Coping style as a mediator between pregnancy desire and child abuse potential: a brief report

By: Christina M. Rodriguez

*** Note: Figures may be missing from this format of the document

Abstract:

Women with unwanted pregnancies may be at elevated child abuse risk, although ineffective coping styles are associated with both child abuse potential and unwanted pregnancy. The present study investigated whether coping style mediated the association between low desire for pregnancy and physical child abuse potential. A sample of 77 expectant mothers participated in an online parenting study. Findings indicated that passive coping styles, namely cognitive avoidance and emotional discharge, fully mediated the association between low pregnancy desire and greater child abuse potential. The implications of working with expectant mothers with unwanted pregnancies are discussed.
Keywords: pregnancy desire; child abuse potential; coping style; child maltreatment

Article:

Mothers with an unwanted pregnancy are often considered at risk for abuse and neglect of their children (Altemeier, 1984; Safonova & Leparsky, 1998; Williams, 1983). Although some of this research has concentrated on low-income pregnant adolescents (e.g. Zelenko, Huffman, Lock, Kennedy, & Steiner, 2001) who understandably have greater stress associated with their pregnancy, women beyond adolescence may experience an unwanted birth that ultimately impacts their mother-child relationship (Barber, Axinn, & Thornton, 1999). Indeed, an estimated 60% of pregnancies in the US are unplanned (Brown & Eisenberg, 2005). Unplanned pregnancies may compromise attachment to a woman's foetus, increasing risk for abuse (Zimerman & Doan, 2003) or provoking negative or ambivalent feelings toward the child, particularly in depressed mothers (Kumar & Robson, 1984). Thus, a woman's reduced desire for her pregnancy would theoretically relate to greater child abuse risk, although this connection has not been adequately examined. Women experiencing an unwanted pregnancy may also demonstrate less effective coping styles. Coping is conceptualised as the cognitive and behavioural tactics accessed to manage stress (Lazarus & Folkman, 1984). Active, problem-focused, approach-oriented strategies that directly deal with the stressor, rather than avoid the stressor, are typically considered more effective than passive, emotion-focused, avoidant coping styles (Lazarus & Folkman, 1984). With regard to pregnancy desire, an avoidant coping style has been associated with unplanned pregnancy and depressed mood (Rudnicki, Graham, Habboushe, & Ross, 2001). Relatedly, pregnant women struggling with depression appear to utilise ineffective coping styles (Gotlib, Whiffen, Wallace, & Mount, 1991; Terry, Mayocchi, & Hynes, 1996). Emotional coping was characteristic of depressed women during pregnancy (DaCosta, Larouche, Dritsa, & Brender, 2000). In addition, greater use of passive coping strategies during pregnancy was associated with the subsequent development of post-partum depression (Gotlib et al., 1991). Similar findings have been demonstrated in a study wherein mothers who utilised less problem-focused coping and more passive coping (specifically, wishful thinking) evidenced increased risk for depression post-partum (Terry et al., 1996). Collectively, this research suggests that women with low desire for their pregnancy would be more likely to utilise avoidant, passive coping strategies.

Relatively limited research, however, has considered how coping style is also related to child abuse risk. Early findings suggested maltreating mothers judged themselves to cope poorly, although coping was not clearly defined (Gaines, Sandgrund, Green, & Power, 1978). More recently, a small study indicated that abusive mothers report more ineffective problem-focused coping and greater emotion-focused coping compared to a control group of mothers (Cantos, Neale, O'Leary, & Gaines, 1997). Consequently, women with greater child

abuse risk and unwanted pregnancy both appear to share the common substrate of a passive, emotion-focused, avoidant coping style. Identification of such connections could clarify if particular coping styles should be targeted in working with women experiencing unwanted pregnancies which could thereby potentially impact child abuse risk.

To predict the likelihood of engaging in physical child abuse, the construct of child abuse potential has emerged to estimate risk, tapping those beliefs and behaviours that have been identified in those who are substantiated for physical child abuse (Milner, 1994). Many conceptualise parent-child aggression along a continuum, with physical discipline and severe physical abuse at endpoints (Greenwald, Bank, Reid, & Knutson, 1997; Straus, 2001a, 2001b; Whipple & Richey, 1997). Child abuse potential estimates the risk that one will engage in abusive behaviour somewhere along this continuum, with greater abuse potential predictive of future child abuse (Milner, 1994). Although assessment tools can be utilised to classify individuals, child abuse potential is frequently researched as a continuous construct (Milner, 1986, 1994), with greater child abuse potential associated with elevated risk.

