intermediate or preuniversity
_____	_____	5.	High school
_____	_____	6.	Grade school
_____	_____	7.	No education
_____	_____	8.	Don't know

13. What is your family's current religious background?

____ 1.	Baptist	____ 5.	Jewish
____ 2.	Catholic	____ 6.	Lutheran
____ 3.	Christian	____ 7.	Methodist
____ 4.	Episcopal	____ 8.	Other Protestant

____ 9. Not listed _____

14. How often does your family attend services of worship at your church?

____ 1. Twice a week
____ 2. Once a week
____ 3. Twice a month
____ 4. Three or 4 times a year
____ 5. Only for weddings, funerals
____ 6. Never

15. What is your ethnic background?

____ 1. Afro-American/Black
____ 2. Asian-American
____ 3. Caucasian/White
____ 4. Native American
____ 5. Hispanic descent
____ 6. Other

HOGAN SIBLING INVENTORY OF BEREAVEMENT (HSIB)

Listed below are some experiences other teenagers have had after the death of a sister or brother. Please read each statement carefully and circle number on the answer sheet that best describes how often the statement is true for you.

There are no right or wrong answers--your response depends completely on what you think or feel is true. Please don't spend a lot of time thinking about each response. If at all possible, respond to all statements.

1 = Almost always true
2 = Pretty often true
3 = True about half of the time
4 = Occasionally true
5 = Hardly ever true

SINCE MY BROTHER OR SISTER DIED:

Circle only one.

1.	I believe I will lose control when I start thinking about him or her.	1	2	3	4	5
2.	I am a better person.	1	2	3	4	5
3.	I have grown up faster than my friends.	1	2	3	4	5
4.	I am uncomfortable when I am having fun.	1	2	3	4	5
5.	I am stronger because of the grief I have had to cope with.	1	2	3	4	5
6.	I have control over my sadness.	1	2	3	4	5
7.	I have learned to cope better with my problems.	1	2	3	4	5
8.	I believe I am going crazy.	1	2	3	4	5
9.	My faith has become less important to me.	1	2	3	4	5
10.	I want to die to be with him/her.	1	2	3	4	5
11.	I am more tolerant of others.	1	2	3	4	5
12.	I'm uncomfortable when I am feeling happy.	1	2	3	4	5
13.	I have learned that all people die.	1	2	3	4	5
14.	I should have died and he/she should have lived.	1	2	3	4	5
15.	I have changed my priorities.	1	2	3	4	5
16.	I do not feel depressed when I think about him/her.	1	2	3	4	5
17.	I have a better outlook on life.	1	2	3	4	5
18.	Family holidays such as Christmas are happy times.	1	2	3	4	5
19.	I am a less caring person.	1	2	3	4	5
20.	I believe I am in control of my life.	1	2	3	4	5
21.	I have learned to cope better with life.	1	2	3	4	5
22.	I have panic attacks over nothing.	1	2	3	4	5

23. I can give help to other who are grieving. 1 2 3 4 5
24. I take risks to help me forget he/she is dead. 1 2 3 4 5
25. I care more deeply for my family. 1 2 3 4 5
26. I am afraid that more people I love will die. 1 2 3 4 5
27. I try to be kinder to other people. 1 2 3 4 5
28. I have nightmares about his/her death. 1 2 3 4 5
29. I take people for granted. 1 2 3 4 5
30. I don't worry about much. 1 2 3 4 5
31. I am more creative. 1 2 3 4 5
32. I know I will never get over his/her death. 1 2 3 4 5
33. I am less aware of other's feelings. 1 2 3 4 5
34. I don't care what happens to me. 1 2 3 4 5
35. I have more compassion for others. 1 2 3 4 5
36. My family will always be incomplete. 1 2 3 4 5
37. I am more understanding of others. 1 2 3 4 5
38. I am hardly ever sick. 1 2 3 4 5
39. I am less tolerant of myself. 1 2 3 4 5
40. People know what I am going through. 1 2 3 4 5
41. I don't think I will ever be happy again. 1 2 3 4 5
42. I know how fragile life is. 1 2 3 4 5
43. I cannot get help for my grieving when I need it. 1 2 3 4 5
44. I have trouble concentrating. 1 2 3 4 5
45. I am afraid to get close to people. 1 2 3 4 5
46. I sleep well at night. 1 2 3 4 5
47. I believe I will see my brother/sister in heaven. 1 2 3 4 5

FACES III

David H. Olson, Joyce Portner, and Yoav Lavee

1	2	3	4	5
ALMOST NEVER	ONCE IN AWHILE	SOMETIMES	FREQUENTLY	ALMOST ALWAYS

DESCRIBE YOUR FAMILY NOW:

_____ 1. Family members ask each other for help.

_____ 2. In solving problems, the children's suggestions are followed.

_____ 3. We approve of each other's friends.

_____ 4. Children have a say in their discipline.

_____ 5. We like to do things with just our immediate family.

_____ 6. Different persons act as leaders in our family.

_____ 7. Family members feel closer to other family members than to people outside the family.

_____ 8. Our family changes its way of handling tasks.

_____ 9. Family members like to spend free time with each other.

_____ 10. Parent(s) and children discuss punishment together.

_____ 11. Family members feel very close to each other.

_____ 12. The children make the decisions in our family.

_____ 13. When our family gets together for activities, everybody is present.

_____ 14. Rules change in our family.

_____ 15. We can easily think of things to do together as a family.

_____ 16. We shift household responsibilities from person to person.

_____ 17. Family members consult other family members on their decisions.

_____ 18. It is hard to identify the leader(s) in our family.

_____ 19. Family togetherness is very important.

_____ 20. It is hard to tell who does which household chores.

FAMILY SOCIAL SCIENCE, 290 McNeal Hall, University of Minnesota, St. Paul, MN 55108

APPENDIX F

CONSENT FORM AND LETTERS

333 Human Environmental Sciences
Department of Family Relations
and Child Development
Oklahoma State University
Stillwater, OK 74078

Dear (chapter leader's name):

Since we talked only briefly on the phone, I would like to give you more detailed information about the survey that I am conducting. The survey is being used for my Master's thesis in the Department of Family Relations and Child Development at Oklahoma State University. The focus of my thesis is adolescent sibling bereavement. Only recently have people begun to recognize the unique nature of adolescent sibling bereavement. I would like to contribute to the growing literature on this topic. This is where I need your help.

Attached please find a letter to families requesting their assistance in the study. Also enclosed are business reply cards for families to return to me (postage free). I would greatly appreciate it if you would enclose the letter and cards in the next chapter newsletter. If I can be of any assistance in folding/stapling the cards into the newsletters, please contact me at (405) 744-1256 or (405) 744-7051.

The survey is made up of two questionnaires, which I have included for your perusal. The Hogan Sibling Inventory of Bereavement (HSIB) is for adolescents aged 13-18. The HSIB was created to determine how adolescents cope and adapt to sibling bereavement. The second questionnaire, the FACES III survey is for <u>all</u> family members to complete, including siblings who filled out the HSIB. The FACES III questionnaire addresses family cohesion and adaptability. I hope to determine family characteristics that are related to adolescent sibling bereavement responses.

I will appreciate any comments and suggestions that you have for me. Upon completion of my study, I will send you a summary of the results. Hopefully you will find these results to be helpful enough to include in future newsletters to your families. If there are any questions or concerns that you have, please feel free to contact me at the above-listed phone numbers. Thank you, your time and effort are greatly appreciated.

Sincerely,

Maureen Blankemeyer (405) 744-1256
or 744-7051
Faculty adviser, Dr. David G. Fournier,
(405) 744-8351

333 Human Environmental Sciences
Department of Family Relations
and Child Development
Oklahoma State University
Stillwater, OK 74078

Dear families:

In order to understand better how children respond to the death of a sibling, we have developed a survey for children aged 13-18 to help them express their feelings. Participation by their parents and siblings is also an important part of our survey.

You can help if you have a surviving child between the ages of 13 and 18, and the death occurred within the past five years. If your family meets the requirements, please complete the enclosed business reply card and return it to us as soon as possible. Upon receiving your name and address, we will send you questionnaires to be completed and returned to us. All information you provide will be kept confidential. Families who participate will receive a general summary of the results and your chapter leader will be given our complete findings in the future. Thank you for your help!

Sincerely,

Maureen Blankemeyer
David Fournier, Ph.D.
Dept. of FRCD, O.S.U.

POST CARD IN COMPASSIONATE FRIENDS NEWSLETTERS

Our family qualifies for participation in the survey for children's feelings about the death of a sibling. We understand that all information we provide will remain confidential.

Number of surviving family members _____
Age of surviving children who qualify _____
Time since family death _____

Name and address _____
_____
_____
_____

Phone ( )_____

Blankemeyer

333 Human Environmental Sciences
Department of Family Relations
and Child Development
Oklahoma State University
Stillwater, OK 74078

Dear families:

Thank you for participating in this survey concerning adolescent sibling bereavement. Enclosed please find the following:

1. A Family Background Form.

2. A survey of sibling bereavement for the number of adolescents in your family that you indicated on the reply card (Hogan Sibling Inventory of Bereavement).

3. A survey for each family member related to aspects of your family (FACES III).

4. A post card of consent to be signed by a parent.

The adolescent survey was created for adolescents to express their feelings following the death of a sibling. Please encourage your adolescent(s) to add any comments, thoughts, and feelings that they may have. Younger children may need assistance in filling out the family questionnaire. Please help them do so as all family members' participation is important. However, if not all members choose to complete the family questionnaire, simply return all completed and non-completed forms.

I ask that you take a minute now to read and sign the post card giving consent for your family members to participate in the survey. It is important that you mail it in separately from the questionnaires so that we do not know who fills out which forms. **Do not put your names on any questionnaire!** After your family members have completed the background form and questionnaires, return them in the enclosed envelope as soon as possible. If you would like any information regarding the study or have any suggestions, please call me at (405) 744-7051 or write to me at the above address. Thank you very much. Your time and effort are greatly appreciated.

Sincerely,

Maureen Blankemeyer

PLEASE COMPLETE AND RETURN IMMEDIATELY
(DO NO SEND THIS WITH THE QUESTIONNAIRES.)

I/We,_____,
give consent for my/our family members to participate in the survey on adolescent sibling bereavement. I/We understand that the information we provide will be confidential and will in no way be able to be identified with us, although summaries of overall results may be published.

I/We understand that participation is voluntary and that there is no penalty for refusal to participate.

DATE_____
SIGNED_____
signature of parent(s)

BLANKEMEYER

July 6, 1992

Dear Family:

I am writing in regards to the adolescent sibling bereavement survey which I recently sent to your family. I want to thank those of you who have already completed and returned your survey. Your participation is greatly appreciated.

