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*Traumatic life events and the sense of coherence (SOC)
in adolescents*

According to Antonovsky's theory, a sense of coherence is a salutogenetic life orientation determining the individual's location on the health-disease continuum. This life orientation is formed in the individual's life course. A sense of coherence consists of three components: manageability (MAN), comprehensibility (COM) and meaningfulness (MEA). Such a way of perceiving life events becomes crystallized around the age 30.

The effects of upbringing depend to a high degree on the relations of father and mother with a child, which are important factors in the development of personality (1).

Traumatic experiences, physical and emotional abuse that occurred in childhood and adolescence are important modifiers of the development of the sense of coherence. The effect of the family environment on the development of the sense of coherence was studied by Wolff and Ratner (12). Margalit, Aviv and Ankonna (8) were trying to find the relationship between the sense of coherence and the atmosphere in the family environment and strategies of coping with stress. They found that parents of children with behavioural disorders had the lower sense of coherence than parents of children without behavioural problems.

The aim of the study was to test some hypotheses concerning traumatic life events and sense of coherence (SOC) in the group of secondary school students (age 16–19). The experience of traumatic events was analyzed, and then the relationship between these data and the sense of coherence was assessed.

MATERIAL AND METHODS

The study was conducted on 439 secondary school students, age 16–19 (285 girls and 154 boys) from October 2004 to June 2005 in Lublin Province. Our own questionnaire was used in the study to evaluate traumatic life events. The level of the sense of coherence was measured by the Life Orientation Questionnaire (SOC-29). Mann-Whitney U-test was used to study the significance of differences between the values of SOC in two groups classified according to: 1. experience of physical abuse in the family (no/yes), 2. experience of emotional abuse in the family (no/yes), 3. alcoholism in the family (no/yes), 4. serious disease in the family (no/yes), 5. death in the family due to accident or disease (no/yes).

RESULTS AND DISCUSSION

Tables presented here contain the results of Mann-Whitney U-tests for the classification into two groups.

Table 1. Alcoholism in the family (no/yes)

Results of Mann-Whitney U-test Classification according to alcoholism in the family group 1 – no, group 2 – yes				
Variable	median group 1	median group 2	Z	p
Global sense of coherence (SOC)	4.26	4.07	5.3366	0.000000
Comprehensibility (COM)	3.82	3.64	5.4070	0.000000
Manageability (MAN)	4.40	4.30	3.3487	0.000813
Meaningfulness (MEA)	4.62	4.50	4.7696	0.000002

Table 2. Serious disease in the family (no/yes)

Results of Mann-Whitney U-test Classification according to serious disease in the family group 1 – no, group 2 – yes				
Variable	median group 1	median group 2	Z	p
Global sense of coherence (SOC)	4.24	4.10	3.7133	0.000205
Comprehensibility (COM)	3.82	3.68	3.5627	0.000368
Manageability (MAN)	4.40	4.30	3.4816	0.000499
Meaningfulness (MEA)	4.62	4.62	1.8992	0.057551

Table 3. Death in the family due to accident or disease (no/yes)

Results of Mann-Whitney U-test Classification according to death in the family due to accident or disease group 1 – no, group 2 – yes				
Variable	median group 1	median group 2	Z	p
Global sense of coherence (SOC)	4.24	4.14	2.1270	0.033432
Comprehensibility (COM)	3.82	3.64	3.5230	0.000427
Manageability (MAN)	4.40	4.30	2.1980	0.027956
Meaningfulness (MEA)	4.62	4.75	0.1820	0.855564

Table 4. Experience of physical abuse in the family (no/yes)

Results of Mann-Whitney U-test				
Classification according to experience of physical abuse in the family				
group 1 – no, group 2 – yes				
Variable	median group 1	median group 2	Z	p
Global sense of coherence (SOC)	4.24	4.10	4.1025	0.000041
Comprehensibility (COM)	3.82	3.55	3.9805	0.000069
Manageability (MAN)	4.40	4.30	3.2644	0.001098
Meaningfulness (MEA)	4.62	4.50	3.2752	0.001057

Table 5. Experience of emotional abuse in the family (no/yes)

Results of Mann-Whitney U-test				
Classification according to experience of emotional abuse in the family				
group 1 – no, group 2 – yes				
Variable	median group 1	median group 2	Z	p
Global sense of coherence (SOC)	4.28	4.00	7.8360	0.000000
Comprehensibility (COM)	3.82	3.55	5.6416	0.000000
Manageability (MAN)	4.50	4.10	8.0212	0.000000
Meaningfulness (MEA)	4.75	4.25	7.0624	0.000000

Table 6. Experience of physical abuse in the family (in boys) (no/yes)

Results of Mann-Whitney U-test				
Classification according to experience of physical abuse in the family (in boys)				
group 1 – no, group 2 – yes				
Variable	median group 1	median group 2	Z	p
Global sense of coherence (SOC)	4.28	4.24	0.1498	0.880953
Comprehensibility (COM)	4.00	3.73	1.6299	0.103139
Manageability (MAN)	4.50	4.60	-1.3953	0.162928
Meaningfulness (MEA)	4.63	4.63	0.1662	0.868009