Therefore, the current investigation examined coping approaches among adult pregnant women in relation to their desire for their pregnancy and physical child abuse potential. In the present study, the association between pregnancy desire and physical child abuse potential was evaluated directly. In addition, the study identified which coping styles were most associated with pregnancy desire, hypothesising that strategies reflective of passive coping would be most associated with lower pregnancy desire, consistent with earlier research (Rudnicki et al., 2001). Finally, lower pregnancy desire was expected to relate to increased child abuse potential mediated by passive coping styles.

Method
Participants
A sample of 77 women (age M = 28.10 years, SD = 4.87) were recruited online for a larger Internet study focused on parenting and discipline. Nearly all of the women were living with a partner or spouse (97%). Approximately 40% were first-time expectant mothers, whereas those with children had an average of one child (age M = 4.90 years, SD = 3.69). With regard to race/ethnicity, 88.3% identified themselves as White (not of Hispanic origin), with 7.8% Hispanic, 1.3% Black/African American, 1.3% Asian, and 1.3% selected 'Other'. The median annual family income was $50,000 (roughly comparable to the US median income of $48,201 (U.S. Census Bureau, 2006)). Nearly all participants (98.7%) reported graduating from high school, with 15.6% indicating their highest educational attainment was high school, 33.8% reporting vocational training or some college, 36.4% indicating they had a college degree, and 13% reporting graduate school.

Measures
The *Child Abuse Potential Inventory* (CAPI; Milner, 1986) presents respondents 160 forced-choice statements. The CAPI was designed to screen for physical child abuse risk, assessing rigidity and intrapersonal and interpersonal factors identified in physically abusive individuals. Only 77 items contribute to the summary Abuse Scale score and its six constituent factors, with the remaining statements serving as measures of the three distortion biases or for experimental scales. The Faking Good Index evaluates the tendency to present oneself favorably, including lying and socially desirable responding bias. The Faking Bad Index determines whether participants are trying to present themselves poorly. The Random Response Index assesses whether a participant is responding inconsistently or randomly. Higher scores on the Abuse Scale are considered indicative of greater abuse potential. High internal consistency is reported for the Abuse Scale (Milner, 1986), with split-half reliability ranging from .96 (for control groups) to .98 (for abuse samples), and Kuder-Richardson reliability coefficients ranging from .92 (for control samples) to .95 (for abuse groups). With regard to predictive validity, studies suggest a correct classification of 89.2% of confirmed child abusers and 99% of controls (Milner, 1994).

The *Coping Responses Inventory* (CRI; Moos, 1993) was utilised to assess participants' coping styles. Respondents are asked to recall a stressful event from the last 12 months and indicate how they dealt with the

problem. Participants rate the frequency with which they utilised 48 strategies to cope with the situation on a 4-point frequency scale ranging from 'no' to 'fairly often'. Eight coping approaches (six items each) are assessed. Approach coping strategies include: Logical Analysis, Positive Reappraisal, Seeking Support and Information, and Taking Problem-solving Action (for example, 'think of different ways to deal with the problem' in Logical Analysis, or 'try to see the good side of the situation' in Positive Reappraisal). Avoidance coping styles include: Cognitive Avoidance, Acceptance or Resignation, Seeking Alternative Rewards, and Emotional Discharge (for example, 'take it out on other people when you felt angry or depressed' in Emotional Discharge or 'Try to forget the whole thing' in Cognitive Avoidance). Internal consistency is adequate, with approach coping styles at .89 and avoidance coping styles at .85.

The *Pregnancy Research Questionnaire* (PRQ; Schaefer & Manheimer, 1960) is a measure designed to assess a number of different factors associated with pregnancy, with 284 items contributing to 20 subscales. The Desire for Pregnancy scale was targeted for this study, containing eight items (for example, 'I did not want to have a baby at this time', and 'I sometimes wish I wasn't going to have this baby', rated from strongly agree to strongly disagree), with higher scores indicative of lower pregnancy desire. Internal consistency of the Desire for Pregnancy scale is reportedly adequate at .76.

Procedures
Ethical approval for the study was obtained from the university institutional review board. Specific World Wide Websites targeted to parents (e.g. www.parentsoup.com, www.ibaby.com, www.parenting.com) were identified for this online parenting study. Links to a webpage for the parenting study were advertised on bulletin boards at these sites. Interested parents linked to the study website, which first presented them with an online consent form. Participants who indicated they were pregnant were presented a particular protocol with the measures described above, with all measures completed anonymously. Respondents received a gift certificate code for $5 redeemable online towards the purchase of an item sold on the Internet. To confirm the accuracy of these Internet data, each participant's data were individually screened for accuracy. For example, any respondent who obtained an elevated score on any of the CAPI response bias indices was purged from the data set. Any files judged remotely questionable or incomplete were also removed from the data set, yielding 77 verified participants who indicated they were pregnant at the time of the study.

