

***The Integrated Modeled Theory on
understanding and preventing the incidence
of child abuse in South Africa***

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Background and Aim

Problem of Concern

- Child abuse (crime and violence against children) rife in SA
- Understanding of child abuse is biased: over-estimation of socio-economic factors

Aim of the Research

- Build a theory based model on understanding child abuse
- Propose Integrated Modelled Theory (IMT) a practical model to:
 1. Facilitate the understanding of child abuse (different variables)
 2. Support suggestions for decisions (policies, programmes)

Information Base

- Literature review and different studies, statistics, reports
- Empirical data: Surveyed child abuse database (+1800 cases in Gauteng – SA)

Structure of the Presentation

- *Background and Aim of Research*
- *Defining and understanding child abuse in SA*
- *Theoretical basis and Methodology*
- *Theories on understanding child abuse*
- *Integrated Modelled Theory*

Defining “Child Abuse”

- UN CRC: “*all forms of physical or mental violence, injury or abuse, neglect or negligent treatment, maltreatment or exploitation, including sexual abuse*”. (Article 19, UN CRC).
- British National Commission of Inquiry into the Prevention of Child Abuse: “*Child abuse consists of anything which individuals, institutions, or processes do or fail to do which directly or indirectly harms children or damages their prospects of safe and healthy development into adulthood*”. (National Commission, 1996).

The British definition explicitly takes child abuse outside the family set-up therefore providing greater scope and relevance to this research.

Incidence of Child Abuse in SA

- SAPS stats 2002-5: Increased abuse of children:
 - ✓ KZN: 200%, Gauteng: 165%, National average: 110%
- In 2005 Child Welfare SA (CWSA) provided services to 108 379 “*children in need of care*” (Child Care Act)
 - ✓ Physical abuse: 5 000, sexual abuse: 6 637,
 - ✓ Neglected: 19 187, abandoned: 10 830, adopted: 1 280
- Literature shows that children from poor households suffer child abuse more than those in rich households do
- Understanding of the incidence of child abuse is mostly biased to socio-economic conditions of families

Theoretical Basis and Methodology

- Child abuse is a global problem. It occurs in a variety of forms and is deeply rooted in cultural, economic and social practices. (2002 World Report on Violence and Health, World Health Organisation).
- Solving this problem, however, according to the report, requires a much better understanding of its occurrence in a range of settings, as well as of its causes and consequences in these settings. (2002 World Report on Violence and Health, World Health Organisation).
- This research is concerned about the search for a solution to solve the problem of the incidence of child abuse using artificial intelligence (Bayesian Networks).

Theoretical Basis and Methodology

Theory

- Study acknowledges Social Theory in its approach
- Social Theory allows to make prediction of future course of events in specific settings (child abuse)
- Social Theory facilitates development of new models: Integrated Modelled Theory on understanding child abuse for this research
- IMT can facilitate effective prevention of and interventions against child abuse

Methodology

- Literature review: Theories
- Statistical Analysis Method: Observation and interpretation of quantitative information from TMI Child Abuse Database
- Bayesian Networks system: Development of IMT
- Consultation with experts: Development of IMT

Theories on Understanding Child Abuse

➤ Economic Theory

- Crime causation results in economic incentives - use of children in farms, child sexual exploitation
- Economic theory: child neglect = inability to provide basic needs
- Witte and Witt argue that unemployment is the conduit through which other factors influence crime rate
- In SA: **Break down of family structures**, the **Group Areas Act** (social exclusion) and the “**Bantu Policy**”

➤ Social Theory

- The way children are brought up in their families impacts on their abuse by family members
- The mobility of families results in less intense contact with extended families
- Marriage break-ups cause single parent families and social acceptance of unmarried parenthood



Theories on Understanding Child Abuse

➤ Environmental Theory

- Quality of the physical environment affects the quality of childcare
- Poor housing makes it difficult to maintain high standards of hygiene and warmth

