Building Strong Culpability Decision: The Role of Just Culture

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Abstract. The purpose of this study was to establish a strong culpability decision and implement Just Culture in organizations. The research methodology was based on a quantitative questionnaire that contained a variety of questions and statements related to the role of Just Culture, with an emphasis on safety management systems, commitment to safety, safety training, level of support and recognition for safety within the organization, and how the organization managed blame and punishment. The findings of the study demonstrated clearly what should be reported, how it should be submitted in accordance with the information obtained, how to report using an unfriendly system, and what guarantees were available after reporting. All respondents concurred that all employees should comprehend and implement Just Culture. It should always be incorporated and implemented in regular tasks since safety is a necessity, not merely a duty. Additionally, the key findings from discussion method and interviews with the top management team addressed the existing issues with Just Culture, as well as how the Air Navigation Service Provider (ANSP) in Indonesia builds strong culpability decisions and handles blame and punishment (determine culpability decision). Indonesia Air Navigation (The ANSP in Indonesia) intended to define acceptable and unacceptable behavior criteria, and more than ninety percent of the survey respondents agreed.

Keywords: Culpability Decision · Just Culture · Acceptable and Unacceptable Behavior · Safety Management System

1 Introduction

Just Culture is a significant issue whose implementation would have an obvious advantage in promoting safety, and its implementation should be prioritized. Organizations should develop how they handle blame and punishment [1]. Just Culture can impact everyone at the unit, from Accountable Executive to operational personnel [2, 3]. Because of this, the successful implementation of a Just Culture must invariably span the full spectrum of human conduct and must identify the various types of behavior that have the potential to result in risky actions [4]. Accepting human error, discussing risky activity,

and penalizing irresponsible behavior regardless of the outcome [4] should be the appropriate approach and process for the following 5 (five) harmful behaviors, this can be seen in Fig. 9. Aviation training providers are required by law number 1 of 2009 on aviation to implement SMS. Some of the aviation training providers are: the implementation of Just Culture to the process of decision making by Indonesia Air Navigation (The ANSP in Indonesia), methods to mitigate events that have not yet occurred and suitable follow-up actions that the organization should take. The reporting system should also be well documented to ease the organization's ability to develop and communicate safety management system [5].

Advanced researchers have endorsed a particular scientific viewpoint from Reason (1997), and Baines Simmons Limited (2011) that they have designed and implemented decision tools to facilitate the implementation of a just culture in numerous enterprises. Using a sequence of yes-or-no questions or suggestions, these tools assist businesses in navigating the culpability decision-making process. Were activities as expected? Have safe operating protocols been disregarded intentionally? Every action made by a particular person is not immediately declared guilty; instead, a set of activities must be completed in order to identify the source of the problem [6].

The idea underlying decision support tools is possible to objectively and consistently examine an incident in order to identify fault. Instead of focusing on the essence and severity of the negative outcomes, these tools can provide various benefits to organizations and they are aimed at assisting businesses in developing comprehensive responses to incidents based on an understanding of the human and systems level in which the acts happened [2, 7]. The selection of these tools is in agreement with the Just Culture-based safety management system. This is in contrast to the traditional approach, which focuses on the nature of the consequences. Dekker (2009) concerns the realism of such a formulation of the culpability determination process. It should be mentioned that the process of adopting and implementing Just Culture has been continuing since the inception of this notion [8]. He believes that responsibility is not an objective factor that must be determined, but a relearning in which we must be entirely objective when making decisions rather than a socially created judgment: The problem is that there is an issue suggesting Just Culture to "draw a clear line" between culpable and blameless behavior. When it comes to putting this method into practice, Just Culture must already exist; there should be no uncertainties about the concept and no excessive assumptions. Its problem derives from the incorrect assumption that acceptable and unacceptable behavior form stable categories with unchangeable properties that are unaffected by context, language, or interpretation [5, 9]. Human conduct and the actions that occur are inextricably linked. It is necessary to have knowledge of the cognitive, behavioral, social, and organizational aspects of culpability in order to build a just culture across a variety of businesses, sectors, and cultures, as shown by Dekker's analysis (2009). The guidance provided by culpability tools will interact in the decision-making process pertaining to a particular incident with the personal biases of the decision makers (such as perceptions toward authority), as well as the dynamics of their interaction with one another as a team (e.g. conformity demands), and organizational politics (as consequences of specific determinations) [1, 9]. We need to really understand that the basic need for our safety is Just Culture. A Just Culture is a culture in which front-line operators (typically those who
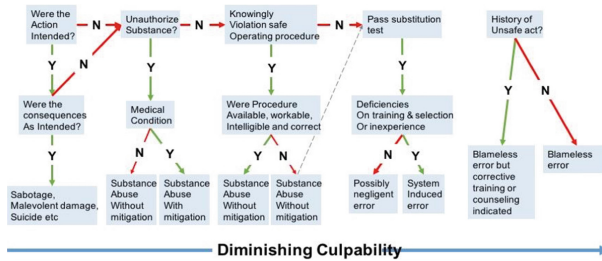
Fig. 1. A Decision Tree for Determining the Culpability of Unsafe Acts