Analysis
Basic statistical analyses were conducted using SPSS 15.0 for Windows. Latent-variable structural equation modelling (SEM) was conducted via maximum likelihood estimates of model coefficients using AMOS 7.0 (Arbuckle, 2006). SEM can evaluate mediation models, permit simultaneous estimation of direct and indirect paths, and provide fit indices to determine the strength of the proposed model. Fit of the model was evaluated using Chi-square, goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), comparative fit index (CFI), normed fit index (NFI), and root mean square error of approximation (RMSEA) (Byrne, 2001; Tabachnick & Fidell, 1996). The Chi-square should ideally be non-significant, whereas the Chi-square for the independence model, which tests the absence of relationship among the variables, should be significant (Tabachnick & Fidell, 1996). With respect to the fit indices, GFI, AGFI, and NFI values greater than .90 are ideal, with CFI values at or above .95 preferred; RMSEA values are ideally .05 or below (Byrne, 2001; Tabachnick & Fidell, 1996). Typically, better-fitting models produce consistent results across several different indices (Tabachnick & Fidell, 1996). Ideally, 10 participants per estimated parameter are preferred (the present model estimates 8 parameters), but smaller samples can be tested if the effect is sufficiently strong (Tabachnick & Fidell, 1996), and the recommended minimum ratio is 5:1 (Bentler, 1993).

Results
Mean scores and standard deviations for each measure appear in Table 1. As a frame of reference, the present sample obtained a mean CAPI Abuse Scale score comparable (i.e. not statistically different) from the normative sample mean of 91 ($p>.05$; Milner, 1986), with 15.6% obtaining clinically elevated scores above the 166 cutoff. A *t*-test comparison between primagravida women and multigravida women identified no significant differences between groups on pregnancy desire or child abuse potential scores (all $p>.05$). However, first-time expectant

mothers did report using significantly more active coping strategies (combined active coping $t = 3.46$, $p<.01$), not passive coping strategies. Age of the expectant mother, annual family income, and number of children were unrelated to desire for pregnancy or coping (all $p>.05$). Child abuse potential scores were significantly associated with younger age ($r = -.25$, $p<.05$) and lower income ($r = -.33$, $p<.01$). However, consideration of first-time mother, age, and income as covariates in the correlational analyses and path analysis did not substantively alter the findings (or actually slightly increased the bivariate associations reported); thus, the more conservative results are reported below without covariates.

Table 1. Means, standard deviations, and correlations for pregnancy desire, child abuse potential, and coping styles.

	M (SD)	Desire for Pregnancy (r)	CAPI Abuse Scale (r)
Desire for Pregnancy	11.01 (4.95)		
CRI Approach strategies			
Logical Analysis	11.42 (3.65)	.19	.17
Positive Reappraisal	11.32 (4.15)	.06	-.13
Seek Guidance/Support	10.51 (3.64)	-.10	-.07
Problem-Solving Action	10.71 (3.38)	-.04	.05
CRI Avoidance strategies			
Cognitive Avoidance	7.71 (3.55)	.29*	.36**
Acceptance/Resignation	7.14 (3.73)	-.02	.22 [a]
Seek Alternate Rewards	6.45 (3.81)	-.13	-.18
Emotional Discharge	6.31 (3.06)	.32*	.45**
CAPI Abuse Scale	100.44 (73.00)	.35*	

Note: CRI = Coping Responses Inventory; CAPI = Child Abuse Potential Inventory.

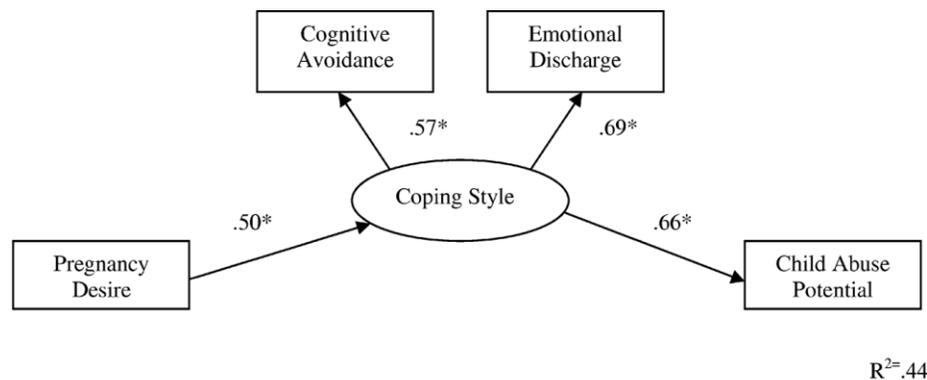[a] This association is only marginal at $p = .052$.

