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Vulnerability of refugees: Some reflections on definitions and measurement practices

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Abstract

The legal and policy discourse on refugees has been mainly focusing on the labelling of particularly vulnerable persons or groups, while it has neglected to offer reflections on the effects of definitions and assessment practices over the creation of stereotypes and of biases in the identification of beneficiaries of protection. The aim of this paper was to offer some reflections on the how categories of vulnerability defined by international and supranational law are operationalised and implemented in the practice of the vulnerability assessment inside the humanitarian organisations. Our analysis shows that the vagueness of the legal definitions affects the way in which humanitarian organisations operationalise it. It also shows that the complexity of the relationships among the various vulnerability dimensions has generally been underrated in both scholarly writings and humanitarian practices. Thus, we outline the basis for alternative responses by the agencies engaged in vulnerability assessment practices.

INTRODUCTION

The notion of vulnerability originates in the environmental sciences, where it is viewed as "a powerful analytical tool for describing states of susceptibility to harm, powerlessness, and marginality of both physical and social systems" (Adger, 2006, p. 268). However, the diffusion of this notion well beyond the original field of application led Brown et al. (2017, p. 497) to point out how "the ubiquity and elasticity of [the term] vulnerability generates a

sense of familiarity and common sense or assumed understandings, which conceals diverse uses with enormously varied conceptual dimensions." Nowadays, most of the researchers (e.g., Brown et al., 2017; Mackenzie et al., 2014) agree that vulnerability involves a status of susceptibility and an evaluation of the future (in terms of real exposure to harming circumstances and to their consequences).

Both in origin and destination countries, as well as in those of transit, personal and context-related conditions (e.g. institutional, economic, or environmental) often expose refugees to a range of detrimental outcomes, such as social isolation (Mendola & Busetta, 2021), discrimination, bad health or economic deprivation, which can interact in destructive ways. Thus, these conditions can compound the damages that arise from being in a detrimental situation. Social scientists have described this interplay as the "intersectionality of risks" (Bürkner, 2012; Truscan, 2013) or "intersectional vulnerability" (Mendola et al., 2020).

Against this background, we seek to conceptualise the premises for measuring and understanding the nature of vulnerabilities of refugees and asylum seekers.

The social science wide perspective adopted in this research shows that on both the personal and the societal level, the term "vulnerability" is too often used to paint a picture of the migrants or refugees as helpless victims, which does not necessarily correspond to reality, and may not help them in ameliorating their conditions and in building their agency capacities (Ludwig, 2016).

Although this is not the place for a systematic analysis of the huge number of sources dealing with vulnerability, the following sections aim at providing some food for thought on this elusive concept and to help in designing a more finely tuned scheme for prioritising interventions.

After this brief introduction, we present in Section 2 a critical discussion of the definitions of the key concepts of vulnerability and discrimination, by analysing some well-known taxonomies and a few selected legal formants, drawing from international and EU legislation. Our aim was to explore whether those concepts can be critically reconsidered to inform a different approach to refugee studies and vulnerability assessment. In Section 3, we provide a critical review of the operational definitions and quantitative measures of vulnerability that international organisations, such as the UNHCR (the United Nations High Commissioner for Refugees) and the UNRWA (the United Nations Relief and Works Agency for Palestine Refugees in the Near East), currently use to prioritise their interventions in assisting refugees and asylum seekers. In Section 4, we review various academic contributions to the definition and measurement of the vulnerability of refugees, which offer different perspectives on the issue. In Section 5, we introduce the issue of the intersectionality of disadvantage axes among refugees. We look at both the legal and methodological implications (from a statistical perspective) of the lack of the intersectional approach in the practice of the vulnerability assessment.

Finally, in the concluding section, we present some considerations and suggestions on how research on the assessment of the vulnerability of refugees can be further developed.

TAXONOMIES OF VULNERABILITY

In the last decades, vulnerability has gained an increasingly important place in the debate on human rights both in refugees and migration studies, as well as in the humanitarian agencies practices. Consistently, Da Lomba (2017) claims that vulnerability should be considered not only as a tool but also as a foundation in the international human rights law.

According to the UN Division of Social Policy and Affairs, vulnerability refers to "a state of high exposure to certain risks, combined with a reduced ability to protect or defend oneself against those risks and cope with their negative consequences" (UN, 2001, p.210).

A human-rights-oriented definition has been given by IOM (2019b) about migrants: "vulnerable migrants are migrants who are unable effectively to enjoy their human rights, are at increased risk of violations and abuse and who, accordingly, are entitled to call on a duty bearer's heightened duty of care" (*ibidem*, p. 14; see also OHCHR, 2017).

The taxonomy provided by Mackenzie et al. (2014) describes different sources of vulnerability. The concept of *inherent vulnerability* refers to universal forms of vulnerability that are intrinsic characteristics of the human condition, that is vulnerability connected to people's corporeality, dependence on others, and affective and social natures. The term *situational vulnerability* refers primarily to the external context and may be influenced by the personal, social, political, economic or environmental circumstances in which individuals or social groups live, including contexts in which they experience oppression, domination and injustice. This last category stresses the inequalities of power, dependency, capacity or need that could make a person vulnerable to harm or to exploitation by others.

