

Peace Studies, Efforts toward Measuring Peace, and Human Security

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Introduction: The Aim of This Essay

What is peace? From the perspective of peace studies grounded in Galtung's work, peace is commonly understood to encompass both negative peace and positive peace. Negative peace refers to the absence of direct violence, such as armed conflict and homicide. Positive peace, in turn, denotes the absence of structural violence that obstructs the realization of each individual's potential and freedom of choice (Galtung 1969). While these two dimensions are widely recognized, no single, unified definition of peace has been established, and views on the pathways toward peace continue to vary (Caplan 2021; Webel and Kaba 2022). Accordingly, in line with this current report's focus on measuring, this essay first examines how negative and positive peace have been measured. It then discusses how these efforts relate to human security, the overarching theme of this report. Finally, it addresses the challenges involved in measuring peace. While numerous indicators for measuring the two dimensions of peace are available in the existing literature and online sources, the indicators cited in this essay are not exhaustive. Rather, they represent a limited selection that is readily accessible and relevant to the scope of the present discussion.

1. Efforts to Measure Peace at the Global Level

Galtung, who developed the foundational concepts of peace research, argued that the first step toward understanding peace is to identify the factors that impede it (Galtung 1969). Foremost among these, as noted at the outset, is armed conflict. Even without going back as far as Herodotus's *Histories*, armed conflicts have long been recorded. For example, the Uppsala Conflict Data Program (UCDP)¹ has recorded cases of organized violence since 1946 in which clashes or armed conflicts between two or more parties, such as governments or armed groups, have resulted in 25 or more deaths. By contrast, the Armed Conflict Location & Event Data Project (ACLED)² captures a broader spectrum of political violence and nonviolent actions involving a wide range of actors, including governments, rebels, militias, identity groups, political parties, external forces, rioters, protesters, and civilians (ACLED n.d.).

These databases record and update the timing and

¹ The Uppsala Conflict Data Program (UCDP) was developed in the mid-1980s following its data collection started in 1979. See Uppsala Conflict Data Program (<https://ucdp.uu.se/>; accessed August 4, 2026).

² The Armed Conflict Location & Event Data Project (ACLED) began collecting data in 2005 and has developed its scope. See Armed Conflict Location and Event Data Project: <https://acleddata.com/>; accessed August 4, 2026.

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location of armed conflicts and violence, the number of affected persons, including fatalities, and the number of incidents. The higher the values of these indicators, the more negative peace is impeded in the relevant region or country.

Furthermore, composite indices have been developed to measure peace more broadly. For example, the Global Peace Index (GPI),³ produced by the Institute for Economics & Peace, selects 23 existing indicators as constituting negative peace. It weights and aggregates them into an index that ranks each country's state of peace. It covers not only armed conflict but also safety (e.g., perceptions of crime, the impact of terrorism, and the number of police and security personnel) and militarization (e.g., military expenditure and arms imports and exports). The GPI is said to cover most areas assumed to constitute negative peace, although not entirely (Institute for Economics & Peace 2025).

The Institute for Economics & Peace has also developed the Positive Peace Index (PPI).⁴ This index likewise selects 24 indicators most closely related to the GPI from existing indicators, aggregates them into eight pillars, and assigns weights. The eight pillars are Acceptance of the rights of others, Equitable distribution of resources, Free flow of information, Good relations with neighbours, High levels of human capital, Low levels of corruption, Sound business environment, and Well-functioning government (Institute for Economics & Peace 2022). These indicators and indices attempt to measure the degree to which positive and negative peace are realized through weighting and analysis by their developers. However, as discussed in the next section, the peace that is measured is more multilayered.

2. Efforts to Measure Peace at Different Levels

The indicators and indices discussed in the previous section primarily measure the actions of conflict parties, the efforts of central governments, and the functioning of organizations and institutions. However, peace measured in this top-down manner does not necessarily capture people's lived experiences, underscoring the need to assess peace from the bottom up, at the field level.