I would also like to take this opportunity to encourage those of you who have not completed and returned the questionnaires to please do so. Your participation is very important as there is very little information known about bereaved adolescent siblings. With your help, we can make a contribution to the public with our study about how family characteristics are related to adolescent siblings' bereavement process.

If you require additional questionnaires, please complete the enclosed postage-paid reply card. If you know of another family who has a bereaved sibling between approximately the ages of 13 and 18, and who experienced the death within the last 5 years, please pass the reply card to them. If you have questions or suggestions, I may be reached at the following phone number and address. Thank you.

Maureen Blankemeyer
Dept. of FRCD, O.S.U.
333 Home Economics
Stillwater, OK 74078

(405) 624-0881 (home)
(405) 744-7051 (office)

Sincerely,

Maureen Blankemeyer

333 Human Environmental Sciences
Department of Family Relations
and Child Development
Oklahoma State University
Stillwater, OK 74078

Dear (chapter leader's name):

I am writing to inform you of the results from the adolescent sibling bereavement study which began with your help last spring. If you find it helpful, please feel free to include the findings in your newsletter. While several researchers and clinicians have addressed parents' grief or young children's grief, few have assessed adolescent grief. Our study differed from most in that it focused on adolescents and their families.

A total of 60 families returned reply cards indicating their interest in participating in the study. After sending questionnaires to the families, twenty-one returned their materials. A total of fifteen families who returned their materials met the requirement of having an adolescent in the family.

Results indicated that adolescents scored in the low and middle ranges of personal growth. Very few scored in the high range. This finding differs from other studies on bereaved adolescents which report high personal growth following the death of a sibling.

Another finding indicated that adolescents from families with an extremely high level of cohesion (emotional closeness) demonstrated significantly higher grief scores than adolescents who are from families that have extremely low amounts of cohesion. While this finding may seem contrary to what would be expected, it is possible that adolescents from families which are very close feel more comfortable than other teens expressing their grief openly. Studies have indicated the importance of being able to express one's grief, yet adolescents in particular often report having no one to talk with about their grief.

Findings from the study suggest that family characteristics, such as cohesion, are associated with adolescents' bereavement responses. Persons working with grieving adolescents should be aware of these and other family factors which are associated with the manifestations of the adolescents' grief.

I would like to thank all participants, chapter leaders, and others who helped me with the study. For additional information on the study, inquiries may be sent to me at the address above.

Sincerely,

Maureen Blankemeyer

VITA

Maureen Blankemeyer

Candidate for the Degree of

Master of Science

Thesis: ADOLESCENT SIBLING BEREAVEMENT: FAMILY FACTORS ASSOCIATED WITH ADJUSTMENT TO LOSS

Major Field: Family Relations and Child Development

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Professional Experience: Teaching Assistant, Department of Family Relations and Child Development, Oklahoma State University, September, 1990 to May, 1991; Research Assistant, Department of Family Relations and Child Development, Oklahoma State University, September, 1990 to present.

Professional Organizations: Phi Kappa Phi, Kappa Omicron Nu, OCFR.

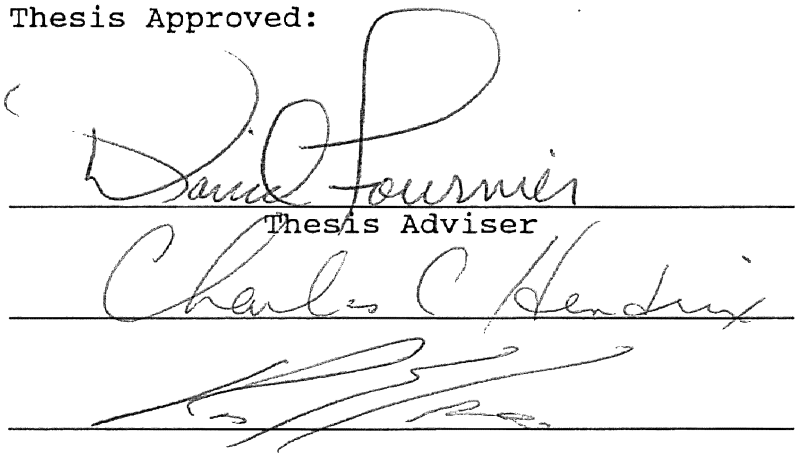
OKLAHOMA STATE UNIVERSITY

ADOLESCENT SIBLING BEREAVEMENT:

FAMILY FACTORS ASSOCIATED

WITH ADJUSTMENT TO LOSS

Thesis Approved:



Thesis Adviser

Dean of the Graduate College

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Without the help of the Compassionate Friends chapter leaders and members, this project certainly would not have been possible; my thanks to Joan Barrick, Donna Dragoo, Greg Slief, and especially Jerry Guy who went out of his way to help me acquire subjects. I also would like to thank Dr. Josephine Hoffer for her helpful suggestions.

I wish to extend thanks to my mother, Joan Blankemeyer, for instilling in me the importance of higher education. A belated thanks to my father, Gene Blankemeyer for believing in me in a way that no one else ever has. Finally, to my brothers and sisters, Angie, Elaine, Sam, and Jerome, thanks for providing solace for me during the stressful times of my graduate years.

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Adolescent Sibling Bereavement: Family Factors Associated With Adjustment to Loss

Maureen Blankemeyer

Oklahoma State University

This article is based on the Master's thesis of the author conducted under the direction of Dr. David Fournier.

Abstract

The purpose of this study was to assess the nature, intensity, and duration of the bereavement process of adolescents who have had a sibling die and to examine the extent to which family factors such as cohesion and adaptability influence bereaved adolescents' adjustment to loss. Fifteen bereaved adolescent siblings and their families completed self-report questionnaires. Results indicated that family cohesion is significantly correlated with adolescent grief. Adolescents were distributed equally among the high and middle ranges of grief. Scores for personal growth were in the low and middle ranges. The length of time since the death occurred did not appear to influence bereavement responses. Adolescents who were from families characterized by very high cohesion demonstrated significantly higher grief scores than those from families marked by extremely low levels of cohesion. The results provide support for considering family factors as important in adolescents' adjustment to the death of a sibling.

Adolescent Sibling Bereavement: Family Factors Associated With Adjustment to Loss

Introduction

Relatively few scientific studies have examined sibling bereavement compared to the number of studies which focus on parental or child bereavement. Rosen (1986) attributes the lack of sibling bereavement studies in part to the belief that sibling relationships play only a secondary role and are relatively unimportant when compared to parent-child relationships. Studies that do examine sibling bereavement generally focus on long-term effects and adult psychological manifestations of childhood sibling bereavement (e.g., Davies, 1991; Fanos & Nickerson, 1991; Martinson, Davies, & McClowry, 1987), or on young children's bereavement (e.g., Cain, Fast, & Erickson, 1964; Krell & Rabkin, 1979; McCown & Pratt, 1985). Only recently have sibling bereavement studies been concerned with adolescents (e.g., Balk, 1981, 1983a, 1983b, 1983c, 1990, 1991a, 1991b; Hogan, 1987, 1988b; Hogan & Balk, 1990; Hogan & Greenfield, 1991; Morawetz, 1982). A study of bereavement commissioned by the National Institute of Mental Health revealed that of all age groups,

adolescents are particularly vulnerable to the risks of medical, psychiatric, and behavioral dysfunction following the death of a sibling (Osterweis, Solomon, & Green, 1984).

Responses to the Death

Much of the scientific literature on adolescent sibling bereavement has focused on responses to the death. Bereaved adolescents respond to the death of a sibling in a variety of ways emotionally, physically, and behaviorally.

Emotional Responses.

Several emotional manifestations have been found repeatedly in studies of adolescent grief. Commonly reported emotional responses are shock, confusion, depression, anger, numbness, fear and guilt (Balk, 1990; Cain et al., 1964; Fanos & Nickerson, 1991; Krell & Rabkin, 1979). Other emotional responses during bereavement are denial, helplessness, sadness, vulnerability, restlessness, loneliness, and strengthened emotional bonds (Glass, 1990; Martinson & Campos, 1991; Oltjenbruns, 1991; Rosen, 1986).

Guilt is one of the most common emotional responses reported by bereaved adolescents (Balk, 1983a, 1983b, 1983c, 1990; Cain et al., 1964; Fanos & Nickerson, 1991; Krell & Rabkin, 1979). Various forms of guilt occur. Some siblings feel guilty over the way they handled the relationship with the sibling when s/he was still alive. Survivor guilt is when the sibling feels guilty that s/he did not die too or instead of the sibling. Some siblings feel responsible for

the death, or feel guilty for having previously wished the sibling were dead. Some even feel guilty for feeling "special" for having lost a sibling through death (Rosen, 1986).

Physical Responses. Bereaved adolescents generally experience an increase in physical symptoms after the death of a sibling (Balk, 1983a, 1983b, 1990; Fanos & Nickerson, 1991; Martinson & Campos, 1991). Sleeping and eating disturbances frequently impinge upon bereaved persons. Similarly, severe headaches, ulcers, and chronically tense and painful muscles and joints are manifestations of grief (Balk, 1983a, 1983b, 1990; Fanos & Nickerson, 1991; Martinson & Campos, 1991). Interestingly, the physical ailments may be the result of not overtly expressing grief. This method of response is very common in bereaved adolescents. Many never share their grief with anyone (Rosen, 1986).

Behavioral Responses. Following a significant loss, adolescents may feel compelled by those around them to exhibit adult-like behavior, even though they desire the security of their childhood. Their overt behaviors may be directed toward comforting other family members as they stifle their own emotions and desired behaviors such as crying (Rosen, 1986). However, studies suggest that individuals who assume a facade of stoicism and independence are susceptible to unresolved grief, especially if they

never open up to anyone (Glass, 1990; Michael & Lansdown, 1986). Similarly, adolescents sometimes conceal their true feelings as they continually express anger through negative behaviors; the adolescent may actually be channeling their sadness and hurt in what they see is a safer, more acceptable manner. Increased behavioral problems are common in bereaved adolescent siblings, especially for those who previously had behavioral difficulties and for siblings of deceased males (McCown & Pratt, 1985).

Michael and Lansdown (1986) asked parents to complete the Rutter scales, which are behavior checklists that indicate significant levels of behavioral disturbance. Ten of the 23 subjects fell into the behaviorally difficult category. Although these were not significant differences, there was one notable significant relationship. The siblings who were behaviorally difficult differed from the others in that they experienced fewer "facilitative experiences" such as having the knowledge that their sibling would die, or having the opportunity to say goodbye to their sibling before the death. However, four of the ten subjects who exhibited behavioral difficulties had also experienced a high number of "facilitative experiences."