*$p \le .01$; **$p \le .001$.

An evaluation of the bivariate associations between Desire for Pregnancy scores and coping and abuse potential identifies a number of interesting patterns (see Table 1). On the CRI, the four approach coping strategies were not significantly related to either the Desire for Pregnancy scores or the CAPI Abuse Scale scores (all $p>.05$). However, for passive coping strategies, both Cognitive Avoidance and Emotional Discharge scores were significantly associated with the pregnancy desire and child abuse potential scores. Thus, these two scales were used in the subsequent path analyses.

SEM was utilised to empirically evaluate whether the two coping strategies (Cognitive Avoidance and Emotional Discharge) mediated the relationship between pregnancy desire and abuse potential. A comparison model of partial mediation, involving a path between Desire for Pregnancy scores directly to CAPI Abuse Scale scores, indicated that a direct path was not significant ($p = .614$). A test of the full mediation model (see Figure 1) confirmed that these coping styles acted as full mediators, with a good fit to the data yielding an R^2 of .44. In terms of fit indices, as would be hoped, the default Chi-square was non-significant ($\chi^2 = .342$, $df = 2$, $p = .843$), whereas the independence Chi-square, which should confirm that there is some significant relationship detected

in the model, was indeed significant ($\chi^2 = 49.11$, $df = 6$, $p<.001$). All of the fit indices were strong, with the GFI calculated at .99 and the AGFI (which adjusts for the number of parameters) at .98. The model also yielded an NFI of .99, which is actually sensitive to small sample sizes, and a CFI at .999. The obtained RMSEA (also susceptible to small sample sizes) was .00. Altogether, these findings suggest that cognitive avoidance and emotionality account for the association between low pregnancy desire and increased child abuse potential.

```
        ┌──────────┐        ┌──────────┐
        │Cognitive │        │Emotional │
        │Avoidance │        │Discharge │
        └──────────┘        └──────────┘
               ↖  .57*   .69*  ↗
                  ╭─────────────╮
                  │ Coping Style│
     .50*    ╭───→╰─────────────╯───→   .66*
  ┌──────────┐                      ┌──────────┐
  │Pregnancy │                      │Child Abuse│
  │  Desire  │                      │ Potential │
  └──────────┘                      └──────────┘

                                         R²=.44
```

* $p \le .01$

[Enlarge Image]

Figure 1. Structural equation model results with standardised estimates ($N = 77$).

Discussion

The present study evaluated whether low pregnancy desire was associated with physical child abuse potential as well as whether passive coping styles mediated that association. Based on a sample of 77 expectant mothers participating in an online study, findings indicated that low pregnancy desire was significantly associated with physical child abuse potential and avoidant coping styles, namely Cognitive Avoidance and Emotional Discharge. Moreover, these passive coping styles fully mediated the association between pregnancy desire and abuse risk.

Consistent with previous research that has suggested women with unwanted pregnancies are at risk for child abuse (e.g. Safonova & Leparsky, 1998), the present results identified that women reporting low desire for their pregnancy also reported elevated child abuse potential scores. Although this association has been proposed for low-income adolescents (Zelenko et al., 2001), the current findings indicate that low pregnancy desire is associated with increased risk for physical child abuse even among adult women who would not traditionally be considered high-risk.

Moreover, passive coping strategies were identified in women with low desire for their pregnancy as well as those obtaining elevated child abuse potential scores. Such coping approaches have been suggested in earlier literature on pregnant women with unwanted pregnancies (Rudnicki et al., 2001) and abusive mothers (Cantos et al., 1997). However, the present results underscore that such avoidant coping strategies, particularly Cognitive Avoidance and Emotional Discharge, account for the association between pregnancy desire and abuse potential. In other words, women who do not desire their pregnancy appear to utilise passive coping mechanisms that are characteristic of those with increased child abuse risk. Such a pattern implies that pregnant women, even those from non-clinical samples rather than simply high-risk samples, who are ambivalent about their unborn foetus, may benefit from interventions that diminish their use of passive coping strategies (specifically cognitive avoidance and emotional discharge) in favour of active, problem-focused coping strategies. These types of interventions would have the potential to facilitate child abuse prevention (cf. Williams, 1983) and enhance mother-child relationships (cf. Barber et al., 1999; and Pollock & Percy, for discussion of mother-foetus bonding).