are directly associated with an event) or other persons are not punished for actions or decisions that are commensurate with their experience and training[2]. However, if the incident is carried out on purpose and the person involved is aware of the consequences, which is usually a violation of established rules, the individual is in a situation that cannot be accepted and must receive the appropriate punishment [8, 9].

The use of the culpability decision method and Just Culture are the finest organizational aids for people due to their strong relationship to the necessity when mistakes are made accidently. A "Just Culture" is a method of thinking about workplace safety that encourages a questioning mindset, resistive to complacency, committed to excellence, and develops both personal accountability and corporate self-regulation in matters pertaining to workplace safety [10]. Between the following two cultures, there are differences in long-term outcomes: A Just Culture was created with the intention of providing a more nuanced approach to culpability-decision tree process than a culture that places an emphasis on eliminating blame. It also focuses on the outcome of the incident at the time it occurs rather than on the lessons to be learnt for long-term progress. Consequently, it can mitigate the adverse effects of a blame culture [6].

Reason's Culpability Decision Tree - Fig. 1 illustrates a decision tree that can be used to assist in determining who responsible for an unsafe act. The investigation begins with the presumption that behaviors in question played some role in causing an accident and/ or serious incident. Reason (1997) argues that the decision tree should be applied in a distinct manner to each of the potentially hazardous behaviors that contributed to the accident or event. Since it is likely that a number of potentially hazardous behaviors contributed to the accident or incident. The specific causes of the concerns include specific dangerous activities that have been undertaken by either a single person or by a number of different people at various times in the event sequence. The five steps of a decision tree are as follows: Intended act; Under the influence of alcohol or drugs; Deliberate violation of the rules; Substitution test; and Repetitive error.

2 Research Method

2.1 Place and Time

This study was conducted in the Air Navigation Services Provider in Indonesia, which is responsible for managing all of Indonesia's airspace. The location of the research was

pinpointed within the Directorate of Safety, Security, and Standardization. Indonesia's airspace is separated into two Flight Information Regions (FIR), with a total width of 2,219,629 km^2, a width region of 1,476,049 km^2 and a total of 9,887 movements per day. Beginning in early April 2020, the study was finished in a span of time that less from one year.

2.2 Sampling Technique

This study utilized a survey administered to approximately 40% of the population in the air navigation service divisions of 229 throughout all Indonesian airports. There were 180 employees in the population (Fig. 2).

2.3 Data Collection

In this research study, a questionnaire was chosen as the instrument for data collection. The questionnaire was presented as a fivepoint Likert scale [11–13]. A survey with forty questions and statements addressing significant elements of just culture was made available to respondents and how this organization handled blame and punishment. Additionally, the Safety Division conducted focus group discussions (Fig. 3).
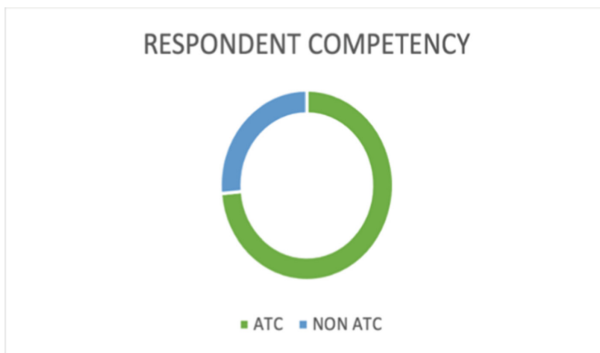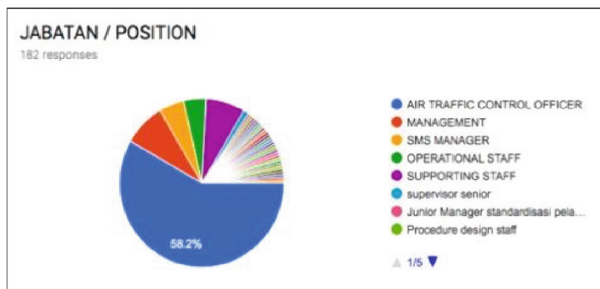