➤ Cultural Theory

- Clash between parental expectation derived from their original cultural background and the cultural environment in which children now live
- Peer pressure and influence of diffuse education. This can generate conflict and occasionally result in child abuse, neglect and exploitation

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Development of IMT Using BNs Theory

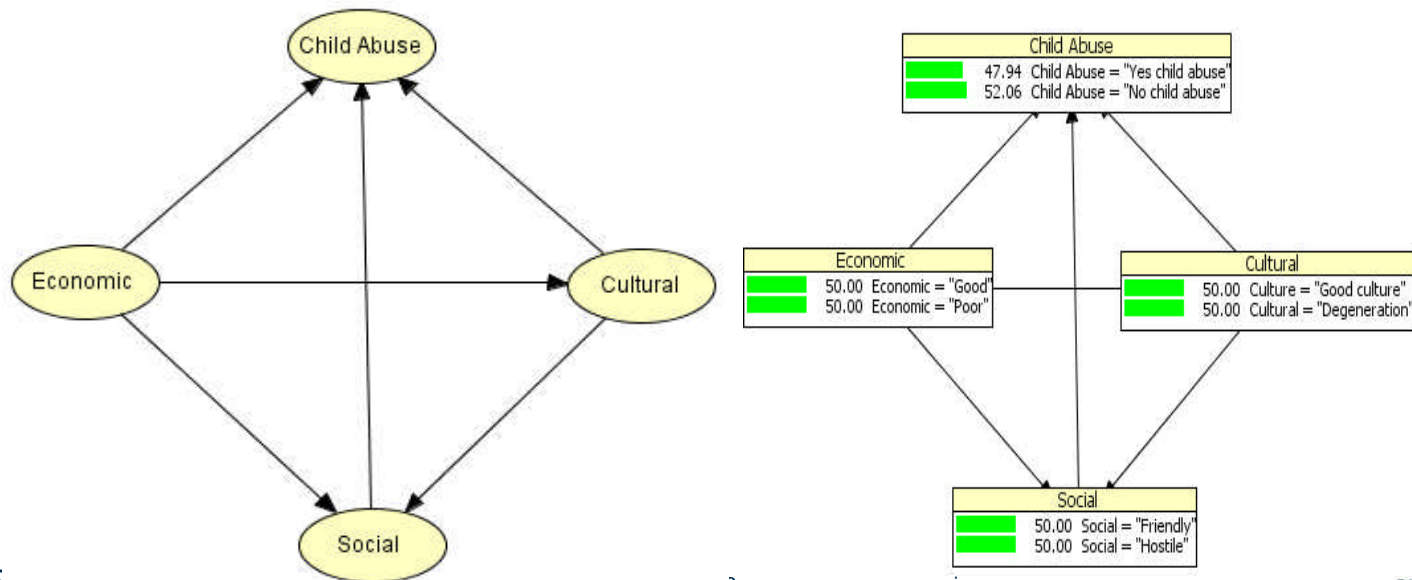
- **IMT: Interprets the impact of contributing factors for effective prevention and intervention mechanisms**
- “Bayesian Networks” (BNs) is a device that:
 1. efficiently solve problems or reasoning and decision making under some uncertainty
 2. acquire/extract knowledge from data, experience, and experts
 3. adjust the behaviour to change
- This paper aims to develop the Integrated Modeled Theory that emphasize on the combination of various factors in achieving a clear understanding of, prevention and intervention against child abuse.
- Networks theory The Integrated Modeled Theory (IMT) is an adaptation of the Bayesian Networks system (Hugin 7,3 Software) in understanding the incidence of, the prevention and intervention against child abuse.
- The choice of the Bayesian Networks system was influenced by its ability to resolve problems under uncertainty using prior knowledge and experts’ experience.

