

De-Freeze Frozen Patient Management

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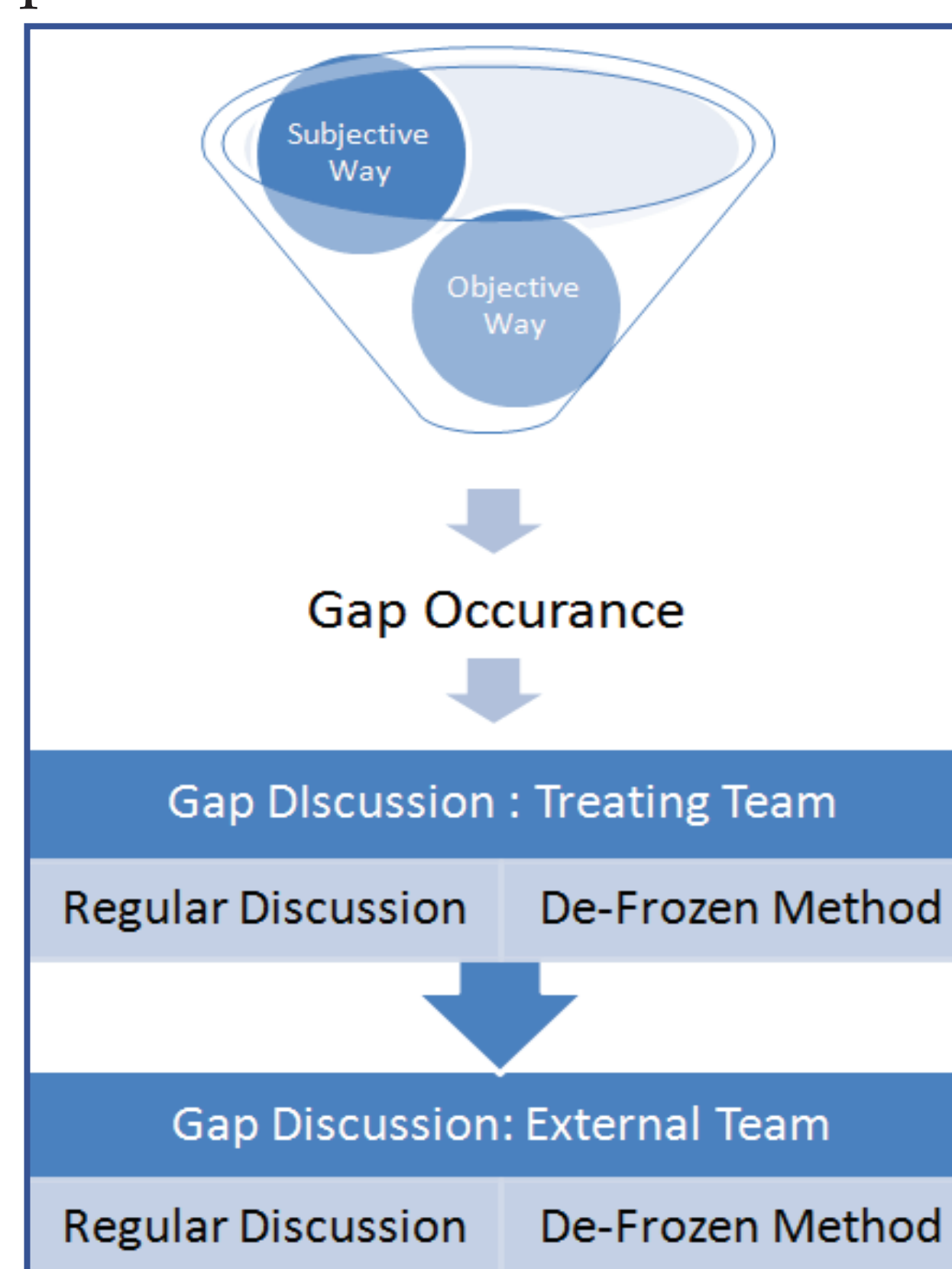
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INTRODUCTION

- To err is part of medical practice. About 10% of all patients entering hospitals suffer an adverse event related to medical error and a significant number of them die (Croskerry, 2010).
- In order to mitigate medical errors, present medical practice encourages functioning according to written guidelines, protocols and structured procedures (GPP).
- Working according to GPPs intensifies the frozen patient management problem (Kobo-Greenhut et. al., 2014).
- We define "frozen patient management" as a case when leaping from current patient management to more appropriate one is not considered or done.
- In order to encourage medical practitioners to identify the necessity for leaping on a regular basis, the first line of action should be the ability to recruit external professional peer aid (March, 1991).
- Despite the advantages of external involvement in improving the identification of the necessity for leaping, it may be impractical since it requires surplus human resources and time.