Another behavioral manifestation of bereavement noted by adolescents, their parents and teachers is withdrawal from some or all of their peers (Glass, 1990; Michael & Lansdown, 1986). Peers often are too uncomfortable in the

company of their bereaved friend, so they respond by avoiding them.

A very common behavioral change in bereaved adolescents is weakened study habits, which very likely generates from the inability to concentrate. Although grades are often affected, study habits and grades were reported by Balk (1990) to return to normal for most adolescents. The length of time elapsed before grades returned to normal, however, was not reported by Balk. Not all adolescents find a decrease in grades, some report that immersing themselves in their schoolwork has proven to be therapeutic (Rosen, 1986).

Positive Bereavement Responses. While most bereavement studies focus on negative consequences of the death, some recent works have found that positive outcomes are also reported by bereaved adolescents. For many adolescents, their self-perceived maturity increases following the death (Balk, 1983a, 1983b, 1990; Davies, 1991). Another positive adolescent bereavement response that adolescents report is their decision to turn to religion for support (Balk, 1983a, 1983b, 1983c, 1991b). Although some adolescents question their religion initially, many times they eventually cling to their religious faith more intensely for solace and for an answer to the question, "Why did s/he die?" Thus, religious belief may be viewed as a coping process, a facilitator for the coping process, and a result of the coping process (Balk, 1991b).

Factors Influencing Adolescent Sibling Bereavement

In addition to investigating bereavement responses which are characteristic of adolescents, researchers have also addressed variables which influence bereavement responses. Variables frequently addressed are religion, social support, individual characteristics, circumstances surrounding the death, and the family.

Religion. Religion is frequently used by adolescents as a coping mechanism during bereavement (Balk, 1983b, 1983c, 1991b). Religion does not appear to make coping easier; however, self-reported religiosity predicts differing bereavement reactions. For example, religious adolescents reported more confusion while nonreligious adolescents reported more depression and fear in Balk's (1991b) study. A greater proportion of bereaved Catholics discussed the death within their families than did Protestants according to Rosen (1986).

Social Support. Social support is an intervening variable which can serve to soften the trauma of bereavement. Support systems external to the family are very important since the entire family is consumed with their own as well as family grief. Unfortunately, society is not responsive to bereaved persons, especially children and adolescents. Often, exchanges between the sibling and

members of the bereaved community (friends, neighbors, teachers, and other acquaintances) involve uncomfortableness (Rosen, 1986). Silence and comments such as, "Be strong for your parents," do not recognize the sibling grief as legitimate. A recent and growing trend toward mutual-help bereavement support groups such as The Compassionate Friends is a result of this need (Klass, 1985). Such groups provide grieving parents and siblings support from other bereaved families.

Individual Characteristics. Countless individual characteristics have been found to be associated with various bereavement responses. Gender may be related to how an adolescent grieves. Balk's (1983a) study suggests that confusion about the death of a sibling was reported by significantly more females than males. Females who were older than the sibling who died were significantly less likely than other siblings to feel shock in the first weeks of bereavement while older brothers were more likely to feel fear initially. In McCown and Pratt's (1985) study, when the deceased child was male, the sibling had a higher probability of exhibiting behavioral problems than when the deceased child was female.

Self-concept may also be influential on adolescents' bereavement responses. Although bereaved adolescents' self-concept may not necessarily be lower than their non-bereaved peers, Balk (1990) did find that depending on which range

the self-concept score fell into, the type of grief responses differed significantly.

Circumstances of Death. The literature suggests that grieving adolescents respond according to the circumstances of the death. The cause of death is an important circumstantial issue which influences the manifestation of grief. For example, suicide and homicide are viewed as the most difficult types of death to accept (Krupnick & Solomon, 1987; Osterweis et al., 1984). Anticipated deaths are less difficult to cope with than a sudden death because forewarning allows the opportunity to at least cognitively prepare for the death (Osterweis et al., 1984). The number of "facilitative" experiences (e.g., participation in the patient's care or previously experiencing the death of a pet) that siblings had may also influence bereavement outcomes (Michael & Lansdown, 1986).

Family. The family is undoubtedly one of the most influential factors in determining how an adolescent responds to the death of a sibling. Parental bereavement responses are important family variables as they, in turn, influence sibling grief responses. Parents often are entrenched in their own grief and consequently are likely to inadvertently withdraw emotional support from the surviving siblings (Adams & Deveau, 1984).

In addition to the influence of parental bereavement, the literature reveals that the pre-death sibling

relationships are also crucial variables affecting bereavement responses (Bank & Kahn, 1982; Davies, 1991; Dunn, 1985). For example, enduring the loss of a relationship which was marked with ambivalence or a high level of dependence is believed to be very difficult. In these cases, idealization of the deceased sibling is common, and such idealization does not facilitate grief resolution.

Family cohesion, adaptability, and communication are three concepts which have been addressed in the family bereavement literature. Family cohesion and communication are frequently studied in conjunction with one another. Results from Balk's (1983a) study indicate that perceived family communication and cohesion significantly differentiate bereaved adolescent siblings' responses. Adolescents who reported in the interview that their families were emotionally close and had effective personal communication responded initially to a sibling's death with shock, numbness, fear, loneliness, and depression. However, siblings who perceived their family as having sparse communication and emotional distance felt guilt and anger about the death of their sibling. Difficulty in communicating with family members impedes grief resolution because the adolescent is thus forced to face grief alone. Unfortunately, many of the families studied said the family never actually discussed the death of the sibling (Balk, 1983a; Cain et al., 1964; Krell & Rabkin, 1979; Rosen, 1986). Krell and Rabkin (1979) also suggest that the lack

of communication among bereaved family members may result in problems for family members. Siblings whose family members remain silent about the death are what Krell and Rabkin call the "Haunted Child." This sibling lives with uncertainty, distrust, and fear. Similarly, Cain et al. (1964) found that many of their clinical subjects had parents who prohibited discussion of the deceased child or feelings resulting from the death.

Adaptability is defined by Olson, Sprenkle, and Russell (1979) as the ability of a marital or family system to change with regard to the power structure, role relationships, and relationship rules in response to situational and developmental stress. Davies, Spinetta, Martinson, McClowry, and Kulenkamp (1986) found that functional bereaved families were more adaptive in their reorganization than were dysfunctional bereaved families. Hogan (1988a) developed the Hogan Sibling Inventory of Bereavement (HSIB), which is a measure of adolescent sibling bereavement adaptation following the death. The adolescent respondents reported that in time they as well as their mothers adapted more functionally than they perceived that their fathers had (Hogan, 1988b).

Families vary in the amount of cohesion and adaptability they have. The Circumplex Model of Marital and Family Systems, developed by Olson et al. (1979), incorporates family cohesion, adaptability, and communication. According to the model, there are four

levels of family cohesion ranging from low to high: disengaged, separated, connected, and enmeshed. Similarly, there are four levels of adaptability: rigid, structured, flexible, and chaotic. Balanced types on the cohesion dimension include families who fall into the separated and connected categories. Families that are balanced on the adaptability dimension include those which are structured and flexible. Extreme levels, or unbalanced types, on the cohesion dimension are disengaged and enmeshed. Extreme levels on the adaptability dimension are the unbalanced types, rigid and chaotic. For both the cohesion and adaptability dimensions, balanced levels are hypothesized to be generally more conducive to family functioning than are the extreme levels. A third dimension of the Circumplex Model is family communication, which facilitates movement on the other two dimensions.

Purpose and Hypotheses

The purpose of this study was to assess the nature, intensity, and duration of the bereavement process of adolescents who have had a sibling die and to examine the extent to which family factors such as cohesion and adaptability influence bereaved adolescents' adjustment to loss. This exploratory study examines variables in combination with one another in a way that has not been evidenced in the literature.

Hypotheses for the study were based on the Circumplex Model (Olson et al., 1979). The first hypothesis is that adolescents from families who are unbalanced on the cohesion dimension (extremely high or extremely low cohesion) would demonstrate more negative bereavement responses, as measured by lower growth scores and higher grief scores (from the Hogan Sibling Inventory of Bereavement), than would adolescents from families characterized as having a balanced level of cohesion. Second, adolescents from disengaged families (low cohesion) would demonstrate more negative bereavement responses than would adolescents from families characterized as having a balanced or high level of cohesion. Third, adolescents from families characterized as unbalanced on the adaptability dimension (extremely high or extremely low adaptability) would demonstrate more negative bereavement responses than would adolescents from families who had a more balanced level of adaptability. A final hypothesis is that adolescents from families characterized as rigid (low level of adaptability) would demonstrate more negative bereavement responses than would adolescents from families who had balanced or high levels of adaptability.

Method

Sample and Procedure

Subjects were acquired through The Compassionate

Friends, a self-help bereavement support group for families who had experienced the death of a child. Three Oklahoma Compassionate Friends chapters carried in their monthly newsletters a total of 1000 copies of an overview of the study, requests for volunteers, and reply cards to be completed by people interested in participating in the study. One hundred copies of the overview and reply cards were also distributed at the National Compassionate Friends Conference in North Carolina. Reply cards were to be completed by families who had a surviving sibling between the ages of 13 and 18, and who had experienced the death within the previous five years. Subjects consisted of adolescents as well as their family members. Sixty volunteers returned reply cards. Twenty-one families subsequently returned completed materials. Six of these families did not meet the requirements of a surviving adolescent sibling and were excluded from the study. A sample of 15 families was used for the present study. All persons who completed the Hogan Sibling Inventory of Bereavement questionnaire and met the adolescent age requirements were included as subjects, even if they did not complete the other questionnaires. A total of 17 adolescents completed the adolescent questionnaire and were included in scale sums and reliability scores. Fifteen respondents completed the other questionnaires and were included in subsequent family level analysis. Similarly, 32 volunteers who returned the FACES III questionnaire were

included in reliability scores, but only 15 adolescent families' scores were used when analyses involved more than one instruments' data.

The mean age of participating adolescents was 17.4 years (SD=1.85), ranging from 15 to 21 years. The average age of subjects at the time of death was 14.2 years (SD=2.54), ranging from 10 to 18 years. Originally, the intent was that only siblings between the ages of 13 and 18 years would complete the HSIB. However, due to the low number of respondents, the age range was expanded to between 10 and 20 years. Respondents qualified as adolescent subjects if they were within this age range either at the time of death or at the time of completing the questionnaire.

Gender was represented by 33% males and 67% females. Participants were all Caucasian. Most deaths (31%) were from automobile accidents and in most cases (92%) there was no warning of the death.

Insert Table 1 about here

The time elapsed since the death ranged from .32 to 8.32 years, with a mean of 3.20 years and a standard deviation of 2.42.