IMT Development Process

- IMT development process:
 1. Identify contributing factors
 2. Identify their links
 3. Define strength of the links
 4. Establish interdependencies
 5. Quantify the links
 6. construct influence or decision diagrams

Links and Interdependences among factors

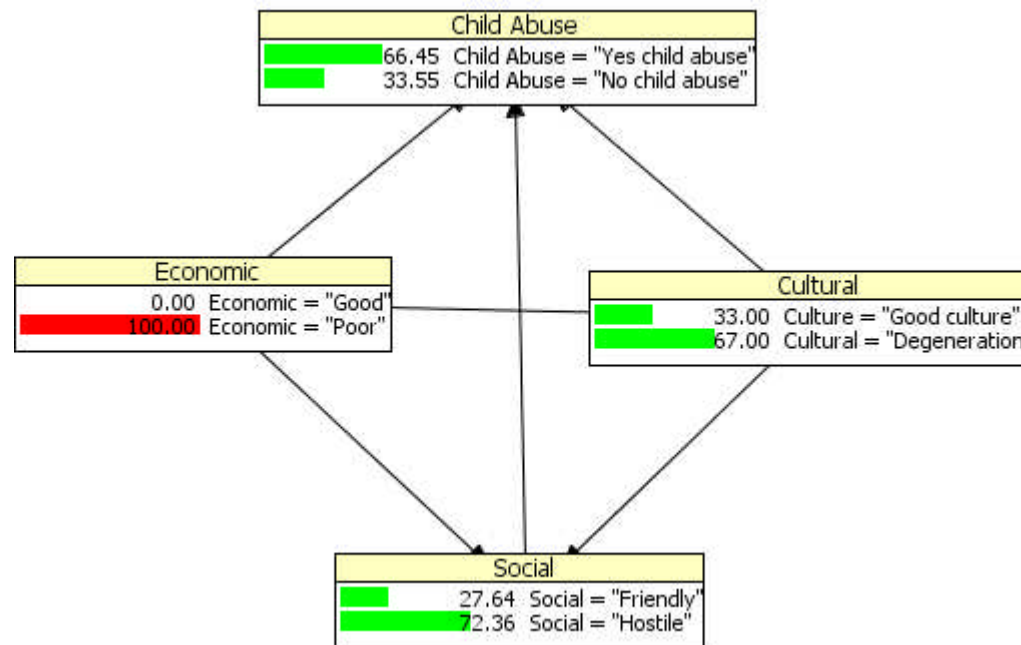
- The IMT demonstrates that there are links and interdependences between the three clusters. Social cluster for instance depends on and is influenced by economic and culture clusters. The states of the economic and culture clusters affect the states of social cluster. The culture cluster depends on and is too influenced by the economy cluster. In this case, if the economic condition is not good, the cultural practices tend to be negative. The impact of such links is explained in the quantification of the sub-model and the simulation of probabilities.



Poor economy

First Scenario: Poor economy

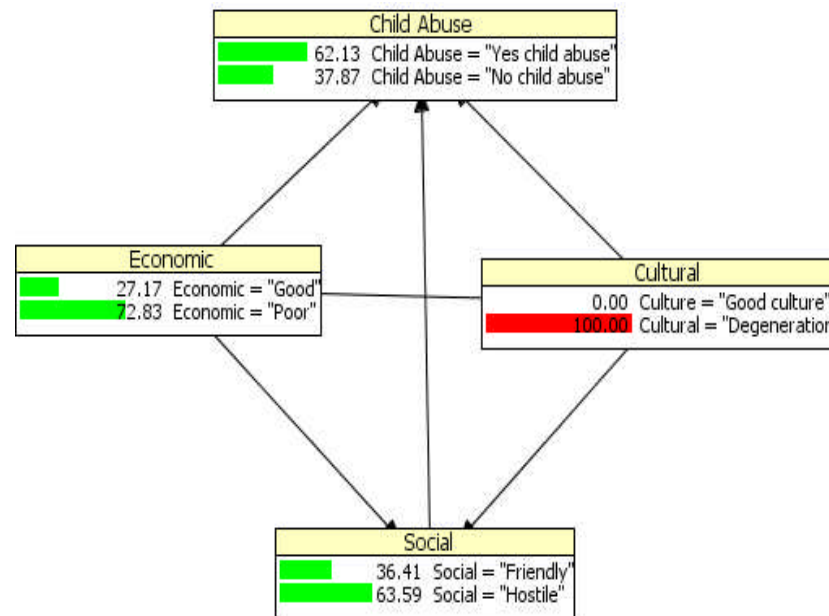
- If the economy cluster is 100% “Poor”, the probability of culture cluster is 67% to be “Degeneration”, and the probability of social cluster to be “Hostile” is 72%. Consequently, the probability of “Child abuse” to occur rises to 66.45%.



