ATTACHMENT, SENSE OF COHERENCE AND WELL-BEING IN THE CONTEXT OF PARENTAL MIGRATION

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Abstract
The aim of the present research was to investigate the relationship between children’s attachment, sense of coherence and well-being in children whose parents were working abroad (N=43) and also from intact families (N=50), according to the salutogenic model of Antonovsky (1987). The influence of children’s attachment on depression, anxiety and well-being was mediated by sense of coherence. Consequently, parental attachment was positively associated with well-being in intact families. Implications for mental health interventions are discussed.

Keywords: attachment; migration; well-being; sense of coherence

Introduction
In the past decade, parental migration from Romania has rapidly increased, raising concerns about the psychological consequences of children left behind, becoming "a national tragedy" (Bilefsky, 2009). According to official statistics published by the National Authority for the Protection of the Rights of the Child and Adoption, over 80 thousand children belonging to almost 60 thousand families are left in Romania by their parents who migrate for work to other countries. Unfortunately, only few parents inform the authorities that they intend to migrate in order to work abroad, leaving their children at home in the care of their relatives (UNICEF, 2008).

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The phenomenon of parental migration is controversial, although it was very investigated in the last decades. Some previous research states that for some children the experience may foster healthy growth and strengthens family relationships, while for others it may result in feelings of neglect, loneliness and abandonment (Broder, 1974; Senior, 1991). In the same direction, other studies show that migrant children exhibit less emotional disturbance, better health conditions and better behaviors. Explanations are that parental migration stimulates economic growth and increasing household income provides children with access to better living standards and quality of life (Taylor et al., 2005). At the same time, the father’s migration causes the improvement of the school performances for girls (Lee & Park, 2010).

On the other hand, other studies outline that migration has little influence on children’s emotional well-being (Zhou, Murphy, & Ran, 2015). For example, Beiser (2002) found no differences between migrant and non-migrant children, one possible explanation being the quality of parental styles that influenced children’s emotional well-being. In this context, parental migration is irrelevant, the most important thing for children’s well-being referring to parental support and care.

However, most studies outlined the negative effects of parental migration on children’s psychosocial development (Jurkovic, Thirkield, & Morrell, 2001; Givaudan & Pick, 2013). The separation from parents may cause psychological symptoms that are manifested in deviant behavior, depression, anxiety and low self-esteem (Glasgow & Ghouse-Sheese, 1995; Pottinger, 2005b; Jones, Sharpe, & Sogren, 2004). Smith et al. (2004) state that these children presented internalizing and externalizing symptoms including anxiety, depression, poor school performance, and deviant behavior. Yeoh and Lam (2006) also found that children from mother-only migrant family had higher levels of depression, low self-esteem and anxiety.

The migration of parents abroad often leads to the phenomenon called parentification, referring to the context when a child takes over the roles and responsibilities of adults (Hooper, 2007). Most authors consider that this phenomenon has predominantly negative consequences, the child abandoning his needs in order to please the family members. In consequence, the development as future adult is disrupted by affecting the ability to create romantic relationships with other persons (Jurkovic, Thirkield, & Morrell, 2001). Other consequences of leaving children behind refer to inconsistencies
of parental practices, deterioration of family relationships, emotional vulnerability and exposure to violence (Givaudan & Pick, 2013).

The main reason why parents decide to go abroad is represented by the financial aspect and the desire to make a better life for their children (Taylor et al., 2005). Consequently, parents compensate their absence by excessive gifts sent to children, as well as money. In the Romanian context, migrants come from areas where employment opportunities are scarce or inexistent: rural areas and small towns where the former industries have collapsed. Therefore, migration represents a family strategy to not only cope with underemployment and poverty as well as with increased consumption needs, although there are positive psychological aspects of their working parents abroad through personality development and the responsibilities assumed by teenagers remained at home (Pantea, 2011).

**Sense of coherence**

We took into consideration for our study the salutogenic model of Antonovsky (1987) which proposes that physical and mental health are mainly determined by sense of coherence, defined as‘a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that 1. stimuli deriving from one’s internal and external environments in the course of living are structured, predictable and explicable (comprehensibility); 2. the resources are available to one to meet the demands posed by these stimuli (manageability); and 3. these demands are challenges worthy of investment and engagement (meaningfulness)’’ (Antonovsky, 1987, p. 19). In this regard, sense of coherence could be considered as an internal resource that increases physical and mental health.

**Parental migration and children’s attachment**

The majority of studies indicated that parental rejection was associated with severity of internalizing and externalizing symptoms (Roelofs et al., 2006). Regarding the relationship between attachment style and symptoms of internalizing and externalizing, insecure attachment towards parents was positively associated with higher scores on symptoms of anxiety, depression and aggression (Roelofs et al., 2006).