Future research in this area should address some of the limitations of the present investigation. Beginning with sample characteristics, these women were recruited online. Research has confirmed the relative comparability of findings obtained online or in person, identifying some of the advantages of online participants (e.g. Buchanan & Smith, 1999; Pasveer & Ellard, 1998). With the growing ubiquity of Internet access, parents recruited online may in fact be comparable to those recruited in person. Nonetheless, women who agreed to participate may represent a more motivated group of mothers, similar to volunteers in parenting studies conducted in person. In addition, although the sample reported an annual family income analogous to national means, these women reported greater educational attainment than the US average (U.S. Census Bureau, 2006), as might be expected given the resourcefulness needed to access the study online. Although online studies yield greater geographic diversity, thereby augmenting external validity, this sample was also predominantly White (88%). Thus, the generalisability of these results should be tested with studies demonstrating greater ethnic and educational diversity. Indeed, the present study likely generalises to demographically similar, non-clinical samples of pregnant women who may be more inclined to volunteer in studies. Considerable effort was expended to ensure data accuracy for each participant, but studies collected in person may also be more likely to confirm participants meet study inclusion criteria. Participants in this study also did not report gestational stage, which might covary with both pregnancy desire and coping style, and this factor should be included in future research.

Finally, the present study relied on self-report for all measures. Although the online nature of the study allowed participants to respond to the questions anonymously, responding remains susceptible to social desirability bias. Future research should consider whether self-report could be supplemented by other mechanisms; however, the subjective nature of some of these constructs (e.g. passive coping style, pregnancy desire) would be challenging for outsiders to observe. In addition, the Child Abuse Potential Inventory (CAPI) does not assess actual assaultive behaviours (only characteristics that have been established in substantiated abusive samples), and an interesting direction for future research could include actual behavioural indices of abuse risk. Further, the CAPI is not designed to assess foetal abuse (cf. Pollock & Percy, 1999), only what may be future abuse risk; an interesting direction for researchers would be to consider how antenatal abuse risk may fluctuate throughout pregnancy and after birth, utilising longitudinal designs. Moreover, the CAPI incorporates an assessment of personal distress and has been associated with depression (Milner, 1994). Given that passive coping style has been associated with depression in pregnant women (e.g. Gotlib et al., 1991), an interesting avenue for future research would be disentangle how coping style relates to both depression and child abuse potential independently.

Overall, this study suggests that continued inquiry into factors in pregnant women that may contribute to elevated physical child abuse risk and compromised mother-child relationships is warranted. Clearly other factors may exacerbate child abuse risk in pregnant women, not simply their desire for the pregnancy or their coping style. By identifying the problematic cognitive and behavioural strategies in women that could ultimately affect the mother's relationship with her child or potentially increase her risk to abuse, research can better inform early efforts to intervene with mothers who are ambivalent about their pregnancy, optimally benefitting these families long-term.

References

- 1. Altemeier, W. A. (1984) Prediction of child abuse: A prospective study of feasibility.. *Child Abuse & Neglect* 8 , pp. 393-400.
- 2. Arbuckle, J. L. (2006) *Amos 7.0* Smallwaters , Chicago — [computer software]
- 3. Barber, J. S. , Axinn, W. G. and Thornton, A. (1999) Unwanted childbearing, health, and mother-child relationships.. *Journal of Health and Social Behavior* 40 , pp. 231-257. 4. Bentler, P. M. (1993) *EQS: Structural equations program manual* BMDP Statistical Software , Los Angeles
- 5. Brown, S. S. and Eisenberg, L. (1995) *Institute of medicine: The best intentions. Unintended pregnancy and the well-being of children and families* National Academy Press , Washington, D.C.
- 6. Buchanan, T. and Smith, J. L. (1999) Using the Internet for psychological research: Personality testing on the World Wide Web.. *British Journal of Psychology* 90 , pp. 125-144.

