

Decision Making while Using Information and Providing Military Psychological Operations

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Abstract

The aim of the present study is to present the process of Decision Making, as a psychological process, using the power of Information in order to design Military Information Support Operation (MISO) – until recently called Psychological Operations (PSYOP), from a mathematical point of view. This study provides the step-by-step set of operations of Decision Making, (PSYOP) and (MISO) to be performed. Designing, organizing and interpreting PSYOP and MISO will be more effective according to that way of reasoning.

Keywords: Decision Making; Military Information Support Operation (MISO); Psychological Operation (PSYOP)

1 Introduction

The phenomenon of social communication consists of verbal and non verbal messages exchanges, and provide information as well as influence on others.

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Central role has the process of distributing *information*. The Latin stem (*information-*) of the nominative (*informatio*): this noun is derived from the verb *informare* (to inform) in the sense of "to give form to the mind", "to discipline", "instruct", "teach". The Greek word is *πληροφορία* which transliterates (*plērophoria*) from *πλήρης* (*plērēs*) "fully" and *φέρω* to carry-through. It literally means "fully bears" or "conveys fully". Information is any type of pattern that influences the formation or transformation of other patterns [1] [2]. Information has high value, is easily manipulated and can be used in the frame of non-cooperative strategies which manipulate the information asymmetry, in order to disguise reality and to defraud or confuse others as a vehicle of opportunistic propensities, unethical politics, economic superiority [3] and warfare.

In modern times research on co-operative or non-cooperative behaviors especially in conditions of information asymmetry is crucial for governments and armies. Co-operation can provide development in many fields such as economy [4], science, technology, culture, but non-cooperation cause troubles and of course provides competition and superiority. Non – cooperative behaviors are negatively correlated with the perception of self-efficacy and optimism [5]. Co-operative or non-cooperative behaviors are related with the Game Theory [6] and can be applied in political, sociological, and psychological behaviors as well as in military science. One of the dilemmas facing policymakers in an arms race where mutual defection occurs trying to determine whether the opponent is simply trying to 'win' or is a risk-averse expected payoff maximizer [7].

The Cold War and similar arm races can be modeled as a Prisoner's Dilemma situation [8]. Both NATO and Warsaw Pact had the choice to arm or disarm. Disarming whilst their opponent continued to arm would have led to military inferiority and possible annihilation. Arming whilst their opponent disarmed would have led to superiority. If both sides chose to arm, neither could afford to attack the other. If both sides chose to disarm, war would be avoided and there would be no costs. The 'best' overall outcome is for both sides to disarm. The

rational course for both sides is to arm. Thirty years both sides spent enormous resources into military research and armament. Decision making is a matter of strategy based on *Knowledge*, personal *capabilities* by using *information* and the power of *communication*.

2 Decision Making

In decision making process several variables are crucial: a. personal qualities such as perception of self – efficacy and self-esteem or resilience, b. knowledge: informations about the environment (natural or social) c. strategy: long term and short term plans, methods, materials.