Degeneration Culture

Second Scenario: Degeneration culture

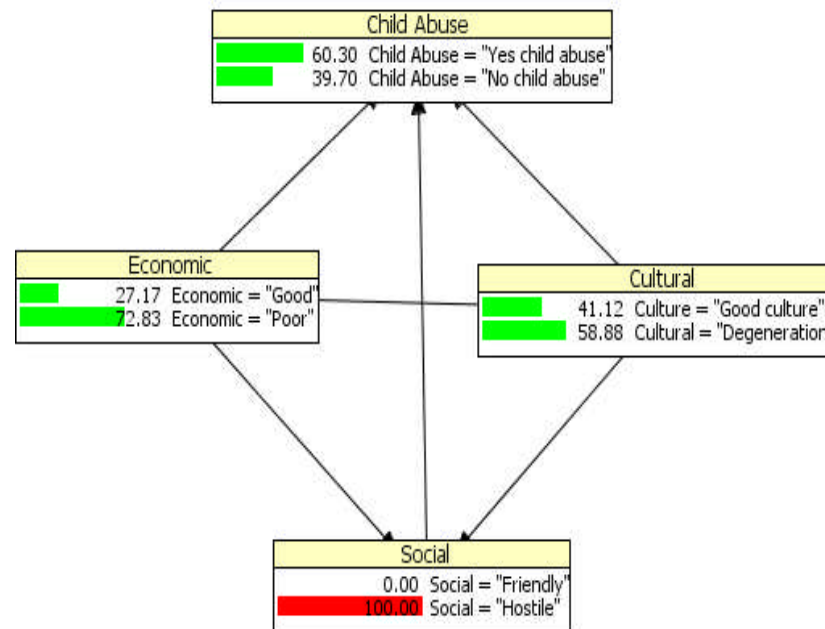
- If culture is 100% “Degeneration”, the probability of the social factor to be hostile is 63.59%. In such situation and considering the links and interdependences between the clusters, the economy cluster is 72.83% poor. The probability of child abuse to happen becomes 62.13%.



Hostile Social Factor

Third Scenario: Hostile social factor

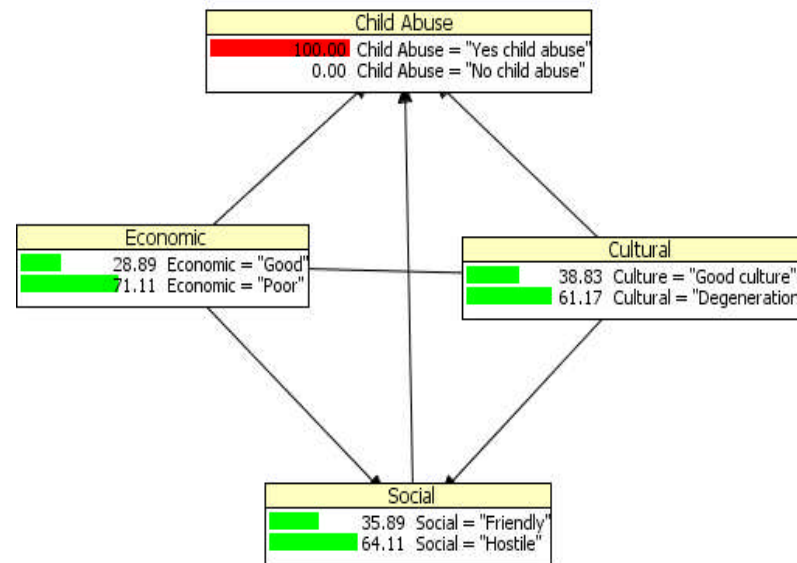
- If the social cluster is 100% “Hostile”, the probability of the culture to be degeneration is 58.88%. In such situation the economy cluster is 72.83% poor. As the consequence of these combinations, the probability of child abuse to occur is 60.30%.