For example, Mac Ginty emphasized the importance of measuring peace as perceived by conflict-affected communities and the individuals and families living within them. He proposed “everyday peace indicators” set by the communities themselves, focusing on whether people can safely carry out daily activities such as going to work, attending school, shopping, visiting cafés, eating, and sleeping (Mac Ginty 2021). To grasp whether and to what extent daily life is peaceful, it is essential to incorporate the perspectives of community members into such indicators. Visualizing people's subjective sense of safety or insecurity in everyday life provides a basis for understanding peace from a perspective different from that of the indicators discussed in the previous section.

Reflecting similar concerns, international cooperation agencies have also participated in initiatives in this area. For example, the Stockholm International Peace Research Institute and the World Food Programme jointly published *Measuring Peace Impact: Challenges and Solutions*, which provided an overview of discussions among the Peace Evidence Expert Research Group, with participation from the German Ministry for Economic Cooperation and Development, the Swedish International Development Cooperation Agency, JICA, and international NGOs. The report pointed out that conceptions of peace may differ across levels such as society, community, household, and individual, and emphasized the necessity of community participation in indicator selection, monitoring, and evaluation (Brusset et al. 2022).

A further initiative in this area is the Eirene Peacebuilding

³ The Global Peace Index (GPI) was first compiled in 2007. See Institute for Economics & Peace, Global Peace Index (<https://www.economicsandpeace.org/global-peace-index/> ; accessed August 30, 2025).

⁴ The Institute for Economics & Peace has published annual Positive Peace reports since 2015. See Institute for Economics & Peace, Reports (<https://www.economicsandpeace.org/reports/> ; accessed August 30, 2025).

Database,⁵ which comprehensively collects a wide range of indicators for measuring peace. It aims to track factors that impede peace and the responses to them. The database draws on diverse sources, from comprehensive statistics provided by the United Nations, the World Bank, and the Institute for Economics & Peace to information at multiple levels, including national governments and individual projects. Its indicators cover not only the dimensions of negative peace but also those of positive peace, such as gender equality and disparities in access to justice, as adopted by the Institute for Economics & Peace. Peacebuilding actors can upload new indicators based on the outlines and results of individual activities, and the total number of indicators exceeds 12,000.

In this way, the selection of indicators for understanding the realization of positive and negative peace is not uniform among actors involved in building and sustaining peace. Updating indicators, whether periodically or irregularly, allows for continuous tracking of the changing nature of peace. What indicators reflect, therefore, is not peace as a fixed outcome, but the processes through which peace is realized, maintained, or undermined (Brusset et al. 2022). As noted at the outset, there is a shared understanding that no single definition of peace exists. If peace is understood as a process, it is unsurprising that its forms and manifestations are highly diverse.

3. Negative Peace, Positive Peace, and Human Security

Thus far, this essay has discussed various efforts to measure peace. These efforts share common ground with initiatives to promote human security, which is the main theme of this report. The concept of human security was proposed to contribute to the realization of peace at a time

when the Cold War had ended and approximately thirty years had passed since the emergence of peace studies (UNDP 1994). Direct violence, such as armed conflict, constitutes a major threat to human security. The processes captured by the GPI, PPI, and field-level indicators—through which peace is realized and sustained—overlap with the processes of promoting human security, which takes each individual as the referent object of security.

If both negative peace and positive peace—as reflected in the indicators cited in this essay—are achievable, this would be equivalent to the realization of human security. There are several reasons why this is the case. First, as mentioned throughout this report, human security does not recognize only armed conflict and violence as threats. Tanaka (2019) classified the mechanisms by which threats to human security arise into three categories: physical system (such as natural disasters), living system (such as environmental pollution, ecosystem destruction, and infectious diseases), and social system (such as armed conflict and violence). In contrast, while the initiatives to measure peace discussed so far focus on many threats originating from the social system, they cannot be said to comprehensively capture the threats and impacts arising from the physical and living systems (**Figure 1**). Viewed in this light, even if negative and positive peace are achieved, this may be understood as representing a situation in which human security has only been partially realized.