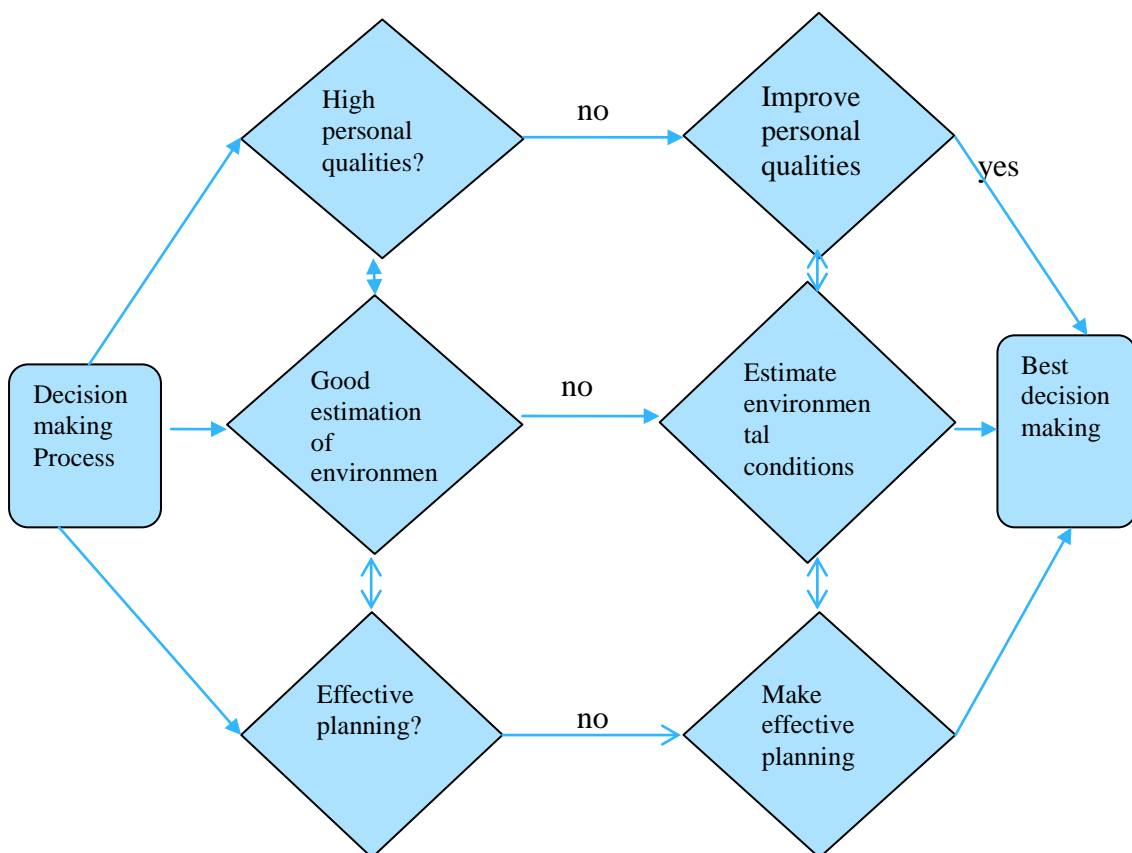


Figure 1: Decision making algorithm

Gellat's [9] model of decision making presupposes: a. a person who wants to make a decision, b. at least to alternatives, c. as many informations as possible. If decision is exploratory one need more information until the final decision. Gellat's stages [10] of decision making include: a. collection of adequate information, b. assessment of each choice's possible results, c. assessment of realization's possibility, d. assessment of how much desirable the results will be, e. decision (exploratory or final).