Summary of Incidence of Child Abuse

Summary of the Incidence of “Child abuse”

- The links and interdependences among the economic, social and culture clusters and their contribution to the incidence of child abuse are depicted in the above network. The network shows that the probability of child abuse to happen at 100% is influenced by the economy cluster being 71.11% poor, the culture cluster being 61.17% degeneration and the social cluster being 64.11% hostile. First Scenario: Poor economy



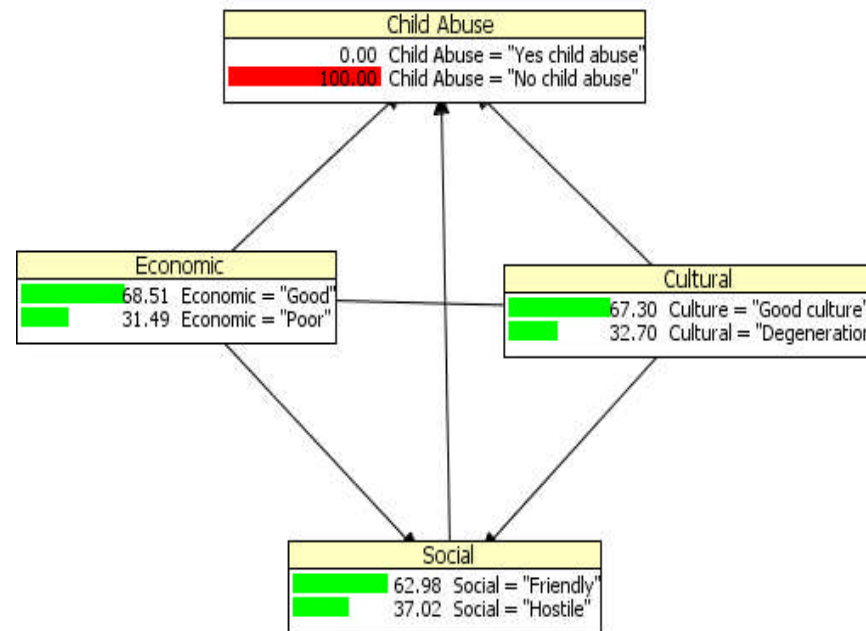
Prevention and Intervention: Decision Tool

- The IMT is a tool that facilitates the understanding of child abuse. The above networks show the links and interdependences among economic, social and culture clusters. The networks show also the probabilities of each individual cluster in contributing to the incidence of child abuse.
- Similarly, the ITM informs decision-making processes for effective and efficient policy development and implementation and other mechanisms for the prevention of and intervention against child abuse. The IMT facilitates the task of changing the contributing factors in order to achieve child care, protection and well-being.