Fig. 2. Respondents' Competency

Fig. 3. Respondents' Position in the Company

2.4   Data Analysis Methods

2.4.1   Just Culture Survey

This survey should require more respondents, as replies from all ANSP employees in Indonesia, particularly ATCOs and ACOs as front-line workers, are required. The following respondent information may be provided:

2.4.1.1 Just Culture Policy Analysis

We have gained valuable knowledge from the questionnaire, and the findings will be put to use over the course of the following few years to assist in the prioritization of activities leading to the provision of safety culture, and SMS product benefits, as well as the oversight of aviation safety in Indonesia.

The overall percentage of respondents who agreed or strongly agreed with the statement that there is appropriate corporate support for developing and maintaining the ideals of a "Just Culture" in their organization was 75%. Respondents highlighted that even if SMS in their company was great, there was always a space for development. Just Culture must be ingrained and adopted in regular tasks, appropriate to the company's applicable standards, as then our daily job becomes necessary [2, 5]. The need for safety has become a fundamental aspect of every human [14].

The comments of the respondents revealed intriguing information. Some employees were uncertain about what should be reported, how it should be submitted in accordance with the information obtained, how to report using an unfriendly system, and what guarantees were available after reporting. Respondents were also unaware that Just Culture is an environment of trust, in which individuals are encouraged and that there is a quality which stimulates goodwill and admirable organizational objectives [2].

In addition, the award provides critical information on safety, while also making it obvious that they are aware of what they are allowed to do and what they are prohibited from doing, so that they are aware that justice is present in the organizations for which they work [7]. This indicated that people should be aware that frequent and deliberate errors will result in sanctions [10] (Figs. 4 and 5).
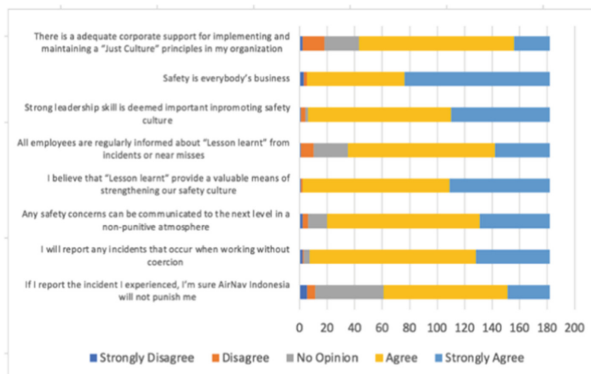

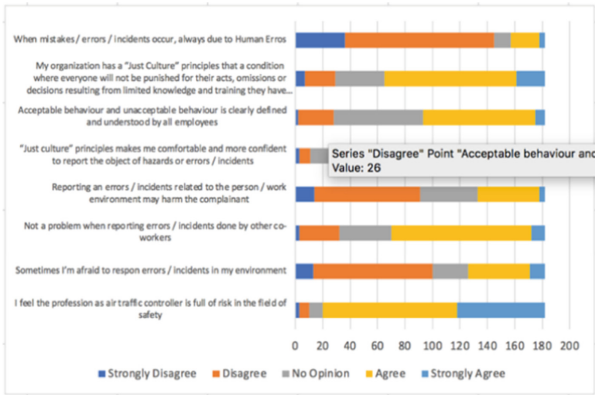**Fig. 4.** Just Culture Policy's Result I
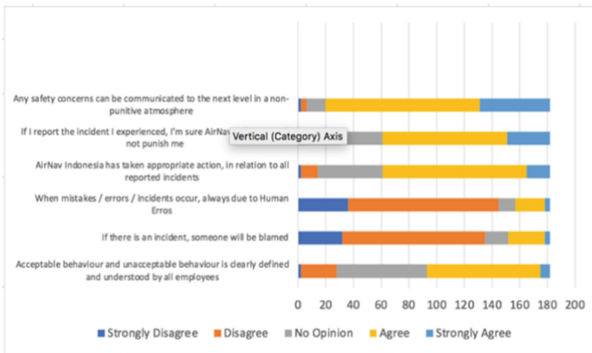
Fig. 5. Just Culture Policy's Result II