Inherent and situational vulnerability may be either "dispositional" (i.e. potential) or "occurrent" (i.e. actual). For example, migrant women are *dispositionally* vulnerable to sexual exploitation, but whether or not they will be actually exploited will depend on a range of factors, such as their socio-economic status, their geographical location, the welfare system in the destination country and so on. This distinction is relevant when seeking to identify sources of vulnerability, as the risk factors individuals face, and the consequences of these risk factors, may vary.

Table 1 shows the four possible combinations of these typologies with some real and present examples. As *nomina sunt consequentia rerum*, the Table consents to imagine an approach case by case, which could be used to analyse and prioritise interventions on vulnerability situations, by classifying different forms and possible intersections of those forms. In particular, it is worth considering that an individual may experience more than one situation/status resulting from the crossings displayed in Table 1, either simultaneously or over a certain time pattern. Moreover, it should be noted that some of the factors that can be classified as "inherent" can become "situational" if we consider individuals acting and interacting within the social and relational dimension (e.g. an individual's educational level depends not only on family choices, but also on welfare policies and the contextual situation).

Finally, Goodin's taxonomy (1985) introduces the further notion of "pathogenic vulnerability," as the one caused by prejudice or abuse in interpersonal relationships, and by social domination, oppression or political violence. The existence of "pathogenic" vulnerabilities (which Goodin defined as "morally unacceptable") has led some scholars to point out that interventions that were designed to alleviate inherent or situational vulnerability may instead have the paradoxical effect of increasing vulnerability in certain circumstances. At this regard, Da Lomba (2017, p.15) posited that "scrutinising how the State exercises its right to control immigration is key to comprehending how its laws and policies participate in their [of migrants] vulnerability."

Hence, the refugee's position depends on a powerful mix of inherent and situational vulnerability, both potential and actual; part of their vulnerability is often pathogenic.

Vulnerability in the international and EU legislation

The concept of vulnerability is also widely referred or implied in various pieces of international and supranational (EU) legislation, which often provide lists of classes of persons defined as vulnerable, while rarely providing explicit definitions of what vulnerability is.[1.,2.] As suggested by Morawa (2003, p. 140), "[p]robably the clearest set of guidelines stem from the human rights bodies applying their own procedural rules to petitioners whom they — for whatever reason — categorise as vulnerable and treat favourably."

With regard to the particular conditions of migrants,[3.] the UN and the EU legal frameworks do not offer a definition of the expression "migrants in vulnerable situations," but they do provide a list of classes of individuals who are assumed to be vulnerable. Both the UN and the EU lists imply the vulnerability of migrants as stemming from inherent individual characteristics such as age, gender or ethnicity, and from external factors that cause the migrants to experience precariousness, discrimination or other negative circumstances.

Article 20, 3 of the Asylum Qualification Directive, 2011/95/EU, for instance, obliged the Member States to consider the specific situation of vulnerable persons such as minors, unaccompanied minors, disabled people, elderly people, pregnant women, single parents with minor children, victims of human trafficking, persons with

TABLE 1 Taxonomy of vulnerability

Mode/Time	Dispositional Vulnerability -DV-(potential)	Occurrent Vulnerability -OV- (actual)
Inherent Vulnerability -IV-(personal) IV depends on intrinsic characteristics of human nature connected to corporeality, dependence on others, and affective and social natures.	Being a young migrant woman makes you DV to sexual exploitation. Being a young migrant woman makes you DV to sexual violence/harassment in detention centres. Being a migrant child makes you DV due to lack of agency. Being homosexual makes you DV to persecution.	Being a young migrant woman from Benin City (Nigeria) makes you OV to trafficking and sexual exploitation in Europe. Being a young woman who believes in voodoo rituals, and a victim of trafficking in Europe, makes you OV to blackmail and exploitation. Being a sub-Saharan migrant in a Libyan detention centre makes you OV to torture and physical and mental disease. Being an unaccompanied minor outside of the official reception and protection system makes you OV to sexual exploitation and human organ trafficking.
Situational Vulnerability -SV- (context) SV depends mostly on the external context and may be influenced by the personal, social, political, economic or environmental circumstances in which individuals or social groups live, including those characterised by oppression, domination and injustice.	Being hosted in a detention centre makes you DV to torture and poor mental and physical health. Living in a non-democratic country makes journalists DV to persecution, imprisonment or violent death. Living in a migrant hotspot makes asylum seekers DV to an alien environment, anxiety due to uncertainty about the future and disrespectful treatment by authorities.	Being hosted in a detention centre causes you to be injured, and, when you arrive in the host country, this experience makes you OV to post-traumatic stress and to being unable to enter the local labour market. Living in Belarus makes opposition politicians OV to the risk of being killed or imprisoned. Witnessing the torture of adults in migrant detention centres makes children OV to mental health distress.

mental disorders and persons who have been subjected to torture, rape or other serious forms of psychological, physical or sexual violence.