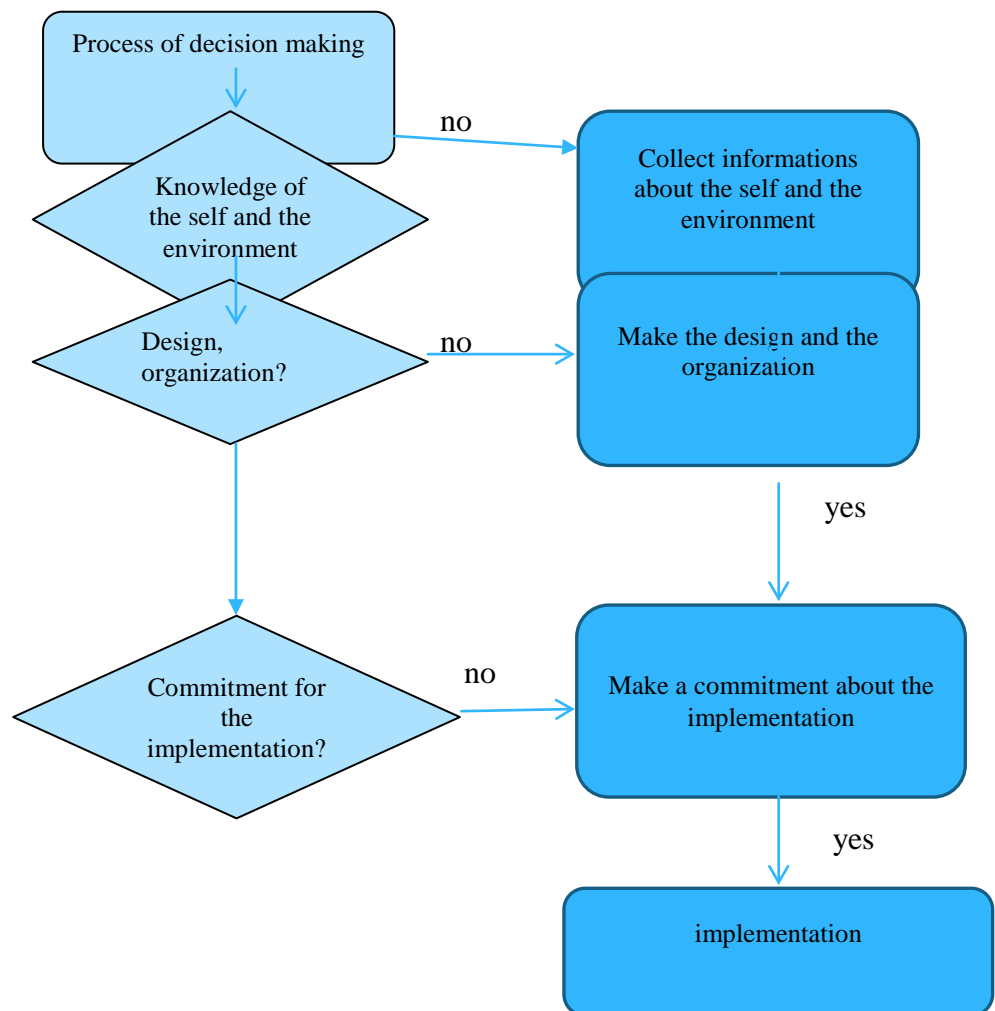


Figure 2: Harren's model of decision making (1979)

According to Vroom [11] the central model of decision making includes two individual models: a. the model of *power*: one makes a choice which has more *power* in the sense of expectations for each alternative choice to be real, so one make the decision that have more possibilities of success and b. the model of *valence*: one prefers the choice with the most valence, in the sense of the degree of desirability of the choice which consists of the consideration of the forecasted results and the person’s values.