Fig. 6. Culpability Decision's Result I

2.4.1.2 Culpability Decision Analysis

It can be concluded from the diagram above that a significant proportion of respondents were still uncertain about the steps to be taken by the management in the event of errors or omissions (Fig. 6).

Other important aspects included presenting the the presumption of innocence and cross-checking toward an incident/accident so that company does not practice persecution before the investigation is completed and the final result is gained. Just Culture will not be properly implemented if the organization is too quick in adopting follow-up steps before the investigation's conclusion is reached, or even followed by criticizing or punishing individuals [15] (Fig. 7).

This section is the most important part of an organizational safety system. Employees should be clear about what acceptable behavior and unacceptable behaviors applied in the company where they work [8, 9, 16]. Therefore, the culpability decision will also explain in detail about the behavior.
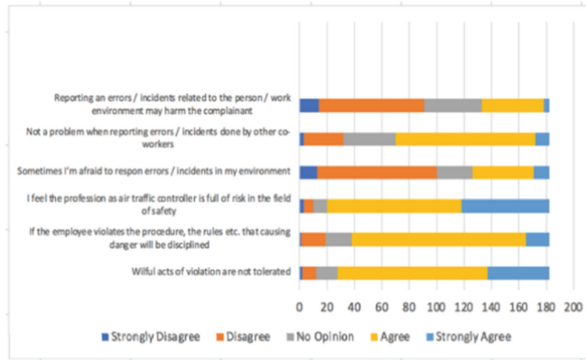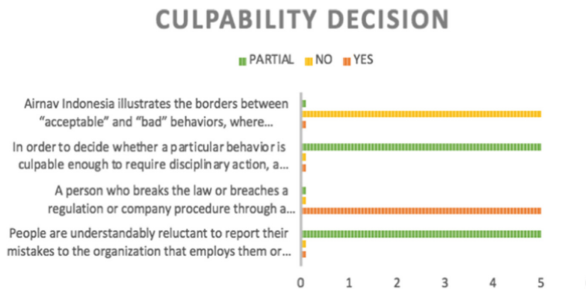
Fig. 7. Culpability Decision's Result II

Fig. 8. Focus Group Discussion (FGD)/Interview related to Culpability Decision

2.4.2 Focus Group Discussion and Interview

The researchers conducted Focus Group Discussion [17] and Interview because there was a need to get involved directly in finding out cases, processes that need to be conducted and things that need to be implemented relating to Just Culture and determine the culpability decision.

2.4.2.1 Just Culture Policy Analysis

It is stated that there must be a clear statement and implementation of Just Culture within the organization [8, 18]. Most ANSP employees in Indonesia understood and attempted to promote Just Culture [5]. Nevertheless, they needed a clear commitment expressed in the company policy. In addition, employees wanted a very clear rule that distinguishes between acceptable behavior and unacceptable behavior that could be reported easily by the employee itself.

2.4.2.2 Culpability Decision Analysis

The Indonesia Air Navigation lacked specific instructions on how to handle situations in which an employee committed a mistake or repeated mistakes. The Directorate of Air Navigation (2018), audit results of an audit questioned the procedures of Indonesia

Air Navigation when employees committed negligence, errors, or violations, as well as how the Indonesia Air Navigation classified these actions as acceptable or unacceptable behavior (Fig. 8).

3 Research Result

3.1 Assessment of Possible Solution

Researchers also provided outcomes of an analysis that was carried out and how it might be continued by the appropriate team. The Safety and Quality division will be making a great deal of progress toward improving their services. The findings of the study indicated that there ought to be a review or an in-depth discussion regarding the various ways in which to enhance the Safety Management System in the future of the entire, and these results indicated that there should take place either of these things; beginning with improving the company's policy and how the Indonesia Air Navigation handled blame and punishment to ensure that the reported was held accountable for their activities. In Indonesia, The ANSP Safety Management Manual is going to be updated with culpability decision criteria, which will include acceptable and unacceptable behavior criteria. Then, the culpability tree will be built so that a Just Culture can develop in the organization and employee awareness can be enhanced.