According to Antonovsky (1987), loving parents and supportive friends influence the children’s perspective to see the world as being comprehensible, meaningful, and manageable. Unfortunately, little research has assessed the role
of parental and peer attachment in adolescents’ well-being, the most of them did not examined the contribution of migration status (Gloria & Ho, 2003). We chose to investigate peer attachment due to previous findings, which stated that problems peer support protected against stressors more than parental support among late adolescents and college students (Gore & Aseltine, 1995). Moreover, Ying et al. (2007) found that parent and peer attachment intensified sense of coherence, which, in turn, mediated their effects against depressive symptoms among Chinese American college students. Thus, sense of coherence may be viewed as a mediator in the relationship of parent and peer attachment with well-being, so we will consider it in our study.

Research hypotheses and objectives

The purpose of the present research was to investigate the potential mediating role of sense of coherence in the relationship between parental and peer attachment, on one hand, and depressive and anxious symptoms and children’s well-being in the context of parental migration. According to previous research, the salutogenic model of Antonovsky (1987) was tested only on children and adolescents who emigrated from their country of origin. No research has investigated whether the impact of parental and peer attachment on sense of coherence and well-being varies among children whose parents work abroad and children from intact families. Moreover, we hypothesized that attachment towards mother would be more important for children in comparison of father attachment, no matter of the migration status. Also, we want to see if there are any differences in the peer attachment and parental attachment in both groups of subjects regarding well-being and symptoms of depression and anxiety.

Methods

Sample

The sample consisted of 93 students, 43 with parents working abroad and 50 from intact families. In the migration group (19 boys, 24 girls), their aged ranged from 12 to 17 years (M=13.81, SD=1.67). Mother worked abroad in 22 cases, fathers worked abroad in 17 cases and only 4 participants had both parents working abroad. In intact group (22 boys, 28 girls), the age of the subjects ranged from 12 to 16 years (M=13.32; SD=1.20).
Measures

Parent and peer attachment was measured by the *Inventory of Parent and Peer Attachment* (IPPA; Armsden & Greenberg, 1987). The IPPA was a self-report measure that included 25 parent items and 25 peer items that measured trust, communication, and alienation. The IPPA used a five-point Likert scale response. In our study, internal reliability was .80 for the Parent Attachment Subscale and .73 for the Peer Attachment Subscale.

*Sense of Coherence-13* (SOC-13; Antonovsky, 1987) is a 13-item short version that reflects the ability to cope with stress. It consists of four meaningfulness items (α=.76), five comprehensibility items (α=.82) and four manageability items (α=.68, mean of inter-items correlations =.35). All items were answered on a 7-point Likert scale, in which the response options range from, (1) very seldom or never to (7) very often. For this study the global Cronbach’s alpha=.90.

Depression and anxiety symptoms were assessed by *The Revised Children’s Anxiety and Depression Scale* (RCADS; Ebesutani et al., 2012) is a 25-item questionnaire that measures the reported frequency of various symptoms of anxiety and low mood. The RCADS can be completed by young people aged from 8 to 18 years. Youth are asked to indicate how often each item applies to them according to a 4-point scale (1-never, 2-sometimes, 3-often, 4-always). Internal consistency was good (α =.89 for both depression and anxiety scales).

Children’s well-being was measured by *The Satisfaction with Life Scale for Children* (SWLS-C; Gadermann, 2010). SWLS-C items are scored on a 5-point scale ranging from 1 (“disagree a lot”) to 7 (“agree a lot”). It is a 5-item life satisfaction scale, mean of inter-items correlations being .40.

Procedure

Due to the fact that we had difficulties in recruiting participants in schools, we had conceived workshops in facial expressions recognition and management of negative emotions in order to motivate them to participate in our study. They signed a consent form and completed the paper–pencil questionnaires. The parents consent was also required before applying the instruments. We contacted the parents through school counselors, who gave them the consents.
Statistical analysis

First, the associations between variables in the presumed mediational models were calculated, through bivariate correlations between the questionnaire-based variables (attachment, sense of coherence, well-being, symptoms of depression and anxiety). Specifically, following Baron and Kenny (1986) stipulation, the mediation hypothesis was tested through a series of regression analysis. Moreover, we investigated sense of coherence as mediator in the relationship between parental attachment and children’s well-being, peer-attachment and children’s symptoms of depression and anxiety, respectively. The significance of each mediational model was examined through post hoc probing using Sobel tests (Preacher & Hayes, 2004).