Measurement

Participants completed materials either after receiving them in the mail or at the National Conference for The Compassionate Friends. Materials were then mailed back to the researcher. A family background form was used to collect information about circumstances of the death of the child as well as family demographic information. Two standardized instruments were also administered. The Hogan Sibling Inventory of Bereavement (HSIB) (Hogan, 1988a) is a 47-item self-report questionnaire designed to measure the adolescent sibling bereavement process. The HSIB was completed by all adolescent siblings in the families. Items on the questionnaire are prefaced with the stem, "Since my brother or sister died:" Specifically, items assess adolescent grief and personal growth. The scale is scored using a 5-point likert format with the choices: "Almost always true" (1), "Pretty often true" (2), "True about half of the time" (3), "Occasionally true" (4), and "Hardly ever true" (5). The internal consistency reliability coefficient (Cronbach's alpha) for the total scale was .87 (n=14). Cronbach's alpha for the subscales, adolescent grief and personal growth, in the current study were .90 and .88 respectively (n=14). The Cronbach's alpha for these factors as reported by the author of the HSIB were .95 and .90 respectively (n=158) (Hogan, 1992).

Insert Table 2 about here

The second instrument, the Family Adaptability and Cohesion Evaluation Scales (FACES) III was the third version of the FACES scales developed by Olson, Portner, and Lavee (1985) in order to assess the two major Circumplex Model dimensions, i.e., family adaptability and family cohesion. FACES III allows for families to be placed within the Circumplex Model. The questionnaire consists of 20 items and is scored using a 5-point likert format. Scale choices are: "Almost never" (1), "Once in a while" (2), "Sometimes" (3), "Frequently" (4), and "Almost always" (5). Based on the number of family members indicated on the reply card, families received one FACES III form for each member of the family, including those who were also asked to complete the HSIB. The internal consistency reliability coefficient (Cronbach's alpha) for family adaptability was .81 in the present study (n=32) and .62 as reported by the authors of FACES III (n=2,412). Cronbach's alpha for family cohesion was .91 in the current study (n=32) and .77 as reported by the FACES III authors (n=2,412) (Olson et al., 1985).

Analysis

Data analysis included factor analysis of the HSIB instrument. The two factors identified by Hogan (1992), grief and personal growth, were also identified in the

present analysis. However, based on the current factor analysis, some changes were made from the original questionnaire for subsequent analyses. Items #43 and #47 were omitted; item #13 was reverse coded and item #39 was changed from originally being reverse coded to not being reverse coded.

HSIB scores on the two factors were then divided into content determined groups of high, middle, and low scores. High scores corresponded to those in the range of the highest one-third of the total possible points. Middle scores were in the second one-third. Low scores were those which were among the lowest one-third of all possible scores. For other analyses, groups were equally split into high, middle, and low scores based on sample distribution.

Pearson correlation coefficients were conducted to determine significant correlations between the following: total HSIB scores, adolescent grief, adolescent personal growth, and adolescents' perceived family cohesion and adaptability. A one-way analysis of variance was also conducted on these variables. A similar analysis of variance was conducted using family members' perceptions of family cohesion and adaptability. Due to the low number of subjects and the exploratory nature of this study, t-tests were also conducted with these variables to determine at what probability level significant differences could be obtained.

Parents' and adolescents' FACES III scores for each family were averaged to create an adolescent family score. Although the averaged FACES III scores are not truly representative of a family score, since they were derived from individual responses, averaging the scores provided a score which was more inclusive of family members than if only one member's scores were used. FACES III scores were then divided into four groups for both the cohesion and adaptability dimensions based on standardized norms for families with adolescents as provided by the authors of FACES III (Olson et al., 1985). The four groups for cohesion and adaptability are representative of the family types presented in the Circumplex Model of Marital and Family Systems: disengaged, separated, connected, and enmeshed on the cohesion dimension, and rigid, structured, flexible, and chaotic on the adaptability dimension (Olson et al., 1979). The SPSS crosstab procedure was used on the subscales of cohesion and adaptability in order to place family members in the 16-type family typology of the Circumplex Model. This provided a visual model of respondent placement and descriptive statistics such as percentiles.

T-tests were conducted to determine if the elapsed time since death influenced responses. Families were divided by way of a median split into two groups: those who experienced the death within the previous three years (group 1) and those who experienced the death more than three years ago

(group 2).

Results

Means, standard deviations, and Cronbach's alphas for the four subscales are reported in Table 2. Scores are provided for the current study as well as scores from the authors of the instruments. Based on the empirical characteristics of the scales, the present researcher is able to reliably describe the sample used in the study. However, due to the small sample size, all concluding statements regarding the results are tentative; they are not intended to be generalized to the larger population.

The mean score for the total HSIB score was 141.12 (*SD*=21.41). Scores ranged from 113 to 185, while the theoretical range is 45 to 225. The mean score for the grief subscale of the HSIB was 85.88 (*SD*=15.84). Scores ranged from 58 to 117 and the theoretical range for the subscale is 24 to 120. Based on content determined cutoff points, scores were distributed as follows: high 47.2% (*n*=8), middle 53.1% (*n*=9), and low 0% (*n*=0). The mean score for the personal growth subscale was 55.24 (*SD*=14.40). Scores ranged from 32 to 89; the theoretical range (after omitting item #43) is 21 to 105. Based on content determined cutoff points, scores were distributed as follows: high 5.9% (*n*=1), middle 59% (*n*=10), and low 35.4% (*n*=6).

The Pearson correlation coefficients revealed a significant relationship between the total HSIB scale and adolescent grief, which is an HSIB subscale ($r=.77$, $p<.01$). A significant correlation was also evident between family cohesion and adolescent grief ($r=.71$, $p<.01$).

Insert Table 3 about here

Results from the analysis of variance using adolescents' perceptions of family cohesion and adaptability indicated that adolescents who perceived themselves as being from enmeshed (very close) families, those who scored in the highest group on the cohesion dimension, had a significantly higher mean grief score ($M=99.80$) than adolescents who perceived themselves as being from disengaged families, those scoring in the lowest group on the cohesion dimension ($M=73.80$) ($F[3,11]=4.52$, $p<.05$). Similarly, using family members' perceptions of their family cohesion and adaptability, adolescents from enmeshed families had a significantly higher mean grief score ($M=102.0$) than adolescents from disengaged families ($M=72.3$) ($F[3,11]=3.61$, $p<.05$). T-tests indicated some significant differences between groups.

Insert Tables 4 - 7 about here

Family FACES III scores on the cohesion dimension ranged from 18.5 to 50 with a theoretical range of 10 to 50. The mean score was 34.69 (SD=10.69). Families were distributed among the four groups of cohesion as follows: disengaged 40% (n=6), separate 13.3% (n=2), connected 20% (n=3), and enmeshed 26.7% (n=4). Family scores on the adaptability dimension ranged from 12 to 38, with a mean score of 22.34 (SD=6.55). The theoretical range was from 10 to 50. Families were distributed among the four types of the adaptability dimension as follows: rigid 26.7% (n=4), structured 40% (n=6), flexible 20% (n=3), and chaotic 13.3% (n=2).

A crosstabulation analysis of the two FACES III dimensions provided the percentile distribution of family members among the 16 types of families on the Circumplex Model.

Insert Figure 1 about here

All but four of the 16 types were characterized by at least one subject. The family type which was most frequently represented was rigidly disengaged. Seven of the 25 subjects characterized their families as being this type.

Nine family members' FACES III scores fell into the balanced range and eight were in the unbalanced range.

T-tests demonstrated no significant difference between grief mean scores of those who experienced the death within the previous three years (group 1) (M=79.00, SD=14.88) and those who experienced the death more than three years ago (group 2) (M=91.88, SD=16.32). Similarly, no significant difference was found on growth means for group 1 (M=55.88, SD=11.35) and group 2 (M=51.75, SD=13.10); on family cohesion means for group 1 (M=32.05, SD=10.57) and group 2 (M=37.00, SD=10.95); nor on family adaptability means for group 1 (M=20.17, SD=5.27) and group 2 (M=24.25, SD=7.29). Differences in scores were often high but the sample size limited the ability to assess statistical significance.

Discussion

The primary goal of this exploratory study was to determine if there is a relationship between family characteristics and adolescents' bereavement responses. The results provided support for the proposal that family factors are indeed associated with bereavement responses. Family cohesion demonstrated a high correlation with family adaptability. Davies et al. (1986) reported that functional bereaved families are more adaptable than are dysfunctional families. Moreover, family cohesion was significantly correlated with adolescent grief. The results suggest that nearly half of the variation in adolescent grief scores was

accounted for by family cohesion. These findings underscore the need to incorporate family variables as an integral part of individuals' grief.

In order to assess family factors associated with adolescent sibling bereavement, individual differences in the bereavement process of adolescent siblings was assessed. Results indicated that the bereaved adolescents were distributed in the middle and high ranges of grief. While personal maturity is a reported outcome of adolescent bereavement (Balk, 1983a, 1983b, 1990; Davies, 1991), findings from the present study indicate that personal growth scores were either in the low or middle range. The length of time elapsed since the death did not appear to influence grief scores nor personal growth scores. This is in concordance with Balk's (1983b) findings which also suggest that elapsed time since death does not influence bereavement reactions nor self-concept. Likewise, family cohesion and adaptability scores were not significantly different for those who experienced the death relatively recently versus those who experienced the death more than three years ago.

Whereas elapsed time since the death did not differentiate family types, possibly the families' pre-death cohesion and adaptability status may have been indicative of the family post-death status. That is, families balanced on the cohesion and adaptability dimensions may temporarily change to extreme levels in response to the stress of the

death (Olson, 1991). Although no data were available regarding family status prior to the death, findings did indicate that the most common bereaved family type reported in this study was an extreme type, the rigidly disengaged family. This type of family is characterized by limited negotiations, extreme emotional separateness, very little involvement with one another, and very little sharing of feelings (Olson, 1991). Lack of communication among bereaved adolescents and their parents is commonly reported (Balk, 1983a; Cain et al., 1964; Krell & Rabkin, 1979; Rosen, 1986). Unfortunately, grief resolution is impaired by a family's lack of communication because the adolescent is forced to face the trauma of grief alone.

Findings from this study provided support for the proposal that family characteristics influence the adolescent sibling bereavement process. Adolescents from families who reported high bonding and family support had significantly higher grief scores than adolescents from families who had extremely limited bonding with one another. Although these are not causative, the covariance warrants further research. The hypothesis that negative bereavement responses would be characterized by adolescents from families with unbalanced levels of cohesion was not supported although an interesting trend was noted. In fact, a linear relationship of family cohesion and adolescent grief existed. Possibly highly cohesive families provide an atmosphere which is perceived by the adolescent as safe for

expressing their grief. There is also the possibility that grief brings family members closer; the higher the grief, the closer the family pulls together to support one another.