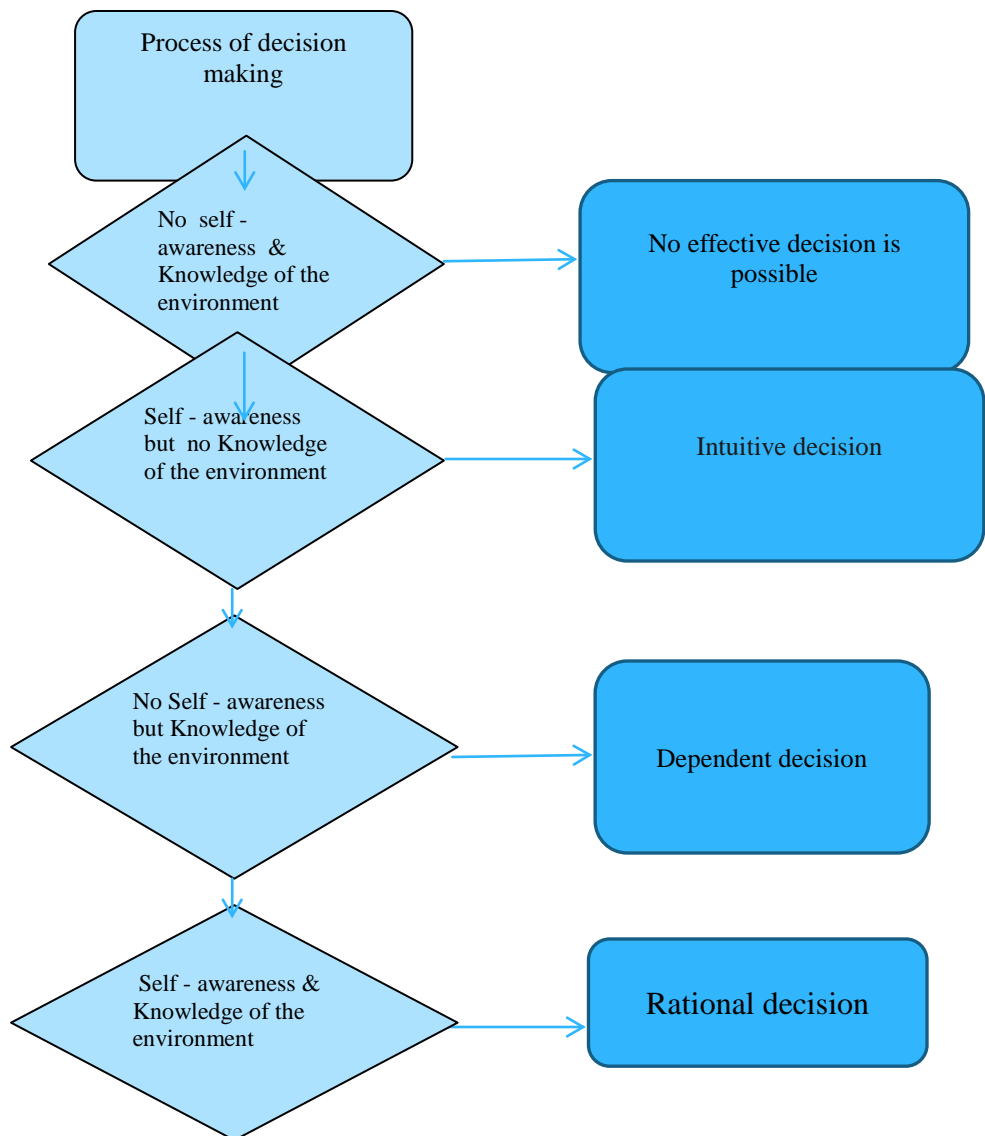


Figure 3: Tiedeman & O’Hara model of process decision making (1963)

Harren's theory [12] about decision making considers: a. the knowledge of the self and of the environment, b. the design, the organization and the implementation of the process of decision making, c. one's commitment in the implementation of the specific choice, d. the implementation of the specific choice.

The effectiveness of a decision making depends on the degree of self - awareness and on the degree of the knowledge of the environment [13]. a. Inability either of self-awareness or of the environment causes confusion and decision making is impossible. b. Self-awareness in combination with lack of informations about the environment leads to intuitive decision. In intuitive way of decision making one takes into account intuition more than rational, one need less time than in rational way because no information is gathered and emotions and fantasy are in the spotlight [14]. Intuitive way of decision making goes with lack of available time and with interpersonal relationships, because other's reactions are unpredictable.

c. Lack of self- awareness in combination with sufficient informations and knowledge of the environment leads to dependent decision. In dependent decision making individuals are dependent on other's knowledge and expectations. d. Self-awareness in combination with sufficient information and knowledge of the environment lead to rational decision. The rational way of decision make is based on rational processing. Individuals assume responsibility of their actions, react considering previous experiencing and information, usually associate previous experiencing with future results as well as personal and environmental potentiality.

3 Psychological Operations

Psychological Operations (PSYOP) are missions distinct from public affairs and support to public diplomacy, their objectives apply to both major combat

operations and stability operations: a. isolate the adversary from domestic and international support, b. reduce the effectiveness of the adversary's forces, c. deter escalation by adversary leadership, d. minimize collateral damage and interference with U.S. operations [15]. PSYOP may request specific behaviors directly, or it may attempt to obtain the desired behaviors indirectly. If they are delivered indirectly they attempt to change knowledge, beliefs, or attitudes by informing, instructing, or interpreting information for the target audience as a prelude or contribution to behavioral changes.

Levels of PSYOP:

i. *Strategic PSYOP and "support to public diplomacy"*: a. refers not to the significance of any given PSYOP activity, but rather to its geographic scope, b. would be trans regional, if not global, c. any information provided by military sources to such a wide-ranging audience would constitute "support to public diplomacy" or to "public affairs," if the audience included the nation's of origin public.

ii. *Theater/operational PSYOP* under the direct control of the theater Commander. They are directed toward general audiences and typically tries to modify general attitude sets as a prelude to behavior changes. The dominant approach for theater or operational PSYOP will involve rational argumentation designed to achieve longer lasting effects. PSYOP can increase the audience's ability to receive the message by adapting it to the receiver's understanding and experience and by eliminating or reducing distractions. Delivery vehicles for messages at this end of the continuum include: internet, television, radio, newspapers, journals.

iii. *Tactical PSYOP*: refers to forces and activities under the direct control of individual maneuver force commanders. Tactical PSYOP is directed against specific target audiences and often asks for specific behaviors. Messages used in tactical psychological operations must be concise and to the point attempting to

persuade an audience for short-term behavior modification in a brief statement on a leaflet or other paper product.