A very similar set of vulnerable categories was then provided by Article 21, Directive, 2013/33/EU (mentioning explicitly, in addition to the above-mentioned categories, women victims of female genital mutilation). Particularly, article 2k) points out how a vulnerable person is in need of special guarantees in order to benefit from the rights and comply with the obligations in the reception context.

Likewise at the UN level, the UN General Assembly (2016, para. 23) listed as vulnerable categories: women at risk, children (especially those who are unaccompanied or separated from their families), members of ethnic and religious minorities, victims of violence, older persons, persons with disabilities, persons who are discriminated against on any basis, indigenous peoples, victims of human trafficking and victims of exploitation and abuse in the context of the smuggling of migrants.

The issue of vulnerability is particularly relevant when it comes to resettlement, where vulnerability enters as an eligibility criterion. Again, we do not have a definition of vulnerability in relation to resettlement eligibility criteria, while the main indicators to properly identifying refugees in need of resettlement again refer to categories of persons or situations.

The Return Directive, 2008/115/EC provides some forms of special treatment in the return of vulnerable migrants. Article 5 provides norms to ensure the respect of the non-refoulment principle, when it is justified by a superior interest or right, such as the best interest of the child, the right to family life and the health condition of the third national involved. Particularly, Article 10 states a specific discipline for the return and removal of unaccompanied minors, and Article 14 provides also specific safeguards, while pending the return procedure, obliging Member States (with some exceptions, according to articles 16 and 17) to ensure reunification with family members present in their territory; emergency or essential health care; access to the basic education system (subject to the length of their stay) for minors, and explicitly recommends that "special needs of vulnerable persons are taken into account."

The UNHCR Resettlement Handbook (UNHCR, 2011) considers resettlement not only in view of a durable solution but also as a strategic option for refugees and identifies "potential vulnerabilities" in the condition of women and girls, children and adolescents, older refugees, refugees with disabilities, lesbian, gay, bisexual, transgender and intersex (LGBTI) refugees, and refugees from minorities and indigenous groups. Moreover, those who have been granted resettlement could face further vulnerabilities, as acts of violence or forms of coercion from other seekers with no definite status could still arise, in order to get back support or sponsorship (UNHCR, 2011, p.148).

In the same spirit, Article 5 EC (2016) about the Union Resettlement Framework, which is anyway a Regulation Proposal, aims at extending eligibility criteria for resettlement beyond classical resettlement categories in the UNHCR rules. Particularly, resettlement should be guaranteed to all displaced people (both beyond borders and inside their own country) falling in "vulnerability categories," including "persons with socio-economic vulnerability and those with family links to third-country nationals or stateless persons or Union citizens legally residing in a Member State or who are dependent on them."

THE VULNERABILITY ASSESSMENT IN HUMANITARIAN PRACTICES AND ITS METHODOLOGICAL DRAWBACKS

If the legal definition of vulnerability remains vague, the practice of vulnerability assessment by humanitarian organisations in the field also proves lacking. Indeed, vulnerability is not only a useful concept in itself, but it can also serve as a tool for the categorisation of the asylum-seeking population, as introduced above. With the aim of providing targeted material assistance, also social protection and humanitarian agencies are increasingly searching for more effective ways to target vulnerable people. In this case, it is not useful to consider people as vulnerable just because they belong to a "class" (women, elderly, refugees, etc.), hence a sort of checklist is provided containing both symptoms and prerequisites of vulnerability and people are scored against this list.

Because it takes a variety of forms, vulnerability has been operationalised in a number of different ways, by mean of various statistical methodologies, or by focusing on different facets of vulnerability. These facets usually encompass heterogeneous aspects of vulnerability, both inherent and situational.

Among the few providers of vulnerability assessment tools and data, the main actors are the United Nations agencies dealing with refugees and needy people. These agencies usually produce their frameworks for measuring vulnerability independently (rarely in joint projects) and carry out substantial fieldwork (in cooperation with local actors) to gather information on the living conditions of refugees over time and over geographical areas.

The simplest approach to vulnerability assessment (VA) is known as the "scoreboard approach." This approach starts with the identification of the most relevant dimensions of vulnerability. For each dimension, a set of items designed to identify easily measurable prerequisites or symptoms of vulnerability is composed. A numerical score is assigned to each item (depending on the intensity of the symptoms), and the weighted or unweighted aggregation of the scores (within each dimension of vulnerability and/or over all the dimensions) is used as the eligibility criterion for providing and prioritising assistance. The provision of an overall score of vulnerability is often a by-product of these VA exercises, whereas reports tend to focus on analyses of each single dimension.

Below, we offer a brief description of different vulnerability assessment frameworks, while focusing on their usefulness and their methodological drawbacks.