However, as conceived by Galtung, positive peace is broad in scope. Galtung cited examples such as famine, tuberculosis, and natural disasters, and argued that structural violence occurs when available measures are not provided, resulting in harm (Galtung 1969). This understanding is essentially equivalent to that of human security, which addresses threats originating from physical and living systems (**Figure 2**). In recent years, some research institutions have incorporated issues such as gender, responses to authoritarianism and social media, climate change, and technological innovations, including AI, into peace research. Conversely, some scholars emphasize security closely related to negative peace (Miall 2020, 5). In other words, while new forms of structural violence emerge and change over time, direct violence, such as armed conflict, remains an important subject of study.

⁵ While several of the Eirene Peacebuilding Database reports were available online at the beginning of 2024, they are no longer available for viewing as of August 4, 2026. See Eirene Peacebuilding Database (<https://eirene.allianceforpeacebuilding.org/#/> ; accessed February 11, 2026).

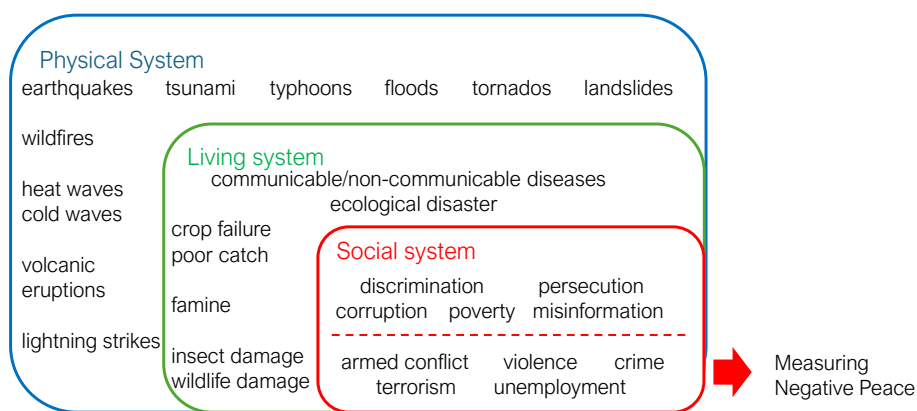


Figure 1 Threats to Human Security and the Measurement of Negative Peace

Source: Created by the author based on Tanaka (2019)

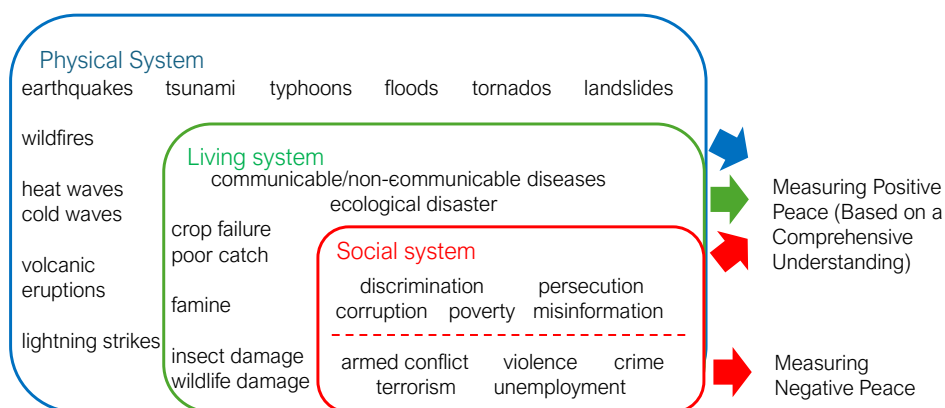


Figure 2 Threats to Human Security and the Measurement of the Two Dimensions of Peace

Source: Created by the author based on Tanaka (2019)

These research trends align with the statement in the foreword of the inaugural volume of *Human Security Today* that “traditional concerns such as armed conflicts, natural disasters... are becoming more acute. At the same time, new challenges have appeared, including...climate change” (JICA Ogata Sadako Research Institute for Peace and Development 2022). From these considerations, a situation in which negative and positive peace are realized can conceptually be regarded as a situation in which human security is realized.