Family adaptability also appears to influence adolescent bereavement responses, although not in the hypothesized way. Instead of rigid and chaotic families having the highest mean grief scores, rigid families had the lowest grief scores while structured families had the highest scores. As rigid families are characterized by strict discipline, little change, and roles that seldom change (Olson, 1991), one possibility is that such a family environment discouraged adolescents from altering their behavior to express their grief. Structured families are characterized by somewhat democratic discipline, change that occurs when demanded, and shared leadership (Olson, 1991). In this study, these family characteristics were correlated with high adolescent grief scores.

Personal growth scores were not indicative of family cohesion and adaptability levels in the manner hypothesized by the Circumplex Model. Although no significant results were found, slightly higher personal growth scores were evident in unbalanced families, those who had either extremely high or extremely low adaptability. While one would expect that adolescent personal growth is positively related to family functioning, the findings do not suggest this to be true. Similarly, higher growth scores were found in disengaged and separated families, or those with lower

cohesion. Individuals who do not have interconnected families may be forced to deal with death by using and enhancing their own intrapersonal resources.

Regarding the families' cohesion, most bereaved families fell into the unbalanced categories, enmeshed and disengaged. Evidently, many families respond to the death of a family member by either becoming more dependent upon one another, or by completely disengaging themselves from one another. Analysis on the family status prior to the death would be required, though, to determine if the family alters their amount of cohesion after the death, or if the family was carrying on their previous characteristics. Possibly, this sample, which was acquired through a bereavement support group, consists of a higher than normal percentage of families who fall in the unbalanced levels.

With regard to family adaptability, most of the families were in one of the balanced categories, particularly the "structured" family. However, the second highest percentage of families was of the rigid type, which is an unbalanced type. Most frequently represented of the 16 total family types was an unbalanced type, the rigidly disengaged family. Prevalence of this type among bereaved adolescent families may be a function of the developmental stage the family is in; adolescents strive for autonomy from parents (Erikson, 1959).

For the most part, families were equally distributed among the balanced, mid-range, and unbalanced ranges. One

factor not accounted for in the present study which may influence this distribution of families is how long the family was involved with some form of support such as The Compassionate Friends. Situations which involve families helping other bereaved families cope with a death appear to facilitate the grief process (Klass, 1985).

Future studies can benefit from results of this study which indicate that family variables do indeed influence adolescent bereavement. Family variables should be incorporated in any grief outcome study and all family members should be included in the sample to more accurately represent the family system as a whole. In addition, family cohesion is an issue warranting further attention in bereavement research. Also a larger sample than the current one would result in findings that are more generalizable. Furthermore, acquiring bereaved families from support groups tends to be more convenient, but families not involved with bereavement support groups may be characterized differently and therefore should be included in future studies. Finally, the adolescent age group should be divided into two or three age groups. Thirteen-year-olds likely will demonstrate different bereavement responses than will 19-year-olds. A larger sample could make this age break-down possible.

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Table 1

Family Demographics

Variable	f	%	Mean	SD
Age of Adolescent	15		17.4	1.9
15 Years	2	13.3		
16 Years	5	33.3		
17 Years	1	6.7		
18 Years	3	20.0		
19 Years	1	6.7		
20 Years	2	13.3		
21 Years	1	6.7		
Age of Adolescent at Time of Death	15		14.2	2.5
10 Years	2	13.3		
11 Years	2	13.3		
13 Years	2	13.3		
14 Years	1	6.7		
15 Years	2	13.3		
16 Years	3	20.0		
17 Years	2	13.3		
18 Years	1	6.7		
Age of Child Who Died	13		17.0	5.6
6 Years	1	7.7		
11 Years	1	7.7		
12 Years	1	7.7		
14 Years	2	15.4		
18 Years	3	23.1		
19 Years	2	15.4		
20 Years	1	7.7		
26 Years	2	7.7		
Gender of Adolescent	15			
Male	5	33.3		
Female	10	66.7		
Time Since Death Occurred	15		3.2	2.4
Less than 1 year	4	26.7		
1 to 3 years	3	20.0		
3 to 5 years	5	33.3		
Over 5 years	3	20.0		
Number of Surviving Children	13		2.0	0.9
1	5	38.5		
2	2	15.4		
3	5	38.5		
Missing	1	7.7		
Cause of Death	13			
Auto Accident	4	30.8		
Murder	1	7.7		
Homicide	2	15.4		
Suicide	3	23.1		
Other	3	23.1		
Gender of Child Who Died	13			
Male	9	69.2		
Female	4	30.8		

Table 1 (Continued)

Variable	f	%	Mean	SD
Parents' Marital Status Prior to Death	13			
Married	9	69.2		
Divorced, Single	2	15.4		
Divorced, Remarried	1	7.7		
One Parent Divorced, One Remarried	1	7.7		
Parents' Current Marital Status	13			
Married	8	61.5		
Separated	1	7.7		
Divorced, Single	2	15.4		
Divorced, Remarried	1	7.7		
One Parent Divorced, One Remarried	1	7.7		

Variable	f	%	Mean	SD
Ethnic Background	13			
Caucasian/White	13	100.0		
Family's Income Last Year	12			
Under $10,000	1	8.3		
$10,00 - 19,999	1	8.3		
$20,000 - 29,999	2	16.7		
$30,000 and over	8	66.7		
Family's Current Religion	10			
Baptist	3	30.0		
Catholic	2	20.0		
Christian	1	10.0		
Methodist	2	20.0		
Other Protestant	2	20.0		

SD = Standard Deviation

Table 2

Values of Cronbach's Alpha, Means, and Standard Deviations for Adolescent Bereavement Characteristics and Family System Characteristics

Scale	No. of Items	Alpha[1]	n^1	Alpha[2]	n^2	Mean	SD
HSIB Total	45			.87	14	141.12	21.41
Adolescent Grief	24	.95	158	.90	14	85.88	15.84
Adolescent Growth	21	.90	158	.88	14	55.24	14.40
Family Adaptability	10	.62	2,412	.81	32	22.97	6.97
Family Cohesion	10	.77	2,412	.91	32	35.47	10.01

Mean = Scale mean

SD = Standard Deviation within the scale mean

Alpha[1], n^1 = As reported by scale author

Alpha[2], n^2 = As found in current study

Mean and SD based on 17 respondents for HSIB Total, Adolescent Grief and Adolescent Growth

Mean and SD based on 32 respondents for Family Adaptability and Family Cohesion

No reliability score was provided by the author for the total HSIB scale.

Table 3

Pearson Correlation Coefficients of HSIB and FACES III Subscales

	HSIB (Total)	Grief	Growth	Adaptability	Cohesion
HSIB (Total)	1.00				
Grief	.77**	1.00			
Growth	.50	-.16	1.00		
Adaptability	.24	.35	-.11	1.00	
Cohesion	.44	.71**	-.28	.47	1.00

**$p<.01$

Table 4

Group Comparisons of Bereavement and Adolescents' Perceived Family Adaptability by FACES III

	Adolescents' Perceived Family Adaptability										
	1		2		3		4				
Bereavement Scales	Rigid Mean	SD	Structured Mean	SD	Flexible Mean	SD	Chaotic Mean	SD	F-Ratio	p	Differences Between Groups[1]
HSIB (Total)	129.8	15.0	148.0	10.4	136.5	31.6	145.3	9.3	0.7	n.s.	n.s.
HSIB (Grief)	73.5	1.7	96.0	9.6	83.8	26.1	91.7	13.2	1.6	n.s.	2>1*
HSIB (Growth)	56.3	13.7	52.0	15.8	52.8	14.6	53.7	4.7	0.1	n.s.	n.s.

[1]For exploratory purposes the t-test was used to analyze each pair when F was not significant.

*$p \geq .05 \leq .09$

n.s. = no pairs of groups are significantly different

Table 5

Group Comparisons of Bereavement and Adolescents' Perceived Family Cohesion by FACES III

	Adolescents' Perceived Family Cohesion										
	1		2		3		4				
Bereavement Scales	Disengaged Mean	SD	Separated Mean	SD	Connected Mean	SD	Enmeshed Mean	SD	F-Ratio	p	Differences Between Groups[1]
HSIB (Total)	132.6	12.9	139.0	25.1	134.0	17.0	149.0	22.4	0.7	n.s.	n.s.
HSIB (Grief)	73.8	4.2	79.7	18.8	90.5	23.3	99.8	12.6	3.5	**	4>1** 4>2*
HSIB (Growth)	58.8	10.9	59.3	10.2	43.5	6.4	49.2	13.9	1.3	n.s.	n.s.

[1]For significant F-Ratios, the Tukey HSD procedure was used to evaluate group differences (HSIB, Grief). For exploratory purposes the t-test was used to analyze each pair (HSIB Total and Growth).

*$p \geq .05 \leq .09$

**$p < .05$

n.s. = no pairs of groups are significantly different

Table 6

Group Comparisons of Bereavement and Family Members' Perceived Family Adaptability by FACES III

	Family Members' Perceived Family Adaptability										
	1		2		3		4				
Bereavement Scales	Rigid Mean	SD	Structured Mean	SD	Flexible Mean	SD	Chaotic Mean	SD	F-Ratio	p	Differences Between Groups[1]
HSIB (Total)	132.3	17.2	136.6	19.8	143.6	23.8	147.5	12.0	0.8	n.s.	n.s.
HSIB (Grief)	73.3	2.1	86.2	20.0	90.2	17.3	93.0	18.4	0.8	n.s.	3>1*
HSIB (Growth)	59.0	15.4	50.4	13.3	53.4	13.0	54.5	6.4	0.3	n.s.	n.s.

[1]For exploratory purposes the t-test was used to analyze each pair when F was not significant.

*$p \geq .05 \leq .09$

n.s. = no pairs of groups are significantly different

Table 7

Group Comparisons of Bereavement and Family Members' Perceived Family Cohesion by FACES III

	Family Members' Perceived Family Cohesion										
	1		2		3		4				
Bereavement Scales	Disengaged Mean	SD	Separated Mean	SD	Connected Mean	SD	Enmeshed Mean	SD	F-Ratio	p	Differences Between Groups[1]
HSIB (Total)	131.0	14.3	140.0	1.4	133.4	20.6	155.5	19.7	1.6	*	4>1*
HSIB (Grief)	72.3	2.8	84.5	6.4	84.4	18.8	102.0	13.3	3.3	**	4>1**
HSIB (Growth)	58.8	12.6	55.5	5.0	49.0	15.1	53.5	11.7	0.4	n.s.	n.s.

[1]For significant F-Ratios, the Tukey HSD procedure was used to evaluate group differences (HSIB, Grief). For exploratory purposes the t-test was used to analyze each pair when F was not significant.

