

A possible innovative revision of the MAPI: Psychological Autopsy Structured on Individual Cases (PASIC)

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Abstract

The aim of this research is to propose an innovative technique of the psychological autopsy. Compared to the classic MAPI model, our procedure is structured on each single case by adapting the interview to the environmental circumstances, the socio-cultural characteristics of the subject examined and to the weapon used in the criminal act. We believe that this approach improves both confidence and compliance of the interviewee and the chances of obtaining information that could escape a standardized investigation. In one of the cold cases we studied, this new protocol led to the discovery of biological material coming from the crime scene, which had been secretly hidden by the subject for over 50 years.

The aim of our work was also to coordinate the activity of the interviewer, trying to avoid repetition in the interviews that could lead to an alteration of the answers to the questions asked. In the first phase questions with open-ended responses were preferred. In later stages we asked specifically worded questions. We were careful not to formulate questions that had already been asked. It must be emphasized that for each case of psychological autopsy only one operator handled the interview.

Key words: Psychological autopsy - suicide – homicide – MAPI – PASIC

1. Definition

The first signs of psychological autopsy date back to 1958, when medical examiner T.J. Curphey, who was Chief Coroner of Los Angeles County at the time, asked the Suicide Prevention Center of Los Angeles for cooperation with the aim of beginning a multidisciplinary analysis of the reasons for the high number of drug-induced deaths he had to deal with. Later, in 1961, the psychological autopsy procedure was further developed by psychologists Shneidman and Farberow and their work is still used as main reference by researchers in the field in the US today. However, Cuba is the place where the psychological autopsy protocol has evolved the most. The model, initially named MAP, later acquired the denomination of MAPI (Modelo de Autopsia Psicológica Integrado) having integrated further items during validation, and it was used in the analysis of victims of suicide, homicide, or accidental death. In contrast to the other models used previously, MAPI is, from a structural and systematic point of view, capable of reporting a very small margin of error. Whoever makes use of MAPI must implement it following the indications of the manual, which foresees and demands prefixed answers. The purpose behind it is to avoid the contamination by subjective components in the judgement of each case and, secondly, to ensure that the outcome of the investigation can be analyzed and reproduced by third parties.

2. Method MAPI

The scientific methodology used to validate MAPI was developed by the Cuban Ministry of Public Health, more specifically, by the Institute of Legal Medicine of the City of Havana through three surveys carried out between 1990 and 1996 on suicide, homicide, and victims of accidents. These investigations found that using third parties to acquire information about the fatal event can be considered reliable. However, it is absolutely essential to approach the interviewees taking into account the likelihood that they will reject the interview and the intervention of the interviewer². Therefore, it is necessary to identify a suitable management of the defense mechanisms of the interviewees first, especially those mechanisms that are triggered by the denial of what happened and by wanting to demonstrate in every way that the cause of the victim's death is not the one that is documented by the medical examiner. This occurs because there is a need to blame someone else for what has happened in order to be free from the sense of guilt that may come from the perception of one's own responsibility³.

From an investigative point of view, the psychological autopsy begins with the analysis of the crime scene, where, as in cold cases, it may not be possible to find biological or other forms of trace on the crime scene. But traces of a different nature, such as psychological traces, may be found. In fact, these are traces that not only remain alive in the places where the victim lived, but also with the people who were in contact with him/her. According to Weisman and Kastenbaum, one of the tasks performed by the psychological autopsy team, also known as DIT (Death Investigation team) is the interview, of which there are two types. The first type involves interviewing eyewitnesses, such as People who were present during the event that led to the death of the victim, or the discovery of the body. The second type refers to interviews with people who had had different kinds of relation with the victim. Specifically, there is an interview called SIRS (Structured Interview of Reported Symptoms), which is a valuable contribution in investigating the actual or probable feelings reported by the victim during his or her life, rather than in the time before the victim's death. There are some psychologists who describe a possible third investigation called the physical autopsy, a detailed

medical examination that can bring to light crucial information concerning the victim that no witness was aware of, such as illness or addiction.