Ideal Situation

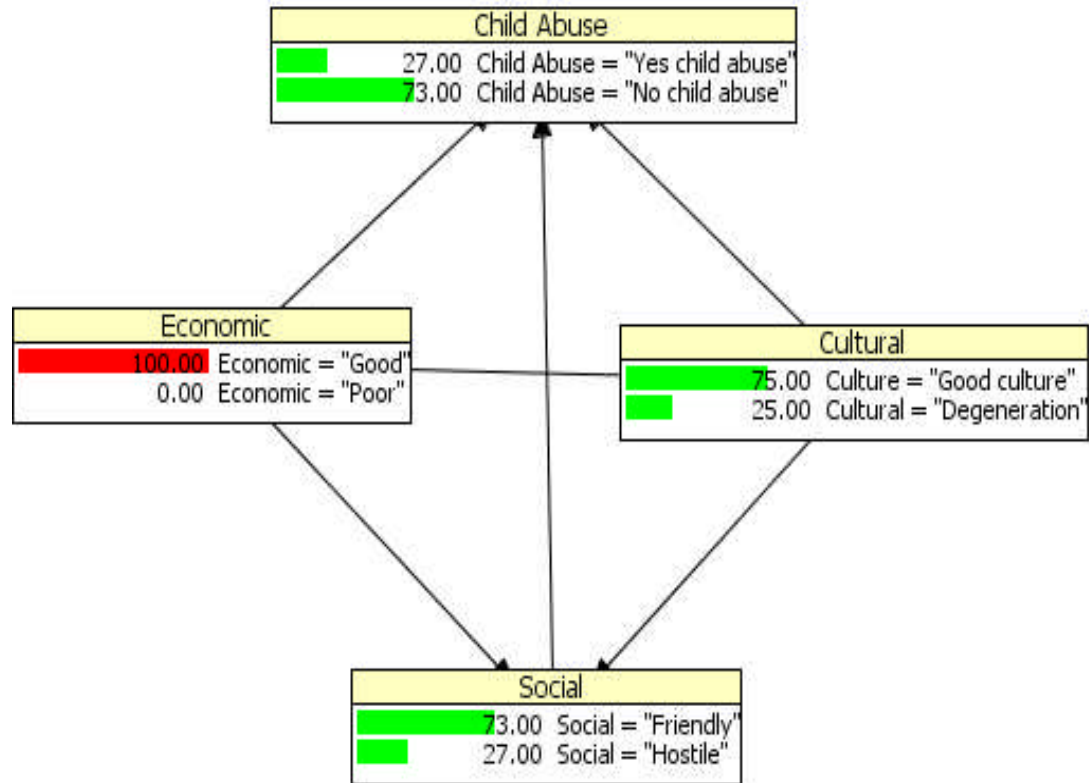
Summary of the Ideal Situation: Decision Tool

- The ideal situation on the good care, protection and well-being of children means less or no incidences of child abuse. The network below denotes that, in order to prevent and intervene against the incidence of child abuse, there is a need to have a good economy (68.51%), a good culture (67.30%) and a friendly social environment (62.30%).