*$p \geq .05 \leq .09$

**$p < .05$

n.s. = no pairs of groups are significantly different

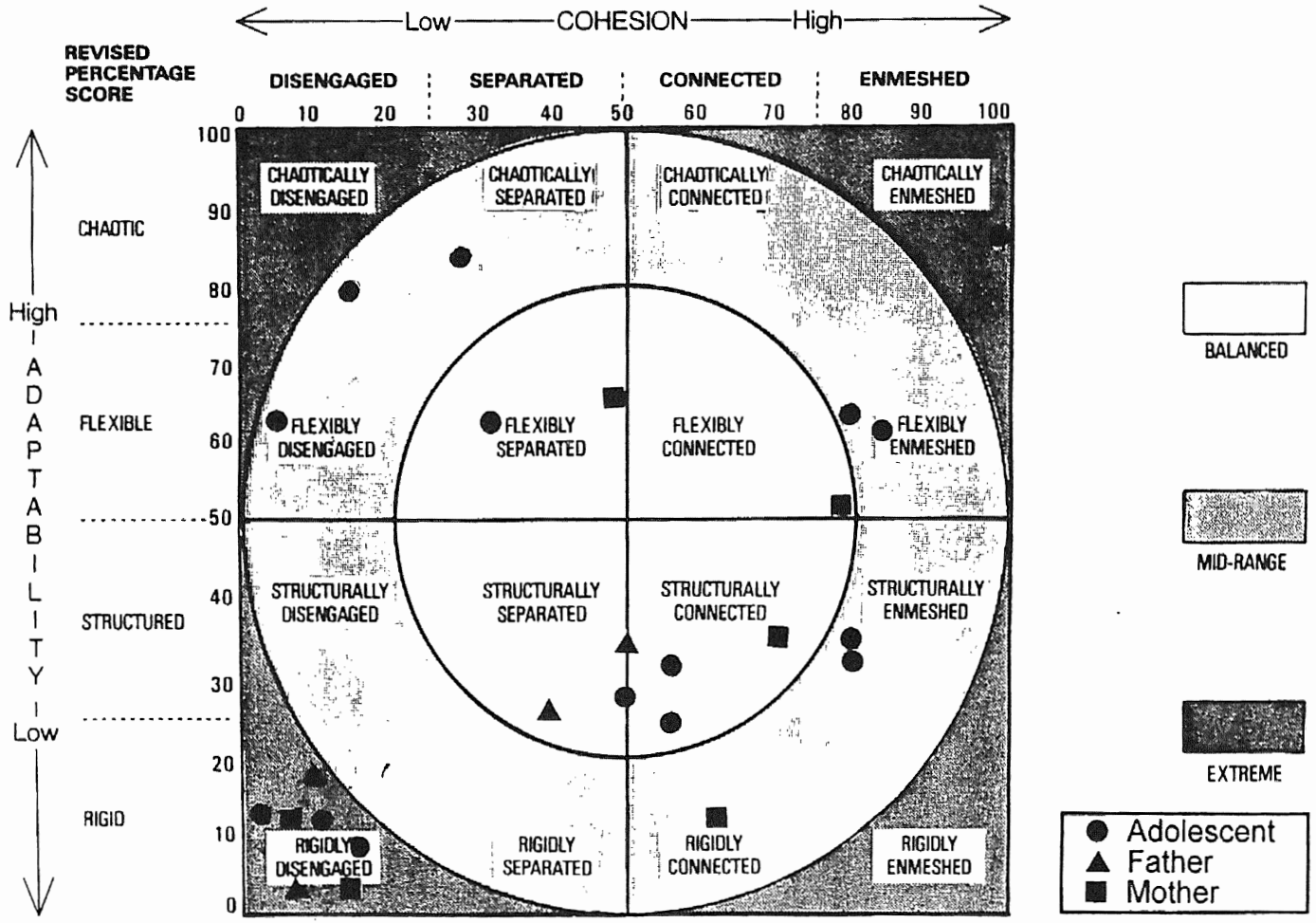

Figure 1. Distribution of Family Members' Perceptions on the Circumplex Model of Marital and Family Systems[1]

[1] Olson, McCubbin, Barnes, Larsen, Muxen, and Wilson (1989)

APPENDIX A

LITERATURE REVIEW

Adolescent Sibling Bereavement

Relatively few scientific studies have examined sibling bereavement compared to the number of studies which focus on parental or child bereavement. Rosen (1986) attributes the lack of sibling bereavement studies in part to the belief that sibling relationships play only a secondary role and are relatively unimportant when compared to parent-child relationships. Studies that do examine sibling bereavement generally focus on long-term effects and adult psychological manifestations of childhood sibling bereavement (e.g., Davies, 1991; Fanos & Nickerson, 1991; Martinson, Davies, & McClowry, 1987), or on young children's bereavement (e.g., Cain, Fast, & Erickson, 1964; Krell & Rabkin, 1979; McCown & Pratt, 1985). Only recently have sibling bereavement studies been concerned with adolescents (e.g., Balk, 1981, 1983a, 1983b, 1983c, 1990, 1991a, 1991b; Hogan, 1987, 1988a, 1988b; Hogan & Balk, 1990; Hogan & DeSantis, 1992; Hogan & Greenfield, 1991; Morawetz, 1982).

There has yet to be consensus in the literature regarding what age children are capable of cognitively understanding the concepts of death and grief (Osterweis, Solomon, & Green, 1984; Rosen, 1986; Sekaer, 1987). However, there is general agreement that by the age of 7, children become aware of the irreversibility of death.

Although there is still debate about what age children begin to comprehend the concept of death, there is consensus in the literature that by the time individuals reach adolescence (approximately 12 years old), they already have the cognitive skills which enable them to mourn and to understand the meaning of death (Johnson, 1987; Osterweis et al., 1984; Rosen, 1986).

For the above-mentioned reasons; 1) that sibling bereavement has been underrepresented in the literature and 2) that there is consensus in the literature that by the time individuals reach adolescence, they are already cognitively equipped to comprehend death; the issue of adolescent sibling bereavement has been chosen as the focus of the present work.

In many of the studies which have examined adolescent bereavement, adolescence was selected as a focal point because many researchers believe adolescence to be a particularly vulnerable time in terms of significant relationship losses (Adams & Deveau, 1987; Balk, 1990; Fanos & Nickerson, 1991; Osterweis et al., 1984; Raphael, 1983). However, this statement is either not based on scientific findings, or is not supported by the data (with the exceptions which will be discussed). Balk's (1990) findings, for example, did not support the statement that adolescence is a particularly vulnerable time with regard to relationship loss. The self-concept of adolescents who had experienced the death of a sibling was investigated by Balk

using the Offer Self-Image Questionnaire for Adolescents (OSIQ). The OSIQ is a self-report inventory designed specifically for self-concept research with adolescents. The inventory includes a 6-point Likert-type scale that asks adolescents how well each of the 130 items describes them. If adolescents are at a vulnerable point in their lives in terms of significant relationship losses, as is often stated in the literature, there is a possibility that their self-concept would be lower than that of their non-bereaved peers. However, descriptive analysis of Balk's results showed that the sample of bereaved adolescents fit the category identified as the adolescent norm group; the resulting OSIQ scores approximated the norm group mean of 50.

In contrast, however, a study of bereavement commissioned by the National Institute of Mental Health revealed that of all age groups, adolescents are particularly vulnerable to the risks of medical, psychiatric, and behavioral dysfunction following the death of a sibling (Osterweis et al., 1984). Similarly, Fanos and Nickerson (1991) also found significant results supporting the claim that bereaved adolescents are more vulnerable with regard to significant relationship losses than people in other age groups. The results indicated that bereaved siblings who were between 13 and 17 years of age at the time of the death expressed more symptoms (guilt, global anxiety, bodily concerns, feelings of vulnerability, and fear of

intimacy, to name a few) than bereaved siblings in the 9-12 age group and the 18 and older age group. Anxiety and depression scales for the study were derived from the Hopkins checklist. Various guilt dimensions were measured using a 3-point scale which was developed specifically for the study.

Rutter (1979) described adolescence as a period of vulnerability for some, but not necessarily all individuals. Rutter concluded that the concept of the adolescent identity crisis cannot be substantiated from the data currently available. Rutter's perspective will be taken into consideration for the present work. That is, in order to give a thorough and accurate review of the literature on adolescent sibling bereavement, a section will discuss adolescence that is characterized as being problematic and a period of critical developmental issues since it is so often presented this way in the literature. However, since the view of adolescence as being particularly developmentally problematic is not substantiated by data, and not all of the researchers view adolescence as problematic, the major portion of this review will focus on issues of adolescent sibling bereavement that do not incorporate the belief of adolescence as problematic. Following the discussion of problematic developmental issues for bereaved adolescents, bereavement responses will be discussed. Next, factors influencing adolescent sibling bereavement will be covered with emphasis being placed on family factors since the focus

of the present study is familial influence on the bereavement process.

Results from clinical assessments of bereaved individuals have suggested that the experience of grief in cases of suicide differs considerably from that experienced as a result of death by illness or accidents (Barrett & Scott, 1989). Therefore for this review, the terms "grief" and "bereavement" will be limited to that experienced as a result of an illness or accident only.

Problematic Developmental Issues for Bereaved Adolescents

As was mentioned, much of the literature on adolescent bereavement portrays adolescence as a time of upheaval, with normal adolescent crises intensified by the tragedy of the death of a loved one. This belief stems from Erik Erikson's (1959) suggestion that adolescence is a developmental crisis of "identity versus identity diffusion." Furthermore, Erikson believed that adolescents are confronted with developmental and situational issues which are unique to their life stage (1964). Efforts to achieve emotional and physical separation from parents, as well as efforts to gain control over their own emotions, body, and newly found skills are all attempts to acquire personal identity. In addition, Erikson theorized that this stage in life when individuals undergo inner struggles about who they are, the meaning of life, and the purpose of religion (1964). Balk (1990) added that as adolescents resolve themselves

regarding these issues, they then begin to establish their self-concept.

Self-concept was defined by Balk (1990) as the manifestation of the syntheses of specific transformations in consciousness, such as formal operational thinking, postconventional morality, religious development, and identity formation. The definition of self-concept given earlier by Balk was, "...the perspectives individuals maintain regarding specific and overall personality aspects" (1983a, 1983b). Balk and other adolescent bereavement investigators have measured self-concept using the Offer Self Image Questionnaire (Balk, 1983b, 1983c, 1990; Hogan & Greenfield, 1991). Although Balk did not scientifically investigate how adolescents establish their self-concept, he did, as was already discussed, support the claim that bereaved adolescents' self-concept is not lower than their non-bereaved peers. In addition, Balk found that depending upon which range the OSIQ self-concept score fell in, the grief responses were significantly different. For example, those bereaved adolescents who had high self-concept scores were most likely to feel confused and to have trouble eating; they were not depressed and had no sleeping problems. Bereaved adolescents with average self-concept scores were more likely to feel angry after the death; they also had less trouble eating than the other scorers. Low scores on the self-concept scale were indicative of depressed individuals who were afraid after the death; they

contemplated suicide and had difficulty sleeping. Even though Balk did not find differences in bereaved versus non-bereaved adolescents, what he did find was important and warrants further research.