Table 7. Experience of emotional abuse in the family (in boys) (no/yes)

Results of Mann-Whitney U-test				
Classification according to experience of emotional abuse in the family (in boys)				
group 1 – no, group 2 – yes				
Variable	median group 1	median group 2	Z	p
Global sense of coherence (SOC)	4.31	4.17	2.5697	0.010183
Comprehensibility (COM)	4.00	3.86	1.8138	0.069724
Manageability (MAN)	4.50	4.30	3.0734	0.002118
Meaningfulness (MEA)	4.63	4.38	3.0975	0.001953

Table 8. Experience of physical abuse in the family (in girls) (no/yes)

Results of Mann-Whitney U-test				
Classification according to experience of physical abuse in the family (in girls)				
group 1 – no, group 2 – yes				
Variable	median group 1	median group 2	Z	p
Global sense of coherence (SOC)	4.17	3.97	4.7786	0.000002
Comprehensibility (COM)	3.73	3.45	3.7714	0.000163
Manageability (MAN)	4.40	4.00	4.8527	0.000001
Meaningfulness (MEA)	4.75	4.25	3.8825	0.000104

Table 9. Experience of emotional abuse in the family (in girls) (no/yes)

Results of Mann-Whitney U-test				
Classification according to experience of emotional abuse in the family (in girls)				
group 1 – no, group 2 – yes				
Variable	median group 1	median group 2	Z	p
Global sense of coherence (SOC)	4.24	3.86	7.3919	0.000000
Comprehensibility (COM)	3.82	3.55	5.2509	0.000000
Manageability (MAN)	4.50	3.95	7.4694	0.000000
Meaningfulness (MEA)	4.75	4.13	6.3811	0.000000

Antonovsky (1) stresses the effect of emotional climate in relations between a child and close family and full acceptance of models of upbringing on the development of strong sense of coherence. He thinks that communicating a message to a child that he or she is an important person is significant for child's early life experience.

Ziemska (13) and Wolf and Ratner (12) observed the effects of apparent rejection of a child in the process of upbringing. Rejection generates anxiety, shyness and aggression. A significant relationship between the low sense of coherence and negative attitude of parents (rejection and demanding attitude) was observed in patients with neurotic disorders by Szymona (11).

The results obtained in this study reveal that teenagers experiencing emotional abuse in the family have a significantly lower sense of coherence in a global scale and all subscales of SOC-29 test in comparison with the teenagers without similar traumatic experience. The experience of physical violence in the family did not affect SOC in boys. Girls experiencing physical violence had lower SOC in the global scale and all subscales. This may be related to different psychological and behavioural consequences in both sexes (6). Reactions in boys tend to be directed outside, while the girls tend to internalize (4).

Both boys and girls experiencing violence model their behaviour on their dysfunctional family (7). Boys who cannot cope with difficult situations hit out and take over the model of solving the problems using violence, while girls are at risk of being victims (2). Ney (9) stresses that emotional abuse affects person's self-esteem and attitude to the world to a much higher degree than other types of violence. Špila et al. also revealed a destructive effect of emotional violence experienced in childhood on the patients' mental health (10).

Persons from families with alcoholism had significantly lower sense of coherence in the global scale and all subscales of SOC-29 questionnaire in comparison with persons without the similar problem. Young adults from families with alcoholic problems present a significantly lower sense of

coherence in a global scale and all subscales of SOC-29 questionnaire. Members of these families are not able to cope with confusion, embarrassment and chaos in their family life (3). They are often unaware of the significant effect of the emotional stress they experience on their general health and try to find a remedy in sedatives or analgesics and frequent visits at the doctors. Symptoms they complain of such as migraine, neurotic disorders, gastrointestinal disorders or problems with weight gain may be related to stress in their dysfunctional family (7).

In teenagers affected by a serious disease in the family a significantly lower sense of coherence in the global scale and all subscales of SOC-29 questionnaire was observed. Persons who had experienced death of a close family member had a significantly lower sense of coherence in all scales of SOC-29 questionnaire except in the subscale of meaningfulness. This is the evidence that adolescents who had experienced traumatic events (death of a close family member, serious disease in the family, violence or alcoholism in the family) find it difficult to cope well with problems of life and the surrounding world seems to them less comprehensive and meaningful. Negative effect of traumatic events on the sense of coherence was also showed by Wolff and Ratner (12).

CONCLUSIONS

1. Adolescents who had experienced traumatic events in the childhood (serious disease in the family or alcoholism) cope with problems of life much worse and the surrounding world seems less comprehensive and meaningful.

2. Persons who had experienced death of a close family member had a significantly lower sense of coherence in all scales of SOC-29 questionnaire except in the subscale of meaningfulness.

3. The experience of physical violence in the family did not affect SOC in boys. Girls experiencing physical violence had a lower SOC in the global scale and all subscales.

4. Teenagers experiencing emotional violence in the family have a significantly lower sense of coherence in a global scale and all subscales of SOC-29 test in comparison with the teenagers without similar traumatic experience.