The victim's history can potentially lead to the discovery of fundamental information about their background and lifestyle, which in turn can help the investigations in terms of narrowing down the number of suspects among whom the perpetrator may be hiding. To this day, there are essentially two lines used for investigative purposes in the creation of a criminal profile: inductive method and deductive method. The inductive profile is carried out by presuming what may have happened in the case being analyzed, by means of statistical reports and by making comparisons and connections. The deductive profile, on the other hand, is carried out through a process that requires a detailed examination of the behavioral patterns that appear in each case under analysis. This meticulous examination concerns the individual traces and clues of a physical and behavioral nature, acquired from the crime scene, from the coroner's documentation and from the peculiarities of the victim. Since any criminal event involves the presence of people and their respective psychologies, a psychological autopsy involves a retrospective reconstruction of the life of a missing person, the primary aim of which is to identify the reasons for the death of the person and then to determine whether it was suicide, homicide or accidental death. Thanks to the psychological autopsy, it is possible to go beyond the mere appearance of a victim and get to the reality of the facts, determining, among other things, criminal or civil liability as well as shedding light on events such as road accidents or domestic accidents⁴. It also works as a preventive and supportive tool for those who were close to the victim by helping them understand, accept, and process the incident.

MAPI (MODELO DE AUTOPSIA PSICOLOGICA INTEGRADO)

1. Name:
2. Address:
3. Date of birth:
4. Place of birth:
5. Until the age of 16 he lived in the area
6. Sex
7. Racial group
8. Marital status
9. Schooling achieved
10. Employment
11. Religious beliefs
12. Personal Pathological Background
13. Family Pathological Background and Social History
14. Toxic habits
15. Favorite and/or most frequently consumed drink
16. Frequency of consumption
17. Quantity consumed
18. CAGE (internationally recognized questionnaire used to detect alcohol abuse and/or alcohol dependence)

RETROSPECTIVE PSYCHIATRIC EXAMINATION UP TO ONE MONTH BEFORE HIS DEATH

19. Integration sphere
20. Cognitive sphere
21. Sphere of relations
22. Affective sphere
23. Pipeline sphere
24. Power supply
25. Sex
26. Hygiene habits
27. Sleep
28. Activities
29. Language
30. Syndrome
31. Nosological diagnostics
32. Conflicts in the socio-economic sphere
33. Conflicts at work
34. Judicial conflicts
35. Criminal history
36. Background of violent events not prosecuted under criminal law
37. Antecedents when minor
38. Stay in prison
39. Antisocial habits
40. Type of dwelling
41. Area where the dwelling is located
42. Composition of the dwelling
43. Condition of the dwelling
44. Psychological aspects of the murdered
45. What were the most interesting aspects for him (her)
46. Treatments received
47. Signals issued up to two years earlier
48. Recent losses (less than one year)
49. Relationship with the author(s) of his death
50. Place where the event took place
51. Time of the fact
52. Presence of third parties
53. Ingestion of alcohol or other substances by the victim before death
54. The victim was carrying weapons at the time of his death
55. Means used by the victim
56. Possible reasons for the event
57. The victim-victim relationships were of...
58. The victim felt for the victim...
59. At the time of the events the victim ...

3. Psychological autopsy in criminal and civil law matters

In criminal law, the psychological autopsy is frequently used in cases of dubious or equivocal deaths, or deaths of unspecified medical-legal etiology in order to determine the psychological state of the person committing suicide at the time of the event, particularly in cases of suspected incitement to suicide.

In the civil sphere, it can be used in cases of contestation of actions such as marriages, wills, donations, etc., or when there is a suspicion that the person was not of sound mind at the time he carried them out⁵.

4. Suicide context

The psychological autopsy originated from the study of suicide, although cases of equivocal death are sometimes found. In such cases the psychological autopsy is often the only way to shed light on the peculiarities of suicide victims in order to determine any warnings manifested prior to death⁶.

The psychological autopsy can be an important tool in determining the possible occurrence of the offence of inciting or aiding suicide, or the offence of murder of a consenting person. In our legal system, the offence of inciting or aiding suicide is governed by Article 580 of the Criminal Code.

Determining or reinforcing the intentions of others to commit suicide or facilitating in any way the suicide is punishable conduct. This doctrine, however, creates a division between death and serious personal injury of the suicidal person. Some consider them to be an event of the offence, while others consider them to be objective conditions of punishability. This is a common offence. Legal nature: crime of damage, event, free form⁷.

The offence of consenting homicide is governed by Article 579 of the Criminal Code and the conduct incriminated consists of causing the death of a person who has given his/her consent to die. It is a common offence. Legal nature: crime of damage, event, free form.