METHODS

- The primary purpose of this paper is to compare the effectiveness of the two methods (involvement of external medical team and the "de-frozen" method) in improving the identification of the necessity for leaping when gap occurs.
- The study was conducted in the emergency department of the Baruch Padeh Medical Center, Poriya
- The data collection was carried out by quality engineering students that accompanied doctors, nurses and patients.
- The students visited the department during 14 periods of 5 to 7 hours. The study included data of all consecutive medical patients admitted during the observation periods.
- The students were instructed to inquire about gaps that can occur between expected and actual physical findings; between expected and actual patient feelings (for example, pain, patient complaints); or between expected and actual laboratory results.



The method model can be seen in Fig. 1

Fig 1: Method Model

RESULTS

The results are shown in Fig. 2

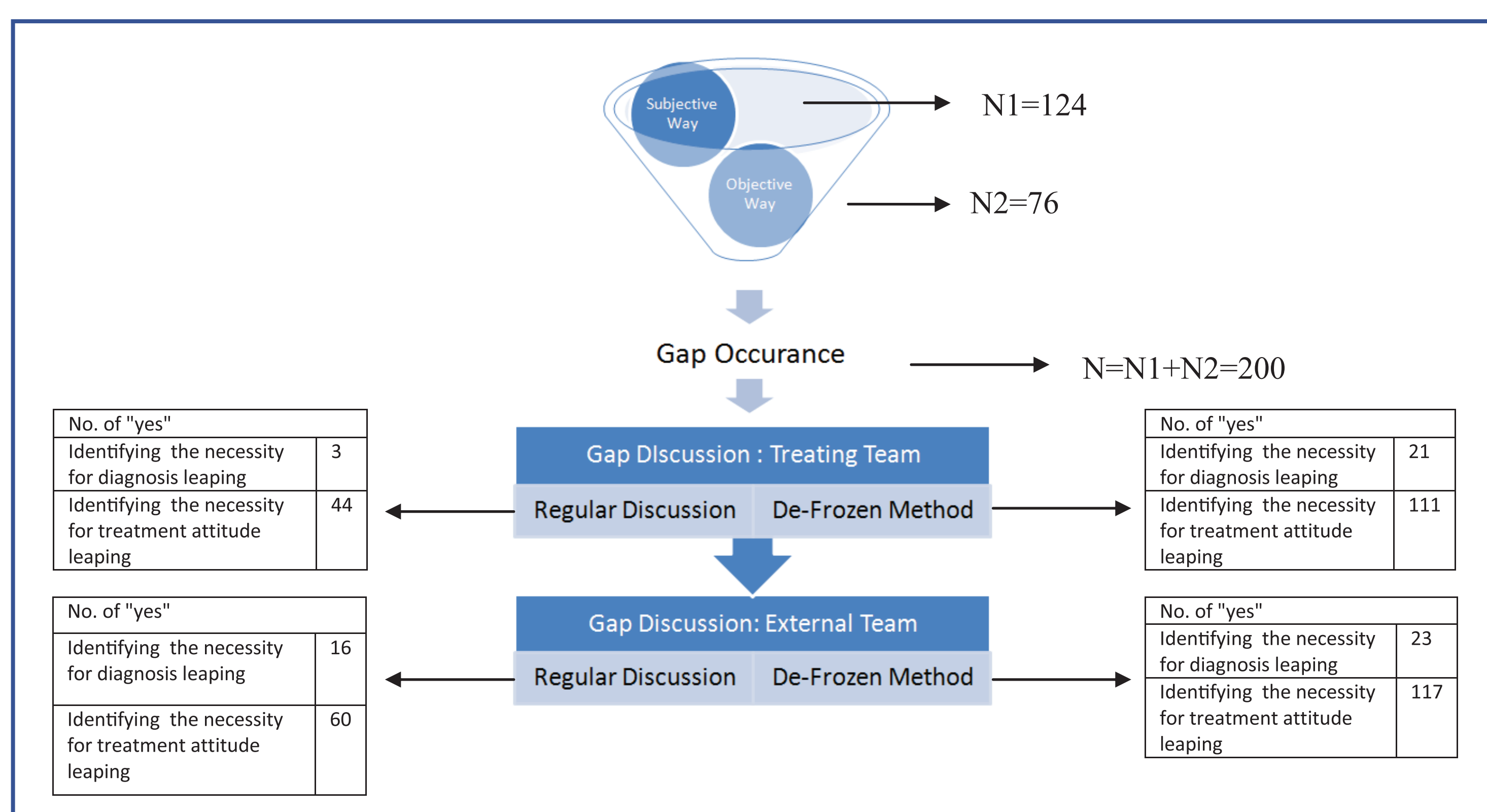


Fig. 2: Method Results

DIAGNOSIS LEAPING CONSIDERATION

Interaction plots of the two factors presented for each of the two types of cases separately (objective vs. subjective) can be seen in Fig. 3

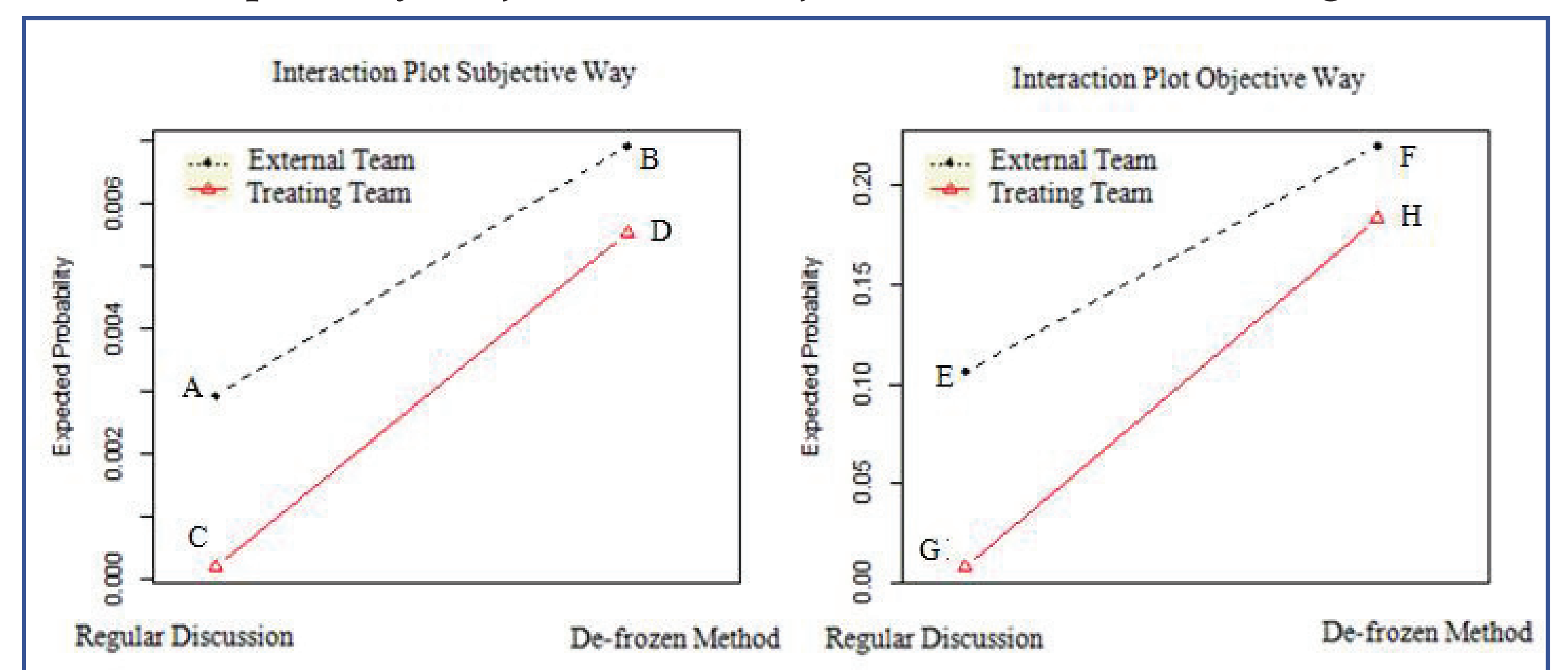


Fig 3: Interaction Plot

- Both factors and their interaction were found to be significant as well as the type of case
- For both objective and subjective ways, the factors have the same effect. The interaction plots also show that the change from discussion to de-frozen increases the probability of considering diagnosis leaping for both types of teams.
- When we consider the difference between objective and subjective way to identify gap, we found that a significantly higher probability is associated with objective way to identify a gap, compared with the subjective way ($P < 0.0001$).