Although some studies of self-concept contradict each other regarding how self-concept is affected by external variables, researchers generally agree that self-concept is a significant factor of influence in the grief process. Michael and Lansdown (1986) found a positive correlation between sibling bereavement and low self-concept, which is somewhat contradictory to Balk's (1990) findings. To measure self-concept, Michael and Lansdown used a paper and pencil test in which each sibling rated him/herself in response to a list of characteristics as s/he is ('self as I am') and as s/he would like to be ('ideal self'). The discrepancy between the two was used as a measure of the sibling's self-concept. The results showed a significant difference in the way siblings perceived themselves and their "ideal self." They always rated themselves unfavorably. This study, however, is limited in that no control group was used and the sample consisted of only 28 subjects. Also, these results are limited in their comparability with Balk's (1990) results as the researchers' methodologies were different and Michael and Lansdown's sample was not limited to adolescents; their subjects' ages ranged from 5 to 21 years.

In addition to Erikson's "normal" adolescent issues--identity and self concept--being a concern during the bereavement of a sibling, another related issue is important too. In conjunction with an adolescent's attempt to establish an identity, s/he will also attempt to establish independence (Erikson, 1964). However, with the death of a sibling, adolescents become vulnerable in that two things that they value are lost: a sibling relationship and parental attention (Rosen, 1986). Consequently, adolescents struggle with the desire for independence, and at the same time, the need for comfort and support from family members.

Frequently, however, adolescents receive less attention from parents after the death of the sibling. Rosen (1986) discussed a sibling loss survey in which 159 subjects completed a grief response questionnaire which was developed specifically for the study. Of those 159 subjects, 34 were randomly selected to partake in a personal interview conducted by Rosen. The interview resulted in 62 percent of 34 siblings reporting that their parents never even discussed the death with them (1986). Thirty-three percent of the 159 subjects reported in the questionnaire that their mother was depressed and/or withdrew from the family; 27 percent reported that their father was depressed and/or withdrew (Rosen, 1986). Thus, the results support the statement that parental attention is decreased when a sibling dies.

Adolescent Sibling Bereavement Responses

The process of adjustment to the loss of a sibling continues for many years, sometimes throughout the life span (Rosen, 1986). Bereaved adolescents respond to the death of a sibling in a variety of ways emotionally, physically, and behaviorally.

Emotional Responses

Several emotional manifestations have been found repeatedly in studies of adolescent grief. Balk (1983a, 1983b, 1983c, 1990) interviewed 33 adolescents in a retrospective interview format. The subjects reported their emotional responses after the death and at the time of the interview. The results are as follows: shock (87.9%/30.3%), confusion (87.9%/51%), depression (81.8%/45.5%), anger (75.8%/27.3%), numbness (66.7%/12.1%), fear (57.6%/24.2%), and guilt (54.5%/39.4%). Cain et al. (1964) also stated that confusion was a common bereavement response, although no statistics were provided to support this claim. Furthermore, their data were acquired from case files at clinical settings, so the results are somewhat limited. Fanos and Nickerson (1991), as was already mentioned, found statistically significant higher mean scores on the emotional responses of anxiety, depression, and guilt for those who were adolescents at the time of the sibling's death than people in other age groups. Other self-report studies found the following emotional responses:

denial, helplessness, sadness, vulnerability, restlessness, loneliness, and strengthened emotional bonds (Glass, 1990; Martinson & Campos, 1991; Oltjenbruns, 1991; Rosen, 1986).

Guilt is one of the most common emotional responses reported by bereaved adolescents (Balk, 1983a, 1983b, 1983c, 1990; Cain et al., 1964; Fanos & Nickerson, 1991; Krell & Rabkin, 1979). Various forms of guilt were reported, mostly in interviews with the just-mentioned authors. Some siblings reported feeling guilty over the way they handled the relationship with the sibling when s/he was still alive. Survivor guilt is common; many feet guilty that they did not die too or instead of their sibling. Some feel responsible for the death, or feel guilty for having previously wished the sibling were dead. Some even feel guilty for feeling "special" for having lost a sibling through death (Rosen, 1986). Although most cases of guilt feelings are self-inflicted, sometimes parents and others impose guilt on the adolescent if they believe the child showed no regret or sadness (Cain et al., 1964). Cain et al. stated that in one-quarter of the cases studied, guilt regarding the death was imposed by the parent. In some cases the parents were guilty themselves, but claimed that the child was feeling guilty. However Cain et al. did not explain how they came to this conclusion.

Physical Responses

Bereaved adolescents generally experience an increase

in physical symptoms after the death of a sibling (Balk, 1983a, 1983b, 1990; Fanos & Nickerson, 1991; Martinson & Campos, 1991). Sleeping and eating disturbances were often self-reported in interviews by adolescents as were severe headaches, ulcers, and chronically tense and painful muscles and joints (Balk, 1983a, 1983b, 1990; Fanos & Nickerson, 1991; Martinson & Campos, 1991). These physical complaints may in fact be the result of not overtly expressing grief. This method of response is very common in bereaved adolescents. Rosen's (1986) interview with 34 subjects was conducted to determine how siblings perceived that the loss had affected their lives. Seventy-six percent of them stated that they had not shared their grief with anyone. In Rosen's survey, over 50 percent volunteered (this question was not asked of them) that they shared their feelings with no one. One unanswered question, though, is why the adolescents are not opening up to anyone. Do they withdraw because others around them do not want to talk about the death, or because the adolescents themselves do not want to talk about the loss? Possibly both contribute. This issue has yet to be adequately addressed.

Behavioral Responses

Following a significant loss, adolescents may feel compelled by those around them to exhibit adult-like behavior, even though they desire the security of their childhood. Their overt behaviors may be directed toward

comforting other family members as they stifle their own emotions and desired behaviors such as crying (Rosen, 1986). Incidentally, this is a situation which is believed, although has not been proven to make individuals susceptible to unresolved grief--assuming a facade of stoicism and independence and never opening up to anyone (Glass, 1990; Michael & Lansdown, 1986). Similarly, when anger is continually expressed through negative behaviors, the adolescent may actually be channeling their sadness and hurt in what they see is a safer, more acceptable manner. McCown and Pratt (1985) measured bereaved sibling behavioral adjustment using the standardized Child Behavior Checklist, an 118-item checklist of childhood behavior problems. Mothers indicated on the list those behavior problems which were exhibited by their child subsequent to the sibling's death. The results showed that children exhibit significantly increased behavior problems following the death of a sibling. The following is a list of some of the variables which were related to siblings who were particularly vulnerable to behavioral disturbances: siblings aged 6 to 11 years, those who previously had behavioral difficulties, and siblings of deceased males.

Michael and Lansdown (1986) asked parents to complete the Rutter scale which indicates bereaved adolescents who exhibit behavioral difficulties. Ten of the 23 subjects fell into the behaviorally difficult category. Although these were not significant differences, there was one

notable significant relationship. The siblings who were behaviorally difficult differed from the others in that they experienced fewer "facilitative experiences" such as having the knowledge that their sibling would die, or having the opportunity to say goodbye to their sibling before the death. However, four of the ten subjects who exhibited behavioral difficulties had also experienced a high number of "facilitative experiences."

Another bereavement behavior noted by adolescents, their parents and teachers is withdrawal from some or all of their peers. In Michael and Lansdown's (1986) study, teachers as well as the parents completed the Rutter scale. One of the most common problems identified by teachers was that the bereaved sibling tended to do things alone. There is, as was mentioned, difficulty in determining sometimes who withdraws from whom. In many instances peers are too uncomfortable in the company of their bereaved friend, so they avoid them. Nevertheless, as self-reported in an interview, sometimes bereaved adolescents feel they have nothing in common with their friends anymore, so they pull away from them (Glass, 1990).

A very common behavioral change in bereaved adolescents is weakened study habits, which very likely generates from the inability to concentrate. Consequently, grades are often affected. Twenty-three of Balk's 38 subjects reported during an interview that their study habits "became worse." Eighteen subjects reported that their grades had become

lower after the death (Balk, 1990). However, Glass (1990) and Balk (1991) both found that study habits and grades later returned to normal for most adolescents. Not all adolescents find a decrease in grades, though. Some reported that immersing themselves in their schoolwork proved to be therapeutic to them (Rosen, 1986).

Positive Bereavement Responses

While most bereavement studies focus on negative consequences of the death, some recent works have found that positive outcomes are also reported by bereaved adolescents. Using the OSIQ, Balk (1983a, 1983b, 1990) found a significant difference in the mean scores of perceived maturity before the sibling's death and at the time of the interview. The interview was conducted 4 to 84 months after the sibling's death. Content analysis indicated that the reasons given for perceptions of increased maturity were based on the changes accompanying the sibling's death. In addition, in Balk's 1990 study, all but 2 of the 42 subjects reported in interviews that they considered themselves more mature than they were prior to the death. Davies (1991) also found perceived personal maturity as a common response of bereaved adolescents (self-reported during interviews). Adolescents in Davies' study reported the following factors which contribute to this maturity: being forced to face one's own mortality, appreciating life as a gift, a sense of being able to help others cope with a death, having a

sensitive outlook on life and toward parents, and acquiring the confidence to cope successfully with stress. Davies speculated that another reason for a sense of increased maturity is that surviving siblings are often forced to undergo role changes which are accompanied by additional responsibilities in order to pick up the slack left by the deceased sibling and emotionally drained parents (Davies, 1991). Hogan (1988b) found that adolescents did in fact appear to be conscious of their parents' emotional state. The adolescents replied to a 109 item version of the Hogan Sibling Inventory of Bereavement (HSIB). Many of them indicated that they behaved deliberately in order to relieve their parents of despair. For example, they attempted to appear happy when their parents were around.

Another positive adolescent bereavement response that adolescents reported was their decision to turn to religion for support. Balk (1983a, 1983b, 1983c, 1991b) found a significant difference in the degree of importance that teenagers placed on religion at the time of death (as self-reported in a retrospective interview) and at the time of the interview. Religion became more important as the adolescents coped with the death. Possibly, bereaved individuals question their religion immediately following the death due to the perceived unfairness of life. Cain et al. (1964) reported different findings (without supporting statistics). Their data from psychiatric case files suggest that following a sibling death many children remained

confused about God's role, and many continually feared or hated God. However no length of time since death was provided for the cases. Adolescents may question their religion initially, but many times will eventually cling to it more intensely for solace and for an answer to the question, "Why did s/he die?" Thus, religious belief may be viewed as a coping process, a facilitator for the coping process, and a result of the coping process (Balk, 1991b).