REFERENCES

1. Antonovsky A.: *Unraveling the Mystery of Health. How People Manage Stress and Stay Well.* Jossey-Bass, San Francisco 1987.
2. Dauvergne M. Johnson H.: *Children Witnessing Family Violence.* Juristat. Canadian Centre for Justice Statistics. Statistics Canada Catalogue. No 85-002-XPE, 6, 1, 2001.
3. Gaś Z.: *Rodzina wobec uzależnień.* Warszawa 1993.
4. Hotton T.: *Spousal Violence after Marital Separation.* Canadian Centre for Justice Statistics. Statistics Canada Catalogue. No 85-002-XPE, 2001.
5. Kaslow F. W. et al.: *Long-term marriages in Sweden: And some comparisons with similar couples in the United States.* *Contemporary Family Therapy. An Intern. Journal*, 16, 521, 1994.
6. Kerig P. K.: *Tender issues in the effects of exposure to violence on children.* *J. Emot. Abuse*, 1, 87, 1999.
7. Makara-Studzińska M.: *Młodzież wobec przejawów patologii społecznej.* *Wyższa Szkoła Dziennikarstwa*, 19, Warszawa-Chełm 2002.
8. Margalit M. et al.: *Coping and coherence among parents with disabled children.* *J. Clin. Child Psychology*, 21, 202, 1992.

9. Ney P. G.: Does verbal abuse leave deeper scars: a study of children and parents. *Canadian J. Psychiatry*, 32, 371, 1987.
10. Śpila B. et al.: Analiza wpływu różnych form przemocy doznanej w dzieciństwie na stan zdrowia psychicznego. *Annales UMCS*, LIX, supl. XIV, 259, 2004.
11. Szymona K.: Uwarunkowania i dynamizm zmian poczucia koherencji u osób z zaburzeniami nerwicowymi, Praca doktorska, AM Lublin, 2001.
12. Wolff A. C., Ratner P. A.: Stress, social support, and sense of coherence. *West. J. Nurs. Res.*, 21, 182, 1999.
13. Ziemska M.: Postawy rodzicielskie. Wiedza Powszechna. Warszawa 1973.

SUMMARY

The aim of this study was the evaluation of the influence of traumatic life events in the process of the sense of coherence. The study was carried out in the group of 439 secondary school students, aged 16–19 (285 girls and 154 boys) The level of the sense of coherence was measured by the Life Orientation Questionnaire (SOC-29). A specially devised questionnaire was used to identify physical and emotional abuse and traumatic life events. The influence of these factors in the development of the sense coherence was analyzed. A statistically relevant associations have been demonstrated between tested stressors and SOC. Conclusions: 1. Adolescents who had experienced traumatic events in the childhood (serious disease in the family or alcoholism) cope with problems of life much worse and the surrounding world seems less comprehensive and meaningful. 2. Persons who had experienced death of a close family member had a significantly lower sense of coherence in all scales of SOC-29 questionnaire except in the subscale of meaningfulness. 3. The experience of physical violence in the family did not affect SOC in boys. Girls experiencing physical violence had a lower SOC in the global scale and all subscales. 4. Teenagers experiencing emotional violence in the family have a significantly lower sense of coherence in a global scale and all subscales of SOC-29 test in comparison with the teenagers without similar traumatic experience.

Traumatyczne wydarzenia życiowe a poczucie koherencji (SOC) u młodzieży

Celem badań była ocena wpływu wydarzeń traumatycznych na kształtowanie się poczucia koherencji. Badaniem objęto 439 uczniów szkół średnich w wieku od 16 do 19 roku życia (285 dziewcząt i 154 chłopców). W badaniach zastosowano Kwestionariusz Orientacji Życiowej SOC-29 do pomiaru poczucia koherencji oraz własny protokół naukowo-badawczy do oceny doświadczania przemocy fizycznej i psychicznej oraz wydarzeń traumatycznych. Następnie badano wpływ tych czynników na poczucie koherencji. W wyniku przeprowadzonych badań wykazano istotny statystycznie związek pomiędzy badanymi stresorami a poczuciem koherencji. Traumatyczne wydarzenia wiążą się z niskim poczuciem koherencji. Młodzież, która doświadczyła traumatycznych wydarzeń w dzieciństwie (poważna choroba w rodzinie, alkoholizm), gorzej radzi sobie z wymaganiami życia, otaczający świat postrzega jako mniej zrozumiały i sensowny. Osoby, które doświadczyły śmierci bliskiej osoby z rodziny, mają znacznie niższe poczucie koherencji we wszystkich skalach kwestionariusza SOC-29 poza podskalą sensowności. Doświadczenie przemocy fizycznej w rodzinie nie wpływa na poziom poczucia koherencji u chłopców. Dziewczęta doświadczające przemocy fizycznej mają niższe poczucie koherencji w skali ogólnej i wszystkich podskalach kwestionariusza SOC-29. Młodzież doświadczająca przemocy psychicznej wykazuje istotnie niższe poczucie koherencji w skali ogólnej i wszystkich podskalach kwestionariusza SOC-29 w porównaniu z młodzieżą nieobciążoną podobnymi problemami.