In light of the research trends on peace discussed above, indicators for measuring peace can be understood as having developed, in principle, from both top-down and bottom-up directions, with a focus on the social system of human security. Furthermore, in other fields, various indices

and indicators have also been developed to measure the impacts of threats originating from physical and living systems, as well as resilience.⁶ The JICA Ogata Sadako

⁶ The Sustainable Development Goals (SDGs) are a comprehensive initiative that seeks to address positive peace from a social perspective. See United Nations, Sustainable Development Goals (<https://sdgs.un.org/goals>; accessed August 30, 2025). The Sendai Framework is aligned with the SDGs and has established 38 indicators focused on natural disasters. See United Nations Office for Disaster Risk Reduction, Sendai Framework for Disaster Risk Reduction 2015–2030 (<https://www.undrr.org/publication/sendai-framework-disaster-risk-reduction-2015-2030>; accessed August 30, 2025). A long-standing index based on this perspective is the Human Development Index, which has been published continuously since 1990. See United Nations Development Programme, Human Development Report 1990 (<https://hdr.undp.org/content/human-development-report-1990>; accessed August 30, 2025).

Research Institute for Peace and Development has been examining indicators of human security that comprehensively capture these aspects. It is expected that indicators for measuring peace, with a focus on the social system, will complement those developed in other fields, thereby advancing understanding of the state of peace and providing complementary indicators for measuring human security.

Conclusion—Future Challenges

The endeavor of measurement is indispensable for understanding the conditions surrounding us as objectively as possible and for formulating and implementing appropriate policies based on that understanding. As discussed above, there is no single definition of peace, yet extensive efforts to measure it have yielded some consensus on its nature. Measurement methods and accuracy have also been improved, confirming the strong affinity between peace and human security. Nevertheless, challenges remain. This essay, therefore, concludes by highlighting three challenges for the future measurement of peace.

The first challenge concerns the selection of indicators. The perspectives guiding their selection are influenced by changes in the times and social values. Both the indicators chosen and their weighting are likely to vary depending on the context. If different indicators are selected across communities, this may reflect their respective contexts. However, it may also create challenges, as it makes comparisons between communities difficult, thereby complicating decisions on central budget allocation and, in turn, hindering policy formulation. Those who utilize indicators are therefore required to use them in a manner appropriate to their intended purpose, taking into account the background of their selection and the validity of their weighting methods.

The second challenge lies in data collection. Certain indicators, such as the number of victims of sexual violence, are difficult to measure accurately. Limitations in funding may hinder data collection and the maintenance of databases, and some data may not be collected for political reasons. Disaggregating data—for instance, by gender—provides

a more detailed understanding of local conditions, but its collection increases both difficulty and cost. Some databases contain significant gaps. Although indicators and databases have advanced dramatically in the twenty-first century, as discussed in this essay, proactive efforts and adequate funding from organizations such as governments remain essential for the collection of underlying data.

The third challenge concerns areas of peace that remain unmeasured. For example, the impact of compounded crises, such as natural disasters during conflict, varies across cases. Community-set indicators are often influenced by internal power structures within the community, and concerns about avoiding discord may shape both the selection and weighting of indicators. Galtung (1990) also highlighted cultural violence that legitimizes and reinforces structural violence. Understandings of structural violence may therefore vary across cultural contexts. While efforts to define what and how to measure have advanced significantly, it remains necessary to examine what continues to be left out of measurement in order to promote both peace and human security.

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