Ideal Situation

Decision 1: Good economy



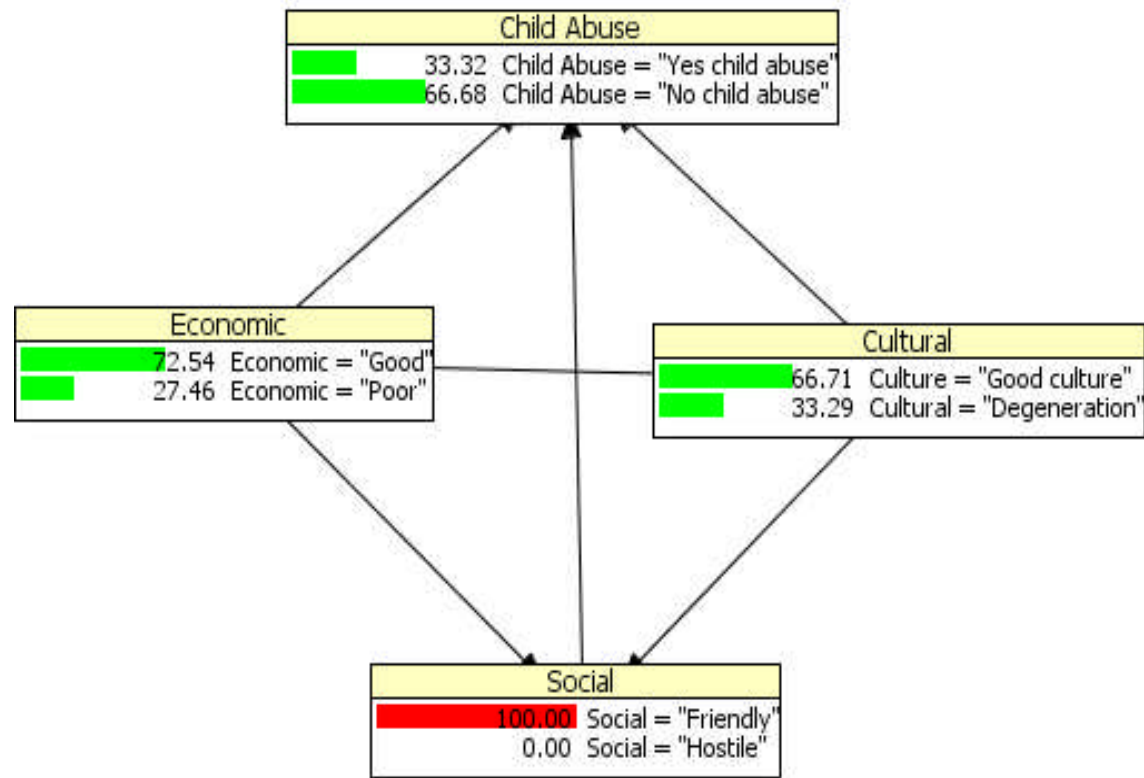
Ideal Situation

Decision 1: Good economy

- Because of its impact on social and culture clusters, the economy cluster plays a crucial role in addressing the incidence of child abuse. The above network shows that, if the economy is good (100%), the probability of culture to be good is 75%. Similarly, a good economy provides 73% chance for the social environment to be friendly. In considering all these three positive probabilities, the likelihood of child abuse to occur is reduced at only 27%. The research and this paper do not dream of a case whereby the economy is prosperous at 100%. The use of the probabilities is to show how good policies and effective actions to address different variables from a cluster can influence other clusters and consequently the outcome factor (child abuse).
- Consider policies and interventions on the access to economic rights (cash grants, social security, school fees exemption...), job creation, skills training for parents...