In the aftermath of the start of the Syrian war, the UNHCR implemented its "Vulnerability Assessment Framework (VAF)" for targeting refugees in Jordan (UNHCR, 2018) and in Lebanon (last released UNHCR et al., 2020). The UNHCR's VAF is a quantitative tool (based on the scoreboard approach) that encompasses 10 domains of households' vulnerability, some of which refer to elements of inherent vulnerability (family structure, education, health and coping strategies), and some of which refer to situational vulnerabilities (poverty, documentation, basic needs, food security, housing conditions, access to water, sanitation and hygiene (w.a.s.h.)). These domains are measured through a set of "atomic indicators" combined in a comprehensive score that measures the overall vulnerability level by the sum of single domain scores.

Composing an overall measure of vulnerability through the sum of its parts implicitly assumes that these parts do not overlap; that is, that they neatly cover different semantic dimensions of the notion of vulnerability that are clearly discernible from each other, and that each and every facet contributes to the multidimensional concept of vulnerability itself. In short, this measure assumes the independence of the different dimensions of vulnerability. However, this assumption is questionable, since, for example, health depends on living conditions and the provision of basic needs, low education and the lack of regular legal documentation systematically drive individuals into poverty. Thus, the intersectional nature of these issues is easily identifiable.

A recent paper by Busetta et al. (2021) highlighted some methodological drawbacks of this approach and focused on the consequences of the lack of any adjustment for either measurement errors or correlations among the items.

In 2012, a joint project by the UNHCR, the United Nations Children's Fund (UNICEF), and the United Nations World Food Programme (WFP) promoted the "VASyR": that is, a tool for the "Vulnerability Assessment for Syrian Refugees" in Lebanon (see the latest realised: UNHCR et al., 2020). Again, in this assessment tool, vulnerability was considered as a composite construct encompassing six dimensions (access to income, food security, basic assistance, living conditions, access to services and protection). A plethora of indicators was monitored in each of the dimensions and compared with their performances in the preceding year at an aggregate level (i.e. as variations in the incidence of each symptom among the surveyed group of refugees).[4] No overall measure of vulnerability was provided in the annual reports, and a longitudinal monitoring of the refugees' well-being was not proposed.

The UNRWA (2015) developed its own vulnerability assessment tool to assist Palestinian people in Lebanon. Eight dimensions of vulnerability were identified: economic, education, food security, health, non-food items, protection, shelter, and water, sanitation, and hygiene (w.a.s.h). Therefore, using the WFP scheme, households were classified according to four increasing levels of vulnerability for each of the eight dimensions described above. A total score was also obtained as a weighted mean of the vulnerability score in each single dimension, although, also in this case, the implied assumption of independence among dimensions is not persuasive. Thus, an overall measure of vulnerability was provided. In the end, the overall score was categorised into four levels (from low-to-severe vulnerability) in order to divide the population into four groups characterised by increasing levels of needs.

Even though vulnerability is clearly a multidimensional concept, it is often inflected as economic vulnerability or health vulnerability. Based on the first acceptation, the World Bank introduced the PMT(F) (Proxy Means-Test Formula), which is a methodology for assessing whether a household or an individual is eligible to receive support from social safety net programmes (see, e.g. Grosh & Baker, 2013). This methodology is diffusely employed in many developing countries where no reliable data (or no data at all) on income are available. The PMT score is derived by a multivariate regression model that explores the dependence of a household's consumption on its main observable socio-demographic characteristics (e.g. education, age and household assets). The score is then compared with a monetary poverty line that allows countries to target their poorest residents.

The PMT method was also used by the UNWRA for a number of years to direct assistance to vulnerable Palestine refugees in Jordan, West Bank, Lebanon and Gaza Strip though this initiative was recently suspended (and substituted with other criteria) due to the COVID-19 pandemic (UNRWA, 2020). While it has a more technical

methodological basis than the aforementioned scoreboard approaches, the PMT is not flawless, and its drawbacks are increasingly being debated in the literature (see the methodological research paper published by the Australian Government in 2011 and Gazeaud, 2020). Particularly, Gazeaud (2020) highlighted the unfeasibility of the assumption of random measurement errors in the PMT, which drives to severe consequences on the PMT's predictive power. In addition, we want to underline the presence of strong interdependencies among the factors used as explanatory variables in the regression models, and (as explained in Section 5.2) these interdependencies can have intersectional effects.

Aside the economic one, health is among the most explored dimensions of vulnerability in refugees and migration studies, and it is at the basis of human-rights approach. Refugees and migrants can be vulnerable to diseases because of lack of health care or interrupted care in the country of origin, because of exposure to infections and lack of care in transit and if experience poor living conditions in the destination country (WHO, 2018). There are several health assessment frameworks for refugees and migrants (e.g. EC & IOM, 2015; UNHCR, 2004; WHO, 2018). They focus on guidelines to be applied at the entrance of the migrants and refugees in the country of destination, in refugee camps as well as during pre-resettlement screenings. All of them provide recommendation on screenings and examinations to be carried on in order to identify most common communicable and incommunicable diseases. Most severe cases are immediately treated, but no scores of vulnerability are produced.