The conduct of the consenting person is the act of will by which he or she manifests their consent to their killing. Incitement or aiding and abetting suicide differs from the offence of murder of a consenting person. The offence described in Article 580 of the Criminal Code explains that the conduct takes the form of acts aimed at forming the intention of others, whereas according to the offence in Article 579 the person who causes the death replaces the would-be suicide, taking the initiative on his/her own by engaging in conduct resulting in the killing of the consenting person.

5. Murder context

In the course of investigating a crime, especially in cases of violent death, the focus is generally on reconstructing the profile of the criminal, leaving out the reconstruction of the victim's profile. By neglecting this aspect, an important part of the investigation might be lost, namely the often-present decisive link between the victim and the criminal. With reference to the analysis of the victim, this is done following the principles of victimology, a discipline that includes various branches of criminology, through which it has been established that the possibility of assuming the status of victim in certain criminal events is not random, let alone equal. In fact, there are certain physical and psychological aspects that can make some people more likely to be chosen as victims than others. The psychological autopsy will provide help in placing the victim in one of two possible categories: active or passive victims⁸.

Passive victims are those in whom there is no discernible psychological attitude or behavior that may have influenced the commission of the crime or led the criminal to specifically choose them as victims. They are accidental victims, whose behavior did not influence the genesis of the crime. There is no *relationship with the offender*, who did not specifically choose that victim. Passive victims also include preferential victims, i.e. those that the offender chooses because of who they are, what they represent, or other reasons. Within the category of passive victims, there are also symbolic victims who are targeted because they represent a group or an ideology. Additionally, there are the cross-victims, which are frequent in criminal vendettas and are targeted when there is no possibility of directly targeting the intended victim⁹.

Active victims include all those who become active as a result of their specific profession. The active relationship of the victim with offenders is represented by their profession as opposite poles in the crime.

In the hypothesis of a victim who assaults, the offender/victim relationship is at its highest, since the violent conduct of a person who endangers someone else provokes an equally violent or even greater relationship from the moment he/she is forced to defend him/herself. This situation is provided for in Articles 52 and 54 of the Criminal Code. Specifically, Article 52 of the Criminal Code governs self-defense which, in our legal system, falls under the so-called causes of justification. - The rules on causes of justification describe particular situations in which a fact which would normally constitute a crime does not acquire that character because the legal system allows or requires that conduct. Legitimate defense is therefore a reaction which anticipates injury, as it is the only possible immediate solution to avoid an unjust offence. The essential prerequisites are the unjust aggression that leads to the emergence of danger and the legitimate defensive reaction. The cause of justification of the state of necessity is governed by Article 54 of the Criminal Code, which reads as follows: "*He or she who acts in order to save oneself or others from imminent danger of personal injury, danger that was not voluntarily caused, nor avoidable, is not punishable for his or her actions as long as the actions are proportional to the danger. This provision does not apply to persons who have a special legal duty to expose themselves to danger. The provision of the first part of this article shall also apply if the state of necessity is caused by the threat of another person; but in such a case, the person who forced him/her to commit the act shall be liable for the act committed by the person threatened*".

This is a cause of justification which excludes the punishment of a person who has committed the act out of the need to save oneself or others from a present danger of serious personal injury. The requirements for invoking the state of necessity are the existence of a present and unavoidable danger and the existence of a danger involving serious personal injury. Under the second

paragraph, this cause of justification cannot apply to people who have a special legal duty to expose themselves to danger (military personnel, ship masters, firemen, ..) except in cases where the danger is different from the one they are required to face. They will be able to avail themselves of the justification in question if they act to save a third party. The third paragraph of Article 54 of the Criminal Code governs the so-called psychological compulsion.

Differences between self-defense and state of necessity: self-defense protects both personal and patrimonial rights, and the reaction is directed against the aggressor and excludes the unlawfulness of the act; state of necessity protects only personal rights and not patrimonial rights, the conduct damages the assets of a third party and not of the aggressor, excludes the unlawfulness of the act but leaves the agent with a civil obligation to provide fair compensation.

Another hypothesis of a victim who participates in the dynamics of a crime is the provocateur, in the sense that she suffers violence because she provokes the aggressor's anger.

Article 62(2) of the Criminal Code provides for the following as a common mitigating circumstance: "*acting in a state of anger caused by an unjust act of another person*". This is a common mitigating circumstance known as provocation and operates in the event of two conditions, namely the state of anger that provokes an uncontrollable compulsion in the subject, and the unjust fact of others. It is not required a link of immediacy between the two, since the agent's reaction may also occur after a longer period of time, provided that this does not break the relationship with the provocateur's unjust conduct. What has been said above shows that the provocative behavior is of great importance in the genesis of a crime.