- 7. Byrne, B. M. (2001) *Structural equation modeling with AMOS: Basic concepts, application, and programming* Lawrence Erlbaum Associates , Mahwah, NJ
- 8. Cantos, A. L. , Neale, J. M. , O'Leary, K. D. and Gaines, R. W. (1997) Assessment of coping strategies of child abusing mothers.. *Child Abuse & Neglect* 21 , pp. 631-636.
- 9. DaCosta, D. , Larouche, J. , Dritsa, M. and Brender, W. (2000) Psychosocial correlates of prepartum and postpartum depressed mood.. *Journal of Affective Disorders* 59 , pp. 31-40. 10. Gaines, R. , Sandgrund, A. , Green, A. H. and Power, E. (1978) Etiological factors in child maltreatment: A multivariate study of abusing, neglecting, and normal mothers.. *Journal of Abnormal Psychology* 87 , pp. 531-540.
- 11. Gotlib, I. H. , Whiffen, V. E. , Wallace, P. M. and Mount, J. H. (1991) Prospective investigation of postpartum depression: Factors involved in onset and recovery.. *Journal of Abnormal Psychology* 100 , pp. 122-132.
- 12. Greenwald, R. L. , Bank, L. , Reid, J. B. and Knutson, J. F. (1997) A discipline-mediated model of excessively punitive parenting.. *Aggressive Behavior* 23 , pp. 259-280.
- 13. Kumar, R. and Robson, K. M. (1984) A prospective study of emotional disorders in childbearing women.. *British Journal of Psychiatry* 144 , pp. 35-47.
- 14. Lazarus, R. S. and Folkman, S. (1984) *Stress, appraisal, and coping* Springer , New York
- 15. Milner, J. S. (1986) *The Child Abuse Potential Inventory: Manual* Psyctec , Webster, NC — (2nd edn)
- 16. Milner, J. S. (1994) Assessing physical child abuse risk: The Child Abuse Potential Inventory.. *Clinical Psychology Review* 14 , pp. 547-583.
- 17. Moos, R. H. (1993) *Coping Responses Inventory. CRI-Adult Form* — Manual. Psychological Assessment, Resources, Inc., Odessa, FL
- 18. Pasveer, K. A. and Ellard, J. H. (1998) The making of a personality inventory: Help from the WWW.. *Behavior Research Methods, Instruments, & Computers* 30 , pp. 309-313.
- 19. Pollock, P. H. and Percy, A. (1999) Maternal antenatal attachment style and potential fetal abuse.. *Child Abuse & Neglect* 23 , pp. 1345-1357.
- 20. Rudnicki, S. R. , Graham, J. L. , Habboushe, D. F. and Ross, R. D. (2001) Social support and avoidant coping: Correlates of depressed mood during pregnancy in minority women.. *Women & Health* 34 , pp. 19-34.
- 21. Safonova, T. and Leparsky, E. A. (1998) The unwanted child.. *Child Abuse & Neglect* 22 , pp. 155-157.
- 22. Schaefer, E. S. and Manheimer, H. (1960) *Pregnancy research questionnaire and postnatal research inventory* — Unpublished manual available in Tests in Print
- 23. Straus, M. (2001a) New evidence for the benefits of never spanking.. *Society, September/October* pp. 52-60.
- 24. Straus, M. A. (2001b) New evidence for the benefits of never spanking.. *Society* 38 , pp. 52-60.
- 25. Tabachnick, B. G. and Fidell, L. S. (1996) *Using multivariate statistics* Harper Collins , New York — (3rd edn)
- 26. Terry, D. J. , Mayocchi, L. and Hynes, G. J. (1996) Depressive symptomatology in new mothers: A stress and coping perspective.. *Journal of Abnormal Psychology* 105 , pp. 220-231.
- 27. U.S. Census Bureau (2006) *U.S. population statistics, people and households* — Retrieved from http://www. census.gov/
- 28. Whipple, E. E. and Richey, C. A. (1997) Crossing the line from physical discipline to child abuse: How much is too much?. *Child Abuse & Neglect* 21 , pp. 431-444.
- 29. Williams, G. J. (1983) Child abuse reconsidered: The urgency of authentic prevention.. *Journal of Clinical Child Psychology* 12 , pp. 312-319.
- 30. Zelenko, M. A. , Huffman, L. , Lock, J. , Kennedy, Q. and Steiner, H. (2001) Poor adolescent expectant mothers: Can we assess their potential for child abuse?. *Journal of Adolescent Health* 29 , pp. 271-278.
- 31. Zimerman, A. and Doan, H. M. (2003) Prenatal attachment and other feelings and thoughts during pregnancy in three groups of pregnant women.. *Journal of Prenatal & Perinatal Psychology & Health* 18 , pp. 131-148.