Results

Variation by migration type using bivariate tests

Before testing the hypothesized relationships using multivariate analyses, variation of study variables by migration status was examined using analyses of variance with t-tests. Children whose parents worked abroad reported higher levels of depressive and anxious symptoms (m=53.11, SD=12.14) compared to children from intact families (M=47.42, SD=11.64). The two groups of subjects did not vary on sense of coherence, well-being, parent attachment and peer attachment.

Correlational analysis

The correlational coefficients for all scales are reported in Table1. Sense of coherence is positively associated with parental attachment (r=.37, p<.001) and with children’s well-being (r=.58, p<.001).

First, we wanted to see if sense of coherence mediates the relationship between parental attachment and children well-being. Therefore, we analyzed this relationship in the two groups of subjects. The first pair of regression models focused on children’s well-being as a dependent variable in intact families. First, the model including parental attachment as predictor and sense of coherence as dependent variable was not significant: F(1,49)=4.05, p=.05, β=.27. Second, the model including parental attachment as predictor and children’s well-being, as dependent variable was significant: F(1,49)=4.49,
p<.05, parental attachment being a significant predictor: β=.29, p<.05. The model including parental attachment and sense of coherence as predictors was significant: F(2,49)=22.28, p<.05, with sense of coherence being the only significant predictor: β=.66, p<.001. Thus, when adding sense of coherence in the model predicting children’s well being, parental attachment was found to be non-significant as predictor (β=.10, p=.32). The Sobel test indicates that sense of coherence does not represent significant mediator of the influence of parental attachment on children’s well-being (z=.84, p>.001). The first mediation model is represented in Figure 1.

Table 1. Correlation coefficients between sense of coherence, parental and peer attachment, well-being, depression and anxiety

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<td>(2) Parental attachment</td>
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<td>(5) Depression and anxiety</td>
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In migration group, the model including parental attachment as predictor and sense of coherence as dependent variable was significant: F(1,42)=29.25, p<.001, β=.64. The model including parental attachment and sense of coherence as predictors was also significant: F(2,42)=23.65, p<.001. In this case, both sense of coherence (β=.37, p<.001) and parental attachment (β=.51, p<.001) are significant predictors. The Sobel test indicates that sense of coherence does represent significant mediator of the influence of parental attachment on children’s well-being in the context of parental migration (z=2.35, p<.001). The second mediation model is represented in Figure 2.
Furthermore, we wanted to investigate the relationship between peer attachment, sense of coherence and symptoms of depression and anxiety. Therefore, the third model focused on symptoms of depression and anxiety of children from intact families. Firstly, the model including peer attachment as predictor and sense of coherence as dependent variable was not significant: $F(2,49)=3.93$, $p=.05$, peer attachment being a significant predictor: $\beta=.27$, $p=.05$. Secondly, the model including peer attachment and sense of coherence as predictors was significant: $F(2,49)=11.71$, $p<.001$, with sense of coherence being the only significant predictor: $\beta=-.59$, $p<.001$. Thus, when sense of coherence is included, peer attachment is no longer a significant predictor: $\beta=.11$, $p>.05$. The Sobel test indicates that sense of coherence does not represent significant mediator of the influence of peer attachment on children’s depressive and anxious symptoms ($z=-1.79$, $p=.07$). The third mediation model is represented in Figure 3.

Moreover, in order to compare the two groups of subjects, we have designed a similar model, focusing on symptoms of depression and anxiety of children left behind. Firstly, the model including peer attachment as predictor and sense of coherence as dependent variable was not significant: $F(1,42)=0.76$, $p<.05$, peer attachment not being a significant predictor: $\beta=.13$, $p<.05$. 

![Figure 2. The mediational model with well-being as dependent variable in migration group (Note: *p<.05; **p<.001)](image)

![Figure 3. The mediational model with symptoms of depression and anxiety as dependent variable in control group (Note: *p<.05; **p<.01)](image)
Secondly, the model including peer attachment and sense of coherence as predictors was significant: $F_{(2,42)}=5.99$, $p<.001$, with both predictors being significant: sense of coherence ($\beta=-.31$, $p<.05$) and peer attachment ($\beta=-.32$, $p<.05$) The Sobel test indicates that sense of coherence does not represent significant mediator of the influence of peer attachment on children’s depressive and anxious symptoms ($z=-0.85$, $p>.05$). The fourth mediation model is represented in Figure 4.