The unconsciously provoking victim, on the other hand, does not realize that he or she is provoking, and believes that he or she is defending his or her right.

The behavior is not obviously intentional and can be considered as an expression of unconscious hostile psychological attitudes. This category of victims can be found in family crimes, but also in prolonged and close working relationships. It is worth mentioning a case which is said to have laid the foundations for the development of the psychological autopsy as a professional technique. We are talking about the murder of Lieutenant Jack Lester Lee, a World War II hero who was killed by his lover in 1947. The defense lawyer called for an expert opinion to prove that the victim had dangerous and psychopathological characteristics that justified the murder committed by his client. Two experts took charge of the case and they started analyzing writings, such as letters, the personal diary, and a book written by the victim. They then reviewed his medical history by analyzing the victim's records at a military hospital where he had been confined and from which it appeared that the then patient suffered from a personality disorder particularly focused on his sex life.

Other active victims include the consenting victim, who consents to be killed by others or who requests it, and finally there are the false victims, who are divided into simulated victims and imaginary victims.

6. Accidental death

In the context of accidental deaths, the psychological autopsy can help understand whether a domestic accident might not in fact be a masked homicide or a suicide. In the second scenario the relatives might want to conceal it for various reasons - insurance, image of the deceased, guilt about the suicide, etc. In road traffic accident cases, it is important to understand the role the victim played in shaping the accident¹⁰. It is important to understand whether the victim had taken drugs or other substances, or whether he had intentionally thrown himself under a car. Also, in cases of accidents at work, a psychological autopsy can be helpful in understanding the psychological condition of the worker at the time of the accident.

7. From MAPI to PASIC

Preamble: The new application methodology involves the use of knowledge areas and no longer a closed response to the well-known points of the classic MAPI.

Structure: The first cognitive area includes a collection of information aimed at obtaining general data. In this first area, personal, social, socio-cultural, and environmental information is collected. In this area, every useful method for a rapid improvement of compliance will be immediately established, supported by a relationship of trust and confidentiality between the parties.

The second area is aimed at asking for an open narrative of "generic" memories of the events.

The third area aims at an increasingly specific interview: the relationship between the interviewee and the victim (family relationships, friendships, professional acquaintances, casual acquaintances, ...).

The fourth area, defined as the criminodynamic area, requires the subject to describe the facts or his hypothesis about the criminal event (criminodynamic version).

The fifth area concerns the identification of the means used in the criminal event (white weapon, firearm, cables...), the search for suggestions and opinions about any relationship between weapon, perpetrator, and victim.

Instructions: Only one single operator, and always the same one, should deal with the subject heard in the psychological autopsy.

The individual practitioner should carry out questioning and open listening using non-suggestive methods intended to be directed exclusively at the person involved in the psychological autopsy (1/1 ratio). Should the interviewee direct us to a third party who knows more information, a new and independent psychological autopsy will be carried out with the intervention of a new operator.

Effectiveness: Simple, quick to apply, protected from suggestions, backed by high confidentiality and with high guarantees between the parties. The criminologist is particularly effective because, at least in this activity, he or she does not play an authoritative role and this situation makes it much easier to establish a confidential and trusting relationship between the parties.

PHASE	MAPI	PASIC
1	Unit area aimed at cognitive information	Cognitive area through open questions aimed at collecting general information (personal, social, socio-cultural, environmental): early compliance between interviewee and operator.
2	Area aimed at closed questions and subsequent piloted response (recall criminal event).	Area aimed at an open-ended interview to obtain generic information through the interviewee's memories (memory of criminal event). In addition, there is the obtaining of spontaneous information in favor of the investigation.
3	Area aimed at direct closed questions in order to obtain information regarding the nature of the relationship between the interviewee and the victim	Area aimed at obtaining increasingly specific information about the nature of the relationship between the interviewee and the victim (family relationships, friendships, professional and casual acquaintances, ...). Purpose: early empathy between the parties.
4	Area dedicated to a description of the criminal event and subjective version of the interviewee regarding criminodynamics always and only through closed questions.	Area dedicated to a description of the criminal event and subjective version of the interviewee regarding criminodynamics always and only through open questions.
5	Area aimed at identifying the means used (weapons) in the criminal event through closed questions and answers (multiple choice).	Area aimed at identifying the means used in the criminal event through Area aimed at identifying the means used (weapons) in the criminal event through the search for suggestions or opinions: personal opinion of the interviewee in relation to victim/weapon/author of the events.
6	Should a third party turn out to be involved in the events (based on the closed responses), it too will be subject to MAPI.	Should a third party to be interviewed emerge from the narrative, methods and purposes will be the same as PASIC but with a different operator.