TREATMENT ATTITUDE LEAPING CONSIDERATION

For this variable, unlike diagnosis leaping, the interaction between subjective/ objective way and mode of discussion were found to be significant ($P = 0.0016$).

Interaction plots of the two factors presented for each of the two types of cases separately (objective vs. subjective) can be seen in Fig. 4

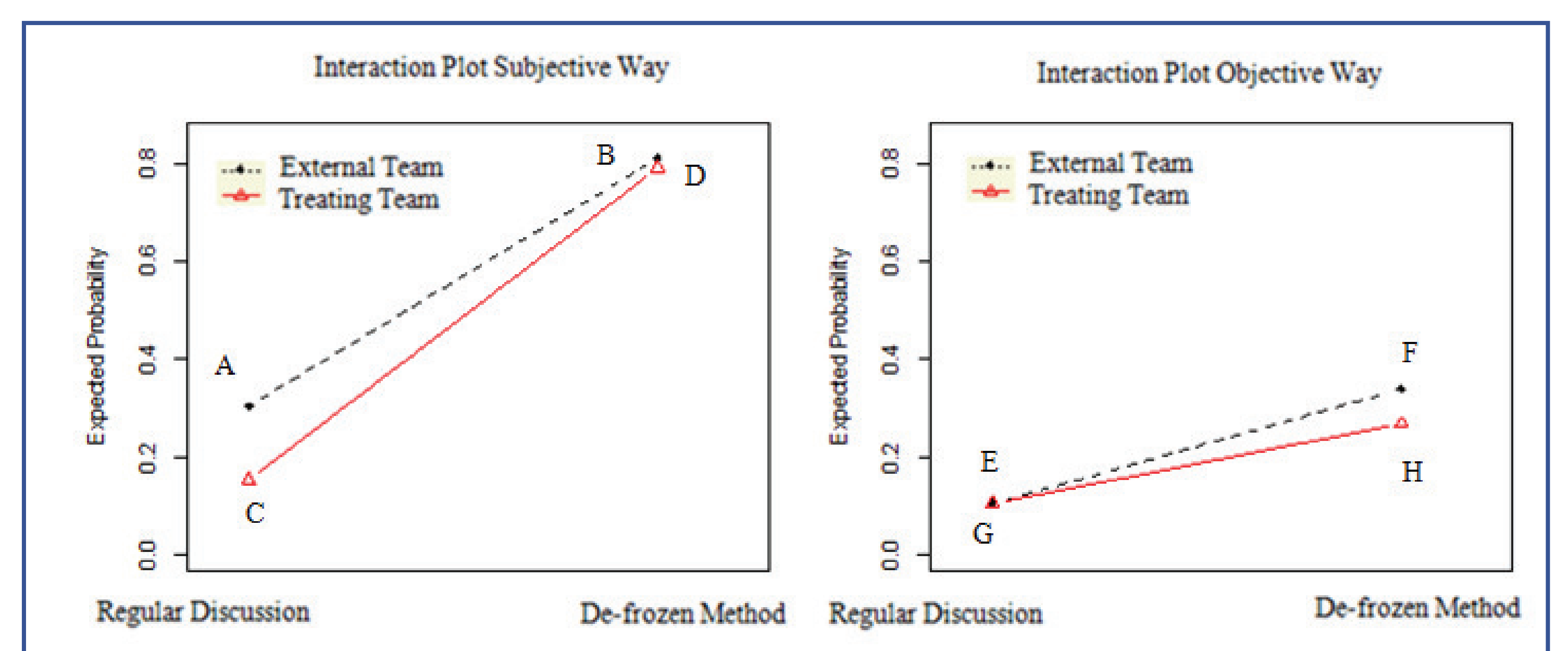


Fig 4: Interaction Plot

- For the subjective cases regardless whether team is treating team or external, discussion by de-frozen method has a significantly higher probability for treatment attitude leaping consideration compared with all other combinations of these factors.
- For objective gap, when de-frozen method is used, there is no significant difference in the probabilities of change between treating and external team.
- The probability to consider treatment attitude leaping is much higher than the probability to consider diagnosis leaping.

CONCLUSION

- The main finding of the present study is that discussion by de-frozen method improves leaping consideration.
- This method was found superior to the recommended method of discussion by external team (March, 1991). Working according to GPPs must be established with our de-frozen method that ensures patient management leaping when required.