An interesting approach to the health assessment, which could be introduced in the practices of VA, is that proposed by the "syndemics" (Singer, 2009), a branch of medical anthropology, which "investigates synergistic, often deleterious interactions among comorbid health conditions, especially under circumstances of structural and political adversity" (Willen et al., 2017). Syndemics mirrors the concept of "intersectional vulnerability" that we widely discussed in Section 5.

ACADEMIC CONTRIBUTION TO VULNERABILITY DEFINITION AND MEASUREMENT

Proposals to address the main critical concerns that have been raised regarding previous definitions and measurements of vulnerability have been coming from the academic realm. An analytical review showed that most of these proposals have adopted a qualitative approach and have taken into consideration a number of issues, such as what dimensions of vulnerability should be measured (Atak et al., 2018; Black, 1994; Brown et al., 2017; Mackenzie et al., 2014); who is really vulnerable (Mackenzie et al., 2014; Sözer, 2021); and to what extent the health and living conditions of refugees in several areas of the world are poor (e.g. Black, 1994; Stewart, 2005). Some of these papers directly addressed the issue of the cumulative effects of the disadvantages experienced by migrants or refugees (Bürkner, 2012), which is one among the core themes in this paper.

Our review here focuses on a few contributions in the quantitative literature that deals with the extent of the operational definitions of vulnerability and the implications of the measurement strategies used in assessing the vulnerability of refugees. In particular, we focus on a) the cumulative effects of these disadvantages and intersectionality; b) correlations among items of vulnerability; and c) measurement errors.

We base our initial categorisation of the academic contributions to VA on the observation that some papers deal with vulnerability as a multidimensional phenomenon, while others restrict their focus to some specific dimensions of vulnerability.

The paper by Black (1994) offered some interesting analyses on a purposive sample of refugees in Greece. While the author argued that "all refugees could be considered as politically "vulnerable", in the sense that they require protection, normally from the host state, against forcible repatriation to their country of origin" (see p. 362), he also provided a grid of indicators to distinguish among refugees based on different dimensions of vulnerability: socio-demographic (e.g. duration of stay and size of family), financial (e.g. debts or dependence on aid and allowances), legal and socio-economic. Thus, implicitly, he was acknowledging that vulnerability is a multidimensional

construct and that some refugees may not be vulnerable with respect to these specific items. While not referring to the taxonomies introduced in Section 2, most of which were published later on, Black underlined the interplay between inherent and situational vulnerability by highlighting that vulnerability is not an absolute attribute, as it is always related to the context.

In a study on the welfare of Syrian refugees, Verme et al. (2015) focused instead on the economic vulnerability of this population and pointed out the difference between poverty and vulnerability. They observed that vulnerability is a latent construct, related to the concept of uncertainty, and drew attention to three main forms of economic vulnerability: vulnerability as exposure to risk, vulnerability as expected poverty and vulnerability as low expected utility. Commenting on their estimates of "monetary vulnerability" as "expected poverty" under conditions of uncertainty, they concluded that "*poverty and vulnerability are two related but quite different concepts, and that the same predictors may behave quite differently for poverty and vulnerability, sometimes with opposite signs*" (see p. 98).

A recent paper by Busetta et al. (2021) on refugees living in informal settlements in Italy defined vulnerability as a multidimensional concept, structured into dimensions and indicators. A notable contribution of this paper was its discussion on the issue of the correlations among items that are usually selected to assess the degree of vulnerability in VA exercises, and on the presence of measurement errors in the whole procedure. An analysis of the factors associated with vulnerability was performed through a latent trait regression model and compared with the "pragmatic approach" of using simple composite indicators (scorecards). The authors emphasised that not only targeted people differ according to the way that vulnerability is measured, but also even factors associated with an increased vulnerability might change (even when considering the same input information). Consequently, they argued that both correlations and measurement errors should be carefully considered when judging the reliability and the validity of most of the current assessments of the vulnerability of refugees.

Again, a multidimensional approach was adopted by Mendola et al. (2020) in their paper on the vulnerability of refugees hosted in high-income countries. Therein, the focus was on the notion of uncertainty that is implicit of vulnerability, and vulnerability was defined as the "*multidimensional risk of experiencing negative outcomes*." The authors focused on the vulnerability of refugees in Germany who are facing new risks related to social isolation, bad health and financial difficulties. Since these risks are clearly correlated, the authors estimated a trivariate logit regression model to account for interdependence among risks. The correlations among risks were found to be highly significant, and the authors warned that ignoring them could cause an under- or an overestimation of the probabilities of being exposed, singularly and jointly, to those risks.