![Figure 4. The mediational model with symptoms of depression and anxiety as dependent variable in control group (Note: *$p<.05$; **$p<.01$)](image)

Finally, we investigated the two groups of subjects in terms of attachment towards mother and father, sense of coherence and depressive and anxious symptoms of children. Therefore, attachment towards father was considered as predictor, the model being significant: $F_{(1,92)}=7.95$, $p<.001$, $\beta=.28$. Second, the model including attachment towards father and sense of coherence as predictors was significant $F_{(2,92)}=14.44$, $p<.001$. Only sense of coherence was a significant predictor of depressive and anxious symptoms of children ($\beta=-.43$, $p<.001$), attachment towards father being a non-significant predictor ($\beta=-.14$, $p>.05$). The Sobel test indicates that sense of coherence represent a significant mediator of the influence of father attachment on children’s depressive and anxious symptoms ($z=-2.41$, $p<.05$). The fifth mediation model is represented in Figure 5.

![Figure 5. The mediational model with symptoms of depression and anxiety as dependent variable in both groups (Note: **$p<.001$)](image)
In the next model, we examined sense of coherence as mediator in the relationship between attachment towards mother and symptoms of depression and anxiety. Firstly, the model including attachment towards mother as predictor was significant: $F(1,92)=5.07, p<.05, \beta=.23$. Secondly, the model including attachment towards mother and sense of coherence as predictors was significant: $F(2,92)=14.84, p<.001$. Moreover, only sense of coherence was significant as predictor ($\beta=-.43, p<.001$), attachment towards mother being a non-significant predictor ($\beta=-.15, p>.05$). The Sobel test indicates that sense of coherence represent a significant mediator of the influence of mother attachment on children’s depressive and anxious symptoms ($z=-2.08, p<.05$). The sixth mediation model is represented in Figure 6.

![Figure 6. The mediational model with symptoms of depression and anxiety as dependent variable in both groups (Note: *p<.05; **p<.001)](image)

Mediation is indicated by the reduction of the effect of the predictor on the dependent variable when the mediator is included in the model (Baron & Kenny, 1986). In the cases of symptoms of depression and anxiety, when attachment towards mother and father and sense of coherence were included in the model, the effects of attachment towards both parents (as indicated by $\beta$) were reduced in both group of subjects. Attachment towards father has a greater impact on sense of coherence ($\beta=.28, p=.06$) in comparison to attachment towards mother ($\beta=.23, p=.02$).

**Discussion**

The aim of the present study was to examine the potential mediating effect of sense of coherence in the relationships between the type of attachment, children’s well-being and symptoms of depression and anxiety. Sense of coherence mediates the relationship between parental attachment and children’s well-being in the group of subjects whose parents work abroad. Children left behind with higher levels of parental attachment and sense of coherence will have a higher level of well-being compared to children from intact families.
Moreover, attachment towards mother and father is positively associated with sense of coherence, which leads to decreased symptoms of depression and anxiety. Thus, parental attachment enhanced sense of coherence, which protected against symptoms of depression and anxiety (Antonovsky, 1987; Ying et al., 2007). Other studies indicated that sense of coherence is a mediator of the effect of stressors on adolescents’ mental health (Ying & Akutsu, 1997; Tram & Coke, 2000). Surprisingly attachment towards father is more salient than attachment towards mother, no matter of migration status. One possible explanation would be that attachment towards father has been underrated in the literature. However, some authors state that insecure attachment towards father was positively associated with higher scores on symptoms of anxiety, depression and aggression (Roelofs et al., 2007). Furthermore, the relationship with father can have an important impact on the development of personality and future relationships with adults.

Regarding peer attachment, although sense of coherence did not mediate the relationship between this variable and symptoms of depression and anxiety, we can observe that peer attachment is higher in migration group compared to children from intact families. On other words, children with high levels of peer attachment and sense of coherence will present fewer depressive and anxious symptoms compared to children from intact families. This confirmed previous, according peer attachment protected against stressors (Gore & Aseltine, 1995; Ying et al., 2007). It is interesting to observe that in the context of parental migration, attachment towards parents is more salient compared to children from intact families, where peer attachment plays an important role in children well-being.

There are several limitations to this study. First, the small sample size limits statistical power and the reliability of the associations that were found. Furthermore, studies in larger groups are needed in order to assess the accuracy of our results. Other limitations of our study are the fact that it relied on self-report data, the validity of causal inferences being limited due to the cross-sectional and correlational nature.

Parental migration places can have a significant impact on children’s well-being, as our research suggests. According to our study, sense of coherence mediates the relationship between children’s attachment and symptoms of depression, anxiety and well-being. Further research could examine the period of time parents spent working abroad and also the age of
children at the moment they were left behind. Therefore, further studies should investigate which psychological interventions on children left behind are efficient in reducing anxiety and depression and improving quality of life in both short and long term.

**References**