Ideal Situation

Decision Two: Friendly social environment



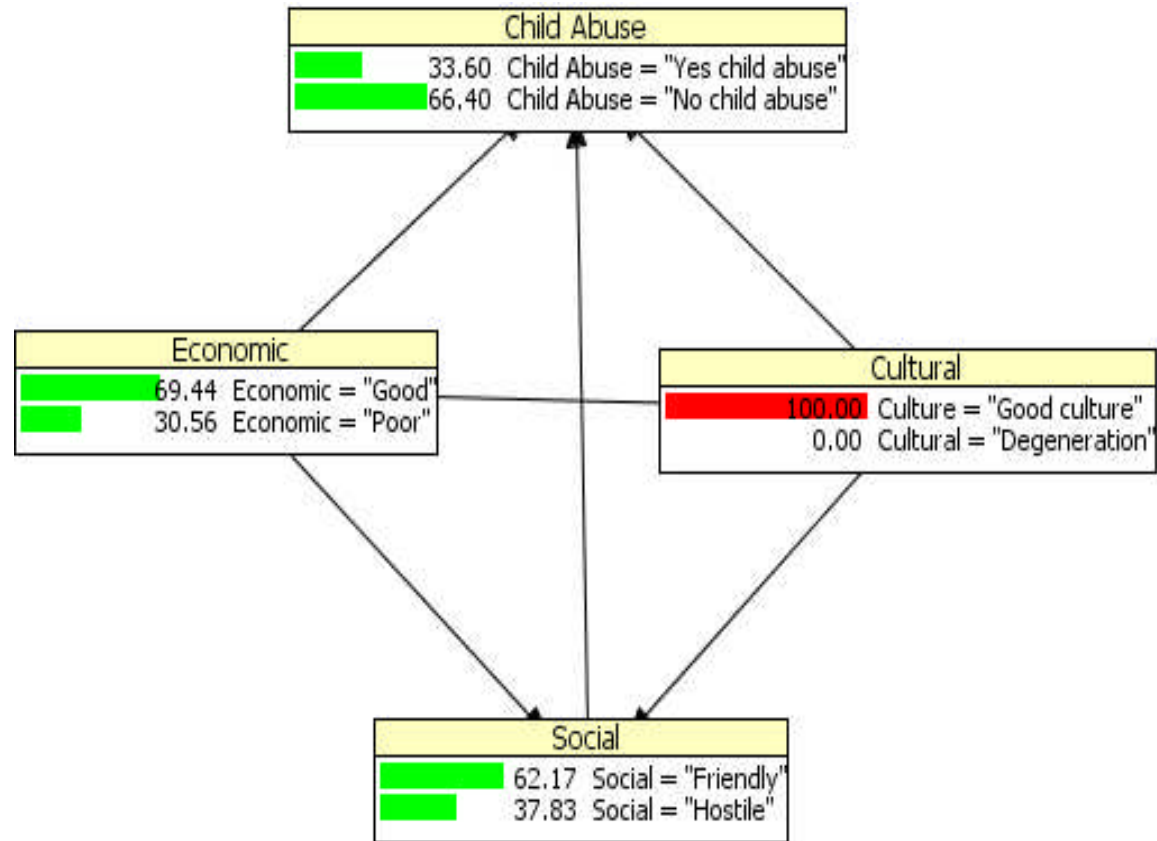
Ideal Situation

Decision Two: Friendly social environment

- Policies and interventions targeting the achievement of a friendly social environment are very important to secure a good care, protection and well-being of children. A friendly social environment for children is an environment where children enjoy a positive relationship with their parents and or caregivers, their teachers and the community at large. Prevention and intervention strategies should address these relationships.
- The following factors are important to be addressed in order to maintain a good social environment for children: substance abuse, parenting skills, family stability, child supervision and community support.

Ideal Situation

Decision Three: Good culture



Ideal Situation

Decision Three: Good culture

- Most of cases of child abuse happen in households where children live. According to Vetter (1986) among the factors implicated as sources of abuse are mental illness, influence of alcohol, sexual inequalities, stress and compulsive masculinity. Family related interventions form the core in addressing cultural factors that contribute to the incidence of child abuse. A home should be a safe haven for children and should provide safe and protected space where children are not exposed to pornographic material and where the behaviors of parent support such developments. Parents should be the champions for children's rights and not the perpetrators. Where feasible, a home should be structured in a way that children's rooms are not in very close proximity where sexual activities take place between the mother and the father. Other cultural factors that need to be addressed to achieve good care, protection and well-being of children include: cultural practices, patriarchy, culture of violence, reporting of case, HIV/AIDS myth, gender of the child, age of the child and child rights.



Conclusion

- This paper acknowledges that economic factors have a great influence on the family and/or community thus impacting on social and cultural factors contributing to the incidence of child abuse. However, the links and interdependences between factors from the economic, social and cultural clusters have demonstrated that all clusters contribute equally to the incidence of child abuse.
- The Integrated Modeled Theory suggests that, to prevent and intervene against child abuse there is a need of an complete understanding of the factors that contribute to its incidence. A good economy for instance will positively impact on both the social and cultural factors. A good culture too has a positive impact on the friendly social environment propitious for the care, protection and well-being of children.

End

Thank You!

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