INTERSECTIONAL VULNERABILITY

The notion of intersectionality originated in feminist and gender studies (Crenshaw, 1989, 1991), and it refers to the existence of a "cumulative" effect of disadvantages due to certain inherent characteristics (such as gender, ethnicity or religion) that exceeds the sum of the detrimental effects derived from each single characteristic.[5] Hence, "[i]ntersectional subordination need not be intentionally produced; in fact, it is frequently the consequence of the imposition of one burden that interacts with pre-existing vulnerabilities to create yet another dimension of disempowerment" (Crenshaw, 1991, p. 1249). Thus, Crenshaw (1989) used the metaphorical image of several cars coming from different streets hitting a person at the crossroad of these "streets" (i.e. axes of discrimination), thereby highlighting that inequality tends to be constituted by particular situations and contexts, rather than by "*uniform class structures*."

The intersectional approach provides a very interesting lens to look at the disadvantages of refugees. Moreover, linking three of the different kinds of vulnerability analysed in Section 2 (inherent, situational and pathogenic) with the idea of intersectionality can help us better explain the troubling sense of powerlessness, loss of control and loss of agency that are commonly mentioned when we talk about vulnerability and

inequality, especially when comparing a vulnerable individual or group (minoritarian) with another individual or group (majoritarian).

Intersectionality characterises also health of refugees as introduced before with the syndemics' approach to health assessment.

Vulnerability often stems from discrimination, that is from the practice of treating a particular person or group in society less fairly than others[6] because of their characteristics, such as their age, sex, religion or nationality. The jurisprudence on this issue has recognised the differences between multiple discrimination and intersectional discrimination (Crenshaw, 1991; McCall, 2005). *Multiple discrimination* occurs when a person is discriminated on the grounds of several factors operating separately (e.g. by being treated less favourably because of his/her origin in one situation and because of his/her gender in another). In *intersectional discrimination*, an individual is discriminated against because of several factors at the same time, and in such a way that these factors are inseparable.

Recital 14 of the EU Racial Equality Directive (2000/43/EC), for instance, states: "[i]n implementing the principle of equal treatment irrespective of racial or ethnic origin, the Community should, in accordance with Article 3(2) of the EC Treaty, aim to eliminate inequalities and to promote equality between men and women, especially since women are often the victims of multiple discrimination."

The concept of intersectional discrimination is well known and has been theorised in the scholarly debate. While it is likely known, even if not expressly mentioned, in the EU case law and official reports, this concept is never considered in pieces of primary and secondary legislation,[7] because it is not a commonly shared construct among the EU member states.

In the scholarly migration debate, gender theories about inequality have been used (Bürkner, 2012). Thus, the analysis of migration has been enlarged through the inclusion of additional axes or factors such as age, religion and ethnicity (Verloo, 2006), and by focusing on the different facets of the vulnerability of migrants we discussed above.

Such an approach allows us to focus on the context dependency of the personal experience of intersectionality of inherent and situational forms of vulnerability. A single migrant or a specific type of vulnerable migrant, as noted by the EU Racial Equality Directive (2000/43/EC), might be individually exposed to a range of needs and restraints, meet various social expectations or be dependent on limited material and social resources. While being exposed to a stable set of categorical (structural) interferences, the same migrant asylum seeker could encounter intersectionality within different frameworks (e.g. in the temporary detention centre, at work, at the hospital or at school). When passing through different context-specific configurations of intersectionality, a refugee might collect negative experiences of inequality and discrimination and might demonstrate resilience as a means of coping with the general situation of being underprivileged.

When talking about intersectional vulnerability, we should consider the (cross)relevance of the different and concurring factors of vulnerability, and how they affect migrants, the conditions and treatment of asylum seekers and refugees, and assessments of state and non-state measures. Such an approach could be useful in evaluating the adequateness and efficacy of interventions designed to ameliorate the conditions of refugees and to reduce their vulnerability.

Methodological challenges of an intersectional approach to assessing vulnerability

In quantitative social sciences, that aim to measure abstract constructs like vulnerability, scholars are facing a growing pressure to capture the complexity of increasingly large sets of dimensions and categories of analysis. However, till now, as already Bürkner (2012, p.181) pointed out, "migration studies have developed only cursory approaches to diversity and intersectionality."

The intersectional confluence of individual, contextual and institutional factors operating on the vulnerability of refugees (see Figure 1) generates something new, which we label here the "*multiprofile of disadvantage*". Inside this *multiprofile*, it may be impossible to enucleate the net effect of each of its components, and some elusive and ambiguous "confounding effects"[8] may arise.

How much is gender responsible for the vulnerability of refugees? *How much* does their nationality affect their vulnerability? Inside this new "identity" of individuals (i.e. their multiprofile), some axes of disadvantage may compensate for each other, or the intersection of two disadvantages may somehow become an advantage when it comes to receiving assistance. For example, while being a woman from Tunisia and applying for international protection indicates a situation of vulnerability, being a woman escaping from the Syrian conflict may be associated with a lower degree of vulnerability, since, in Europe, Syrians might be granted some form of international protection based on their nationality, while protection seekers of other nationalities are often subjected to a longer evaluation process (see AIDA, 2017; ASGI, 2020).[9] Moreover, the confluence of two axes of vulnerability could produce a degree of damage that is much higher than that attributable to the sum of the two separate effects. For example, a migrant woman in a detention centre where she experiences vulnerability as a foreigner and as a detained person could also become the victim of sexual abuse. Being in this condition adds a degree of damage to which men in the same conditions are usually not exposed.