Tab. 1 Comparison between MAPI and PASIC

8. Results

In an Italian cold case that we have studied, this technique of Psychological Autopsy (PASIC) succeeded in obtaining biological material coming from the crime scene that had been secretly hidden for over 50 years by the interviewee. The aim of our work was also to coordinate the activity of the interviewer, trying to avoid the repetition of interviews that would lead to an alteration of the answers to the questions presented. In a first phase, questions with open-ended answers were preferred. In the subsequent phases we asked questions formulated in a very specific way. We have been careful not to formulate questions already asked. For each case of Psychological Autopsy, we pointed out that it is important that only one operator handles the interview.

9. Conclusion

In our case history, started in 2014, we have been applying an innovative psychological autopsy protocol, mainly for cold cases related to the 60's and 70's in Italy. Our model is based on a more basic structure than the classical MAPI. Another crucial feature is that we started to utilize a customized interview to each case.

Each case that we studied presented common characteristics in terms of modus operandi, type of weapon, and social context. On the basis of these variables, we devised the possibility of defining rapid protocols adapted to the characteristics of each individual case. By doing this, we have made it more effective to listen to people who had direct or indirect relations with the victim. The advantages were mainly sustained by a reduced possibility of contaminating the statements of the person being listened to. Our method was therefore more effective and faster in obtaining strategic information from an investigative and criminodynamic point of view.

In order to maintain a high level of trust and confidentiality with the person interviewed, we appointed an individual professional to interview the subject. The interpersonal relationship immediately led to the establishment of trust between the parties, which resulted in the subject revealing very important investigative details shortly after the interview. We have also noticed that the interpersonal relationship, managed with the intention of increasing confidentiality, has determined favorable effects in making memories resurface in the person's mind. Another fundamental element is that the relationship between the professional and the person listened to is protected through the absence of interference by other interlocutors. Among the results obtained, it is very evident how the spontaneous willingness to release declarations and fundamental information has been stimulated. Obviously, the protocol presupposes a constant willingness on the part of the professional to collect direct or indirect spontaneous statements without space or time limits.

In one of our most recent activities, the application of the new psychological autopsy protocol led to the emergence of concrete new evidence connected to the scene of a crime that took place in 1970. Specifically, the daughter of the woman who was killed confessed that she had gathered evidence from the crime scene and kept it hidden for 50 years.

References:

1. Litman, R. E. 500 Psychological Autopsies. *Journal of Forensic Sciences* **34**, (1989).
2. Ebert, B. W. Guide to Conducting a Psychological Autopsy. *Professional Psychology: Research and Practice* **18**, (1987).
3. Isometsä, E. T. Psychological autopsy studies - A review. *European Psychiatry* vol. 16 (2001).
4. Beskow, J., Runeson, B. & Åsgård, U. Psychological Autopsies: Methods and Ethics. *Suicide and Life-Threatening Behavior* **20**, (1990).
5. Garcia Perez, T. The psychological autopsy in violent deaths. *REVESPMEDLEG Revista-Es*, (1999).
6. Bourgeois, M. L. Psychological autopsies in the study of suicide. *Encephale* **22**, (1996).
7. Cavanagh, J. T. O., Carson, A. J., Sharpe, M. & Lawrie, S. M. Psychological autopsy studies of suicide: A systematic review. *Psychological Medicine* vol. 33 (2003).
8. Knoll, J. L. & Hatters-Friedman, S. The Homicide-Suicide Phenomenon: Findings of Psychological Autopsies. *Journal of Forensic Sciences* **60**, (2015).
9. Frei, MD, A. The Psychological Autopsy as a Means to Analyse Cases of Mass-murder and Homicide-suicide. *Universal Journal of Psychology* **4**, (2016).
10. Gau, S. S. F. & Cheng, A. T. A. Mental illness and accidental death: Case-control psychological autopsy study. *British Journal of Psychiatry* **185**, (2004).

Biography

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