PSYOP professional wants the target audience to act rather than to think about the message being conveyed. There may be relatively more emphasis on emotion than reason. Many tactical products also derive a comparative advantage by leveraging the coercive power of the U.S. military and its reputation. Delivery vehicles well suited for tactical PSYOP: face-to-face interaction, loudspeakers, posters and handbills leaflets emails. These products must attract attention and make the principal point quickly.

There are three types of products that are used to create these messages: a. *white* products which are used in overt operations b. *gray* products which are used in covert operations c. *black* products are used in covert operations. White, Gray, and Black operations don't refer to the product's content but rather to the methods used to carry out the operation. In order for PSYOP to be successful they must be based in reality. All messages must be consistent and must not contradict each other. Any gap between the product and reality will be quickly noticed. A credible "truth" must be presented which is consistent to all audiences. Primarily it is a component of offensive counter information but can be used defensively as well. PSYOP are used in support of special operations, unconventional warfare, and counterinsurgency (COIN) operations.

PSYOP can include military operations other than warfare and also include joint operations, such as: a. counterterrorism operations, b. peace operations, c. noncombatant evacuation, d. enforcement of sanctions, e. maritime interception operations, f. strikes and raids

White PSYOP is acknowledged as an official statement or act of the Government, or emanates from a source associated closely enough with the Government to reflect an official viewpoint. The information should be true and factual. It also includes all output identified as coming from official sources.

The source of the gray PSYOP product is deliberately ambiguous. The true source (Government) is not revealed to the target audience. The activity engaged in plausibly appears to emanate from a non-official source, or an indigenous, non-hostile source, or there may be no attribution. It is simply a means for the source to present viewpoints which are in the interest of foreign policy, but which will be acceptable or more acceptable to the intended target audience than will an official government statement. In Overt PSYOP the activity engaged in appears to emanate from a source (government, party, group, organization, person) usually hostile in nature. Covert PSYOP is not a function of the military but instead is used in special operations due to their political sensitivity and need for higher level reasoning.