3.2 ANSP Culpability Decision Concept

Reason and Hudson expanded Just Culture diagram, which incorporates categories of violations, their causes, and organizational accountability at all levels. The diagram is later followed and expanded by researchers to identify how ANSP decided employee liability. An investigation must be carried out into each incident in order to determine the circumstances around what took place, as well as the degree to which the member(s) involved or the system within their activities were carried out should be held responsible for whatever transpired [7, 10, 17].

3.3 Acceptable Behavior and Unacceptable Behavior Criteria in the ANSP

Referring to the same reference of determining culpability decision [1], the Indonesia Air Navigation must and will have procedure for acceptable behavior and unacceptable behavior criteria. It was intended that the Indonesia Air Navigation and its employees will know and have clear behavioral limitations, although this was not easy. The complex and difficult issue was to distinguish between truly undesirable behaviors and risky conduct for which discipline was neither appropriate nor effective. To draw this line, it was required to agree on a set of principles.

Based on the adoption of the 5 criteria above, by building a culpability tree, Indonesia Air Navigation can determine the next course of action, which entails determining the source of the problem, why it can exist, and what aspects are most significant in determining that a wrongdoing has occurred.
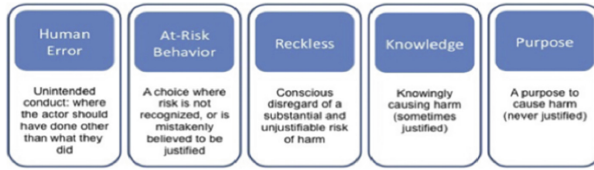
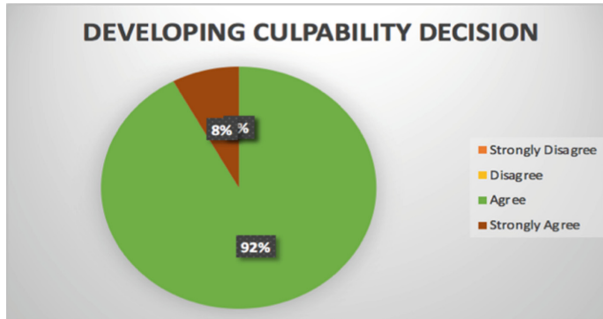**Fig. 9.** The 5 Behaviors

Fig. 10. Feedback Questionnaire Developing Culpability Decision

Individuals who violate proper rules and procedures or behave in a manner that endangers themselves or others are not tolerated. The inability to take action when employees act irresponsibly or negligently may endanger the safety of operation and undermine Safety Culture. Consequently, reckless or negligent conduct may merit disciplinary action under some existing ANSP policies in Indonesia, depending on the circumstances.

Rule violations may occur, for instance, as a result of a one-time individual decision, peer group custom, or because a person broke a rule with the best of intentions [6, 19]. Disciplinary measures will be determined based on these variables.

Indonesia Air Navigation also reminds that, in the event of an incident, actions such as withdrawal from duty may be taken for the benefit of the affected individual. This is also true when a pattern of repeated errors is observed, which may involve further analysis by the safety and quality assurance division (i.e., non-punitive measures). A Just Culture should permit employees to discuss such acts in a manner that prevents them from being perceived as "punishment" [15].