Intersectionality lens raises crucial questions about the quantitative measurement of the vulnerability and crashes into the common practices of humanitarian organisations.

Given this premise, it is to be expected that the statistical modelling of these effects – or even just their synthetic quantitative measurement – is proving to be a complex task. As McCall (2005, p.1772) has suggested, "intersectionality has introduced new methodological problems and, partly as an unintended consequence, has limited the range of methodological approaches used to study intersectionality."

Stating that not all refugees/asylum seekers are equal and that they are not equally vulnerable (as made explicit by the VAF of humanitarian agencies – discussed in Section 3), opens the field to measuring the nuances of their conditions, based on the assumption that the degree of vulnerability spans from not vulnerable at all to totally vulnerable. Taking this variation into account is a challenge for scientists and practitioners involved in humanitarian assessments of vulnerability.

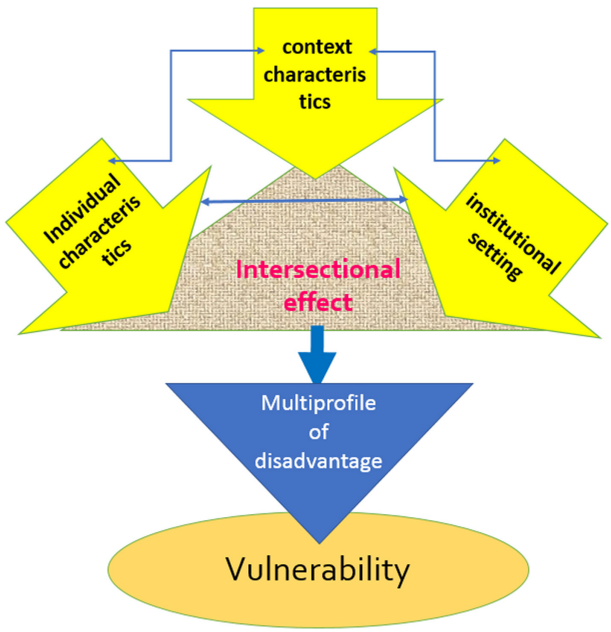

FIGURE 1 Intersectionality and vulnerability

A further complex, though interesting, challenge for the quantitative assessment of the vulnerability of refugees is to separate the factors that are prerequisites for future (potential) forms of damage or discrimination from the factors that are already having an effect. In short, vulnerability measures (such as the UN VAF) should retain distinct dispositional and occurrent elements of vulnerability. Indeed, since in most assessments, all these determinants of the refugees' vulnerability are considered as contributing equally to the vulnerability score (and are hence treated as if they were interchangeable), humanitarian workers may fail to notice that a refugee needs help at the moment, as their attention is on the minimisation of future potential risks. It may be argued that differentiating such needs is not easy, since, for example, a lack of education may not produce effects until the refugees are under the mandate of the UNHCR (which provides them with material assistance), whereas it is a problem for refugees in Europe struggling to find a job. However, putting more weight on actual factors of vulnerability (e.g., on bad health or disability, or on problems related to the age structure of the families) could help in designing a more finely tuned scheme for prioritising interventions.

CONCLUSIONS

The characterisation of refugees as a vulnerable group is a premise that most institutions and agencies would not think needs to be proved or demonstrated. It is generally believed that labelling a refugee as "vulnerable" will provide him/her with specific forms of protection and help and is therefore a "convenient" position. At the same time, this characterisation suggests that refugees are incapable of self-determination. As Sözer (2021, p.1) put it, "the category "vulnerable refugee" has escaped from critical scrutiny by academic literature," and policy interventions at various levels manifest the attitude that such an attribution is "inherently positive." However, this approach could hide a negative humanitarianism that impedes the critical scrutiny of the real factors of vulnerability and the emergence of effective responses to real needs.

In this paper, we have discussed concepts such as vulnerability, intersectionality and discrimination, with a special focus on refugees. We reviewed scholarly writings, legal sources, practices of vulnerability assessment in humanitarian organisations, and debates on definitions and statistical measures of these constructs in order to offer the reader a multidisciplinary perspective on the complexity of this issue, which affects human lives.

Our analysis has found that

a. There is a great deal of vagueness in the definition of vulnerability, in the facets of this construct, and in its operationalisation by international organisations and academic contributors.
b. Refugees should not be considered vulnerable *per se*, as each individual should be evaluated based on his/her inherent and situational fragilities and needs.
c. Looking at vulnerability through the lens of intersectionality would allow for a deeper investigation of vulnerability traits and of their interplay. This approach could lead to better and more effective responses by both the legal system and the agencies that perform vulnerability assessments.
d. Such responses should take into account that the situational dimension of vulnerability can vary (substantially or marginally) depending on the composition of the set of vulnerability factors in the refugees' countries of origin, and in the countries of transit and destination.
e. Ignoring correlations among inherent, situational and pathogenic vulnerability facets can lead to the mistargeting of needy individuals and to an inability to detect real priorities in interventions. The intersectionality of the facets of vulnerability should be taken into account explicitly in the statistical measurement of this construct. Currently, it is largely neglected.