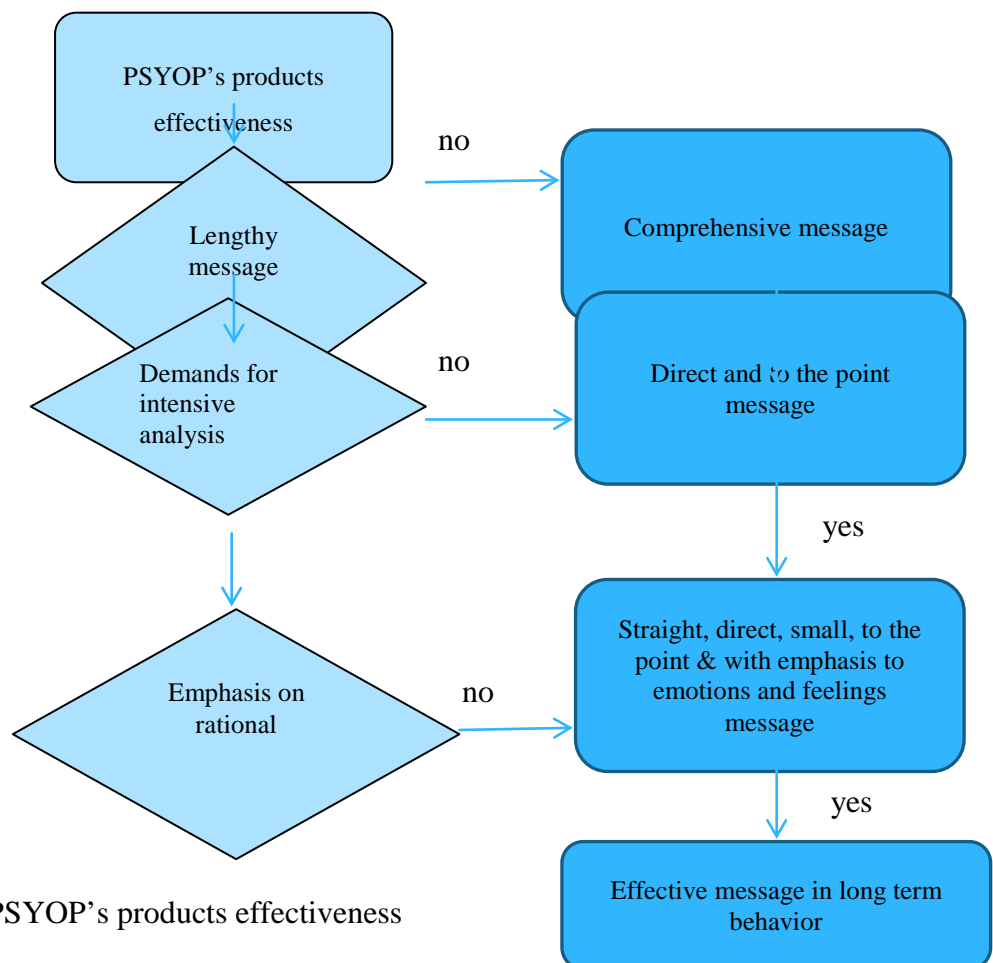


Figure 4: PSYOP's products effectiveness

Black PSYOP, to be credible, may need to disclose sensitive material, with the damage caused by information disclosure considered to be outweighed by the impact of successful deception. In order to achieve maximum results and to prevent compromise of overt PSYOP, overt and covert operations need to be kept separate. Personnel involved in one must not be engaged in the other.

Effectiveness of PSYOP's products depends on the size, the understandability and the emphasis on the rationale of the message.

4 Military Information Support Operation

Military Information Support Operation (MISO), a term used since 2010 by US Department of Defense (DoD), are planned operations to convey selected information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and ultimately the behavior of foreign governments, organizations, groups, and individuals in a manner favorable to the originator's objectives [16].

The informational, cultural, social, moral, political, and physical aspects of the operational environment are as critical to operational success as the traditional orientation on adversary military capabilities has been in the past. MISO can help to broaden commander's objectives with an analysis of the environment and select relevant target audiences, but also to develop focused, culturally, and environmentally attuned messages and actions, employ sophisticated media delivery means and finally produce observable, measurable behavioral responses.

The Purpose of MISO is to influence the perceptions, attitudes, objective reasoning, and the behavior of adversary, friendly and neutral audiences and key population groups in support of the one who provide the MISO, and also to establish and reinforce foreign perceptions of military, political, and economic power and resolve. In conflict, MISO as a force multiplier can degrade the enemy's relative combat power, reduce civilian interference, minimize collateral

damage, and maximize the local populace’s support for operations. It is important not to confuse psychological impact with MISO. Actions of the joint force, such as strikes or shows of force, have psychological impact but they are not MISO unless their primary purpose is to influence the perceptions and subsequent behavior of a target audience (TA).