We prepared a 20-question/statement feedback questionnaire covering the outcomes of the Just Culture survey. The researchers were concerned by the following additional statements and comments from respondents: How management will implement the policy when voluntary reporting of an action is performed; how this organization follows up and gives feedback, and how the organization determines culpability decision. From 38 respondents, 92,1% agree to develop how their organization handles blame and punishment (Fig. 10).
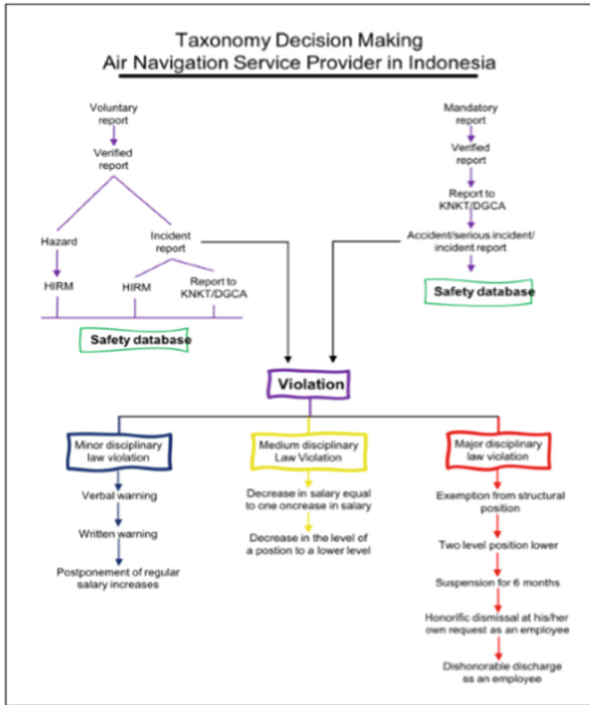
Fig. 11. Decision Making Process

The ANSP safety reporting systems in Indonesia is specifically designed to accommodate the safety report including accident, serious incidents, incidents, and hazards in operations that pose a threat to flight safety that occurs in the operations of air navigation services at Indonesia Air Navigation [20]. The ANSP utilized a system in the operations of reports; nonetheless, it requires comprehensive and continual socialization until all personnel comprehend how to use it. This system is intended to make it easier for users to comprehend and respond. A web-based safety reporting system known as the Electronic Form for Occurrence Report (EFFORT) is a safety reporting application system and database designed to provide a formal means of actively collecting safety event data that can be used to assess the performance of ANSPs in Indonesia.

The safety reporting system for internal operations is referred to as the mandatory safety reporting system. It is a requirement for air navigation service workers in Indonesia due to the nature of the system as specified by national and international aviation regulations. Then, the Indonesia Air Navigation provides the voluntary safety reporting an application system to facilitate safety reports including hazards that have the potential to endanger flight operations reported by external parties related to the operation of air navigation services [2, 21] (Fig. 11).

Notification or initial notification is carried out using the fastest media available to report accidents, serious incidents to the management in Indonesia and the Sub Directorate of Information Management and Safety Investigation at the Headquarter. The Sub Directorate of Information Management and Safety Investigation in accordance with its

main duties and functions with regard to safety reporting will forward such notification to related parties, namely the National Transportation Safety Committee (NTSC) and the Directorate General of Civil Aviation. As the summary of decision making in the figure above, we can see how is the followup process for mistakes and violations carried out by Indonesia Air Navigation.

4   Conclusion

The feedback questionnaire elicited a number of significant remarks, which were used to address areas that need improvement about what should be reported both mandatorily and voluntarily, given that there is a possibility that voluntary reporting may have an impact on punishment [4, 7, 8, 15]. Employees expressed a willingness for situations in which no one would be punished for their actions or decisions which resulted from an inadequate knowledge and training [2].

In accordance with the concept of a Just Culture, socialization activities on safety or SMS training program are seen crucial for determining between acceptable and unacceptable behavior [22].

The management lacked a clear guidance to determine what actions need to be taken if an employee makes mistakes or if the mistakes are practiced repeatedly [7]. Because of this, the board of directors of the ANSP quickly issues regulations in order to evaluate culpability decisions and to specify areas that are characterized as acceptable behavior and unacceptable behavior [1, 9, 23].

Therefore, the Indonesia Air Navigation needs to figure out how to determine the correct culpability decision as soon as possible [1, 9, 15]. This can be done by first determining what happened first, and then figuring out what stage the situation is currently at, as has been explained in the section on the five behaviors [24] that may result in harm, as well as by adopting a Just Culture, an organization might shift its focus from evaluating errors and their effects to examining their causes. They can proceed beyond "how horrible was the outcome and who was responsible?" to a far more fruitful conversation about system design and behavioral choices [8, 9]. By being fair, we establish a culture of learning that is far more accessible, allowing us to change terrible systems surrounding good providers [4].

Every employee must comprehend and uphold a Just Culture and create a voluntary awareness of what to report, what should be reported, how it should be submitted in accordance with the information obtained, and what guarantees were available after reporting [2, 4, 8, 25].

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