Factors Influencing Adolescent Sibling Bereavement

Predicting the outcome of adolescent sibling bereavement is virtually impossible. There are, however, numerous factors which tend to predispose adolescents to certain bereavement responses. Variables frequently addressed are religion, social support, individual characteristics, circumstances surrounding the death, and the family.

Religion

Although religion is frequently used by adolescents as a coping mechanism during bereavement, often adolescents question their religion during the initial stages of mourning (Balk, 1983b, 1983c, 1991b). Religion does not appear to make coping easier, but does predict differing bereavement reactions. For example, statistically

significant results showed that religious adolescents reported more confusion while nonreligious adolescents reported more depression and fear (Balk, 1991b). These results were obtained from responses to interview questions which were created for Balk's study. A greater proportion of bereaved Catholics discussed the death within their families than did Protestants according to Rosen (1986). Rosen's finding, though, was based on a very small number of subjects. Bereaved adolescents are highly susceptible to letting religion influence them since they are at a time in life when they normally examine their religiosity, and religiosity may provide for them meaning in the midst of tragedy that may have seemingly occurred for no reason.

Social Support

Social support is an intervening variable which can serve to soften the trauma of bereavement. Support systems external to the family are very important since the entire family is consumed with their own as well as family grief. Unfortunately, society turns its back on bereaved persons, especially children and adolescents. In Rosen's (1986) survey, surviving siblings reported a total of 32 reported comments from members of the "bereaved community." Included in the bereaved community were friends, neighbors, teachers, and other acquaintances. Thirty of the 32 responses were viewed negatively by the siblings who reported them. Often, exchanges between the acquaintance and the sibling involved

uncomfortableness between them (Rosen, 1986). Silence and comments such as, "Be strong for your parents," do not recognize the sibling grief as legitimate grief. Fortunately, though, there has recently been a growing trend toward mutual-help bereavement support groups such The Compassionate Friends (Klass, 1985). Such groups provide grieving parents and siblings support from other bereaved families.

Individual Characteristics

Countless individual characteristics have been found to be associated with various bereavement responses. Gender may be related to how an adolescent grieves. Balk's (1983a) study suggests that confusion about the death of a sibling was reported by significantly more females than males. Females who were older than the sibling who died were significantly less likely than other siblings to feel shock in the first weeks of a bereavement while older brothers were more likely to feel fear initially. McCown and Pratt (1985), though, found that there was no difference in behavior scores between the genders, as measured by the Child Behavior Checklist. The gender of the deceased sibling, however, was influential on the bereaved siblings' behavior. When the deceased child was male, the sibling had a higher probability of exhibiting behavior problems than when the deceased child was female.

Circumstances of Death

The literature suggests that grieving adolescents respond according to the circumstances of the death. For example, anticipated deaths are easier to cope with than a sudden death because forewarning allows the opportunity to at least cognitively prepare for the death (Osterweis et al., 1984). Michael and Lansdown (1986) reported a significant negative correlation between the number of "facilitative" experiences (e.g., participation in the patient's care or previously experiencing the death of a pet) that siblings had and their self-concept scores as measured by a paper and pencil self-concept test. Michael and Lansdown also found a negative correlation between self-esteem scores and the duration of the illness. Therefore, home dying care may not always be beneficial for some siblings. Home deaths may, however, be beneficial for some in that the parents are more readily available for support than if they were always at a hospital (Martinson & Campos, 1991; Michael & Landsdown, 1986). Another circumstantial issue is the age of the survivor when the sibling died (Fanos & Nickerson, 1991), which was discussed earlier.

The cause of death is another very important circumstantial factor which influences grief responses. Suicide and homicide are viewed as the most difficult types of death to accept (Krupnick & Solomon, 1987; Osterweis et al., 1984). Each kind of death is associated with a unique set of anxieties.

Family

The family is undoubtedly one of the most influential factors in determining how an adolescent responds to the death of a sibling. Parental bereavement responses are important family variables as they, in turn, influence sibling grief responses. Parents often are entrenched in their own grief and consequently are likely to inadvertently withdraw emotional support from the surviving siblings (Adams & Deveau, 1984). As was previously mentioned, Rosen (1986) found that 33 percent of the survey respondents reported that their mother withdrew, and 27 percent reported that their fathers were more distant after the death. The siblings may turn to their father for support, but he provides little emotional support as he is bereft of his child and his wife.

Parents who are consumed with guilt and encourage silence regarding the death, parents who overprotect the surviving children, and parents who create a replacement child lead to what Krell and Rabkin (1979) termed the "Haunted," "Bound," and "Resurrected" child respectively, three types of families at risk. Moreover, the Cain et al. (1964) study suggests that parents who had expectations for a surviving child to equal or surpass achievements of the deceased child may have contributed to the child requiring psychiatric treatment.

Maternal grief may be particularly influential in sibling grief responses. Three cases were studied by Mufson

(1985), and a common theme among bereaved siblings was fear of being overwhelmed by their mother's grief. Consequently, the siblings attempted to be "models of normalcy" in order to try to help their parents out of their grief and back to normal family life (Mufson, 1985). Cain et al. (1964) found when studying the mothers of their clinical subjects that many of the mothers were incapable of providing love and attention for their surviving children.

Michael and Lansdown (1986), though, found no relationship between parental emotional disturbance and family adjustment. Parental emotional disturbance was measured using the Malaise Inventory, a self-report indicator of emotional disturbance. Family adjustment was measured by a 17-item questionnaire which was developed specifically for this research.

In addition to the influence of parental bereavement, the literature has suggested that the pre-death sibling relationships are also crucial variables affecting bereavement responses (Bank & Kahn, 1982; Davies, 1991; Dunn, 1985). For example, the loss of a relationship which was marked with ambivalence or a high level of dependence may be more difficult to endure. In these cases, idealization of the deceased sibling is common, and such idealization does not facilitate grief resolution. However, the existence of pre-existing relationships has not been adequately supported by scientific research.

Family cohesion, adaptability, and communication are three closely related concepts which have been addressed in the family bereavement literature. Family cohesion refers to the emotional bonding that family members have toward one another (Olson, McCubbin, Barnes, Larsen, Muxen, & Wilson, 1989). Family communication and cohesion are concepts frequently used in conjunction with one another. How a family communicates and the family level of cohesion are significant in influencing bereavement responses (Balk, 1983a; Davies, 1991). Balk (1983a) operationally defined family coherency as "an average of each participant's perceptions of how often he/she discussed personal matters with individual family members and how close he/she felt to each family member prior to the sibling's death." The results from Balk's study indicate that perceived family communication and cohesion (as measured by the OSIQ) significantly differentiate bereaved adolescent siblings' responses. Adolescents who reported in the interview that their families were emotionally close and had effective personal communication responded initially to a sibling's death with shock, numbness, fear, loneliness, and depression. However, siblings who perceived their family as having sparse communication and emotional distance felt guilt and anger about the death of their sibling. Difficulty in communicating with family members impedes grief resolution because it forces the adolescent to face grief alone. Unfortunately, many of the families studied

said the family never actually discussed the death of the sibling (Balk, 1983a; Cain et al., 1964; Krell & Rabkin, 1979; Rosen, 1986).

Davies, Spinetta, Martinson, McClowry, and Kulenkamp (1986) categorized "open" families, those who share information among themselves, as functional; while "closed" families who do not allow free expression for all members were labeled dysfunctional. Krell and Rabkin (1979) also suggest that the lack of communication among bereaved family members may result in problems for family members. Siblings whose family members remain silent about the death are what Krell and Rabkin call the "Haunted" Child. This sibling lives with uncertainty, distrust, and fear. Similarly, Cain et al. (1964) found that many of their clinical subjects had parents who prohibited discussion of the deceased child or feelings resulting from the death.

Lack of family communication is not only found in clinical samples. Rosen (1986) reported that of the siblings who were asked whether their family discussed the death, 62 percent said no. Rosen also discussed a case in which the lack of communication hindered the family's ability to establish new coping patterns and to adapt to life after the death of their loved one. Ironically, Rosen concluded from her survey that there was no significant correlation between the amount of perceived family communication and the age of the children, the circumstances surrounding the death, family size, or the family's

socioeconomic status (Rosen, 1986). Possibly previous communication patterns tend to carry over to post-bereavement relationships.

Adaptability is defined by Olson et al. (1989) as the ability of a marital or family system to change in power structure, role relationships, and relationship rules in response to situational and developmental stress. Krell and Rabkin (1979) also refer to adaptation as a family process, one that is much more complex than the sum of individual family members' bereavement responses. Davies et al. (1986) found that functional bereaved families were more adaptive in their reorganization than were dysfunctional bereaved families. Hogan (1988a) developed the Hogan Sibling Inventory of Bereavement (HSIB), which is a measure of adolescent sibling bereavement adaptation following the death. The adolescent respondents reported that in time they as well as their mothers adapted more functionally than they perceived that their fathers had (Hogan, 1988b).

Families vary in the amount of cohesion and adaptability that they have. The Circumplex Model of Marital and Family Systems, developed by Olson, Sprenkle, and Russell (1979), incorporates family cohesion, adaptability, and communication. According to the model, there are four levels of family cohesion ranging from low to high: disengaged, separate, connected, and enmeshed. Similarly, there are four levels of adaptability: rigid, structured, flexible, and chaotic.

For both the cohesion and adaptability dimensions, the balanced levels are hypothesized to be more conducive to family functioning than are either of the extreme, or unbalanced levels. Balanced types on the cohesion dimension include families who fall into the separate and connected categories. Families that are balanced on the adaptability dimension include those which are structured and flexible. Extreme levels, or unbalanced types, on the cohesion dimension are disengaged and enmeshed. Extreme levels on the adaptability dimension are the unbalanced types, rigid and chaotic. A third dimension of the Circumplex Model is family communication, which facilitates movement on the other two dimensions (Olson et al., 1989). By combining both family cohesion and adaptability into the Circumplex Model, sixteen types of family systems may be identified.

The Family Adaptability and Cohesion Evaluation Scales (FACES III) was the third version of FACES scales developed by Olson, Portner, and Lavee (1985) in order to assess the two major Circumplex Model dimensions, i.e., family cohesion and family adaptability. FACES III thus allows for families to be placed within the Circumplex Model.

Experiencing the death of a sibling is one of the most traumatic events a person can endure. Considering that sibling relationships are usually the longest lasting relationships that can occur, one may wonder why more attention has not been devoted to the impact of incurring the death of a sibling. Clearly the literature suggests