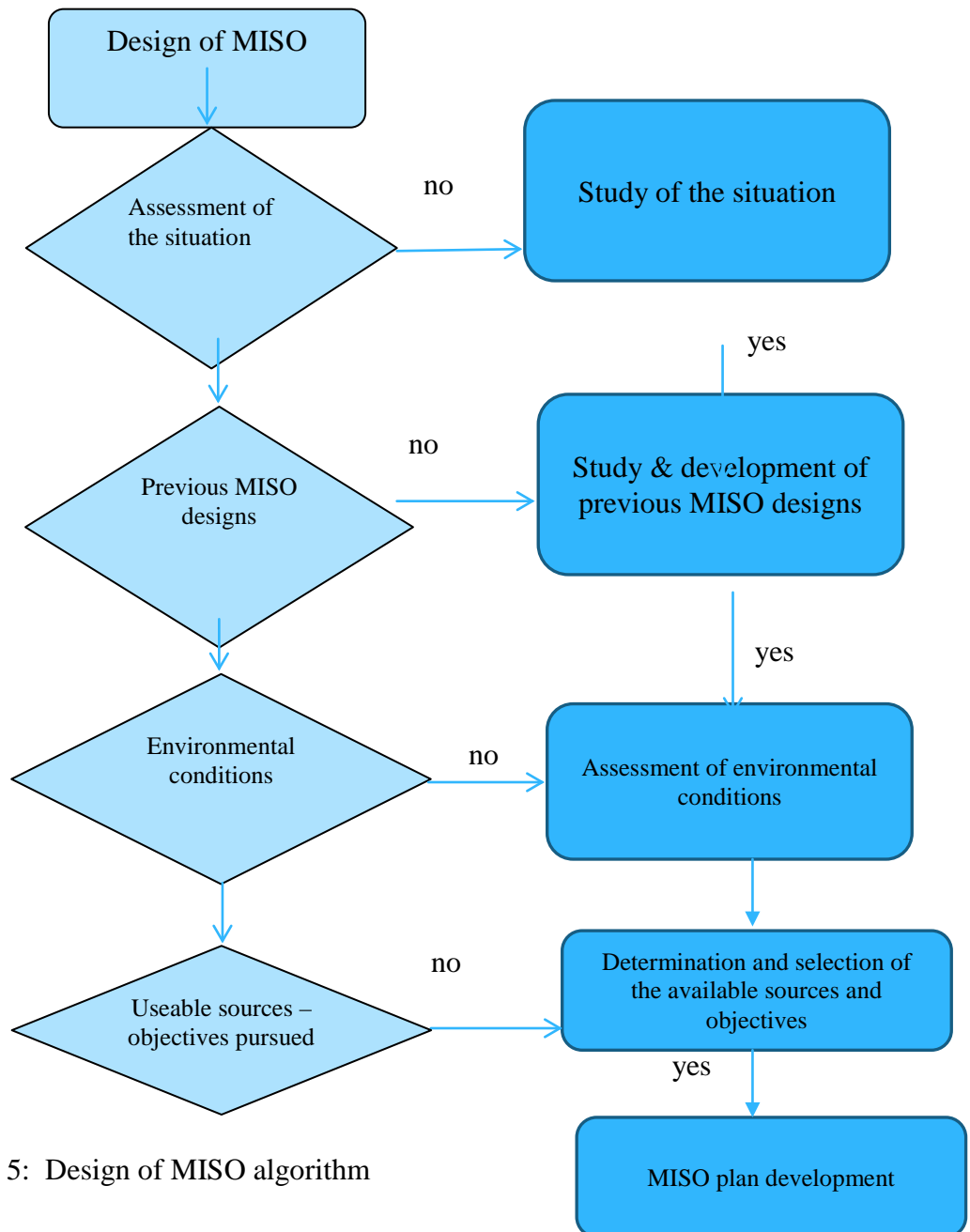


Figure 5: Design of MISO algorithm

MISO conducted at the operational level support regional policies and military plans. Tactical MISO are conducted in support of local military or civil authorities. MISO are designed to create immediate, localized effects, which together, support broader operational objectives.

In peacetime MISO are planned and integrated to further national defense strategies through the geographic combatant commander's (GCC's) theater campaign plan (TCP). MIS units communicate well-orchestrated and planned information to international audiences to clarify intent, prevent escalation of tension, ease concerns, and mitigate the potential effects and capabilities of adversary information activities. When diplomatic and other measures fail to deter conflict and lethal capabilities are employed, MISO can assist the JFC by setting conditions for the insertion of combat forces, neutralizing threats, facilitating efforts to contain conflict, stabilizing the operational area and enhancing efforts to achieve conditions that allow a return to steady-state operations.

In war time MISO contribute to the success of wartime strategies and are well-matched for implementation in stable and pre-conflict environments. In conflict MISO as a force multiplier can degrade the enemy's relative combat power, reduce civilian interference, minimize collateral damage, and maximize the local populace's support for operations. Operations supported by joint MIS forces support include the following: (a) Offense, (b) Defense, (c) Stability operations.

5 Conclusion

Research of Applied Psychology with the point of view of mathematical concept may illustrate the way an Army can offend or defend at the expense of the manipulation of information, in order to influence emotions, attitudes, social representations and finally behaviors. Decision Making, Cooperation Strategies, Information and Intelligence may have an impact to thought, emotion or behavior and may cause the imbalance in a territory, a country or even in the hole planet, so

governments and armies may produce benefits by using PSYOP and MISO. Further research on algorithmic reasoning of social influence in peacetime or in war time deemed necessary.

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