In conclusion, we would like to emphasise that such insights could inspire social scientists and practitioners to change how vulnerability is depicted. These changes could, in turn, be transposed into case law and alter how vulnerability is measured by scholars and assessed by humanitarian organisations.

In particular, it is important to underline that the vulnerability assessment is crucial in different steps of the asylum procedure: in the event of resettlement, of return from one Member State, as the country of arrival, into

another; in cases of *refoulment* (or return) to the country of origin; and in the integration phase in the country of destination.

Although the concept of vulnerability is often mentioned by the member states of the European Convention of Human Rights and the international community, the idea of intersectionality or of intersectional vulnerability is not as widespread or accepted in pieces of legislation, case law and international reports. Similarly, the use of an intersectional approach in vulnerability assessment practices is very rare (especially in the quantitative VA exercises).

Although the approach suggested here could be implemente-d in research and academic studies, applying it may be a fruitful challenge for international organisations, administrative bodies and public agencies.

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ENDNOTES

1. Unfortunately, for reason of space, here, we have the necessity to refer only to few paradigmatic pieces of legislation, documents, and treaties, both at the UN and at EU level, where the concept of vulnerability is relevant or where we find a recurring expression, which is "migrants in vulnerable situation."
2. A more specific definition can be found in the legislation about forced labour, slavery and human trafficking, which is related to our analysis. Article 2.2, Directive 2011/36/EU, describes a position of vulnerability as "a situation in which the person concerned has no real or acceptable alternative but to submit to the abuse involved." The forms of vulnerability the person experiences may vary, that is the vulnerability may be physical, psychological, emotional, family-related, social or economic. In short, the situation can be any state of hardship in which a human being is impelled to accept being exploited (Council of Europe, 2016).
3. We are aware of the conceptual distinction between the figures of asylum seeker, refugee and migrant. Specifically, the latter is a broader and undefined category, often used as an "umbrella term" (IOM, 2019a). In this paper, we refer mainly to refugees and asylum seekers. However, the term "migrant" is sometimes used because in the legal sources, the word vulnerability is often applied to migrants in general.
4. Surveys are cross-sectional and do not allow for comparisons of the living conditions of single households or individuals over time.
5. In the Crenshaw paper, the expression "cumulative effect of disadvantages" is used in a qualitive area of jurisprudence and in the legal theory lexicon. The same expression in a quantitative and statistical lexicon would refer, paradoxically, to the opposite of the intention of Crenshaw. Indeed, in statistics, we talk about the "cumulative effect" as referring to some independent and enucleated (that is, not interplaying) effects that can be synthetised via a sum or an average. This clarification is fundamental here because of the interdisciplinary approach of this paper. Hence, in the following, when we refer to the intersectional approach in the (quantitative) assessment of vulnerability, we are referring to an effect of the axes of discrimination that is not cumulative (i.e., that is additive), but is multiplicative—or is, more generally, not linear.
6. In the Crenshaw paper, the expression "cumulative effect of disadvantages" is used in a qualitive area of jurisprudence and in the legal theory lexicon. The same expression in a quantitative and statistical lexicon would refer, paradoxically, to the opposite of the intention of Crenshaw. Indeed, in statistics, we talk about the "cumulative effect" as referring to some independent and enucleated (that is, not interplaying) effects that can be synthetised via a sum or an average. This clarification is fundamental here because of the interdisciplinary approach of this paper. Hence, in the following, when we refer to the intersectional approach in the (quantitative) assessment of vulnerability, we are referring to an effect of the axes of discrimination that is not cumulative (i.e., that is additive), but is multiplicative—or is, more generally, not linear.
7. Only recently, see *A Union of Equality*: *Gender Equality Strategy 2020–2025*, COM/2020/152, available online at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0152.

8. A "confounder" is a variable whose presence affects the variables being studied so that the results do not reflect the actual relationship. It can suggest there is correlation when there is none, and it can even introduce bias in interpreting phenomena. Confounding is "a situation in which the effects of two or more processes are not separated; the distortion of the apparent effect of an exposure on risk, brought about by the association with other factors that can influence the outcome" (http://www.encyclo.co.uk).
9. E.g., in Italy, "[P]ersons arriving at hotspots are classified as asylum seekers or economic migrants depending on a summary assessment, mainly carried out either by using questionnaires (*foglio notizie*) filled in by migrants at disembarkation, or by orally asking questions relating to the reason why they have come to Italy. People are often classified just solely on the basis of their nationality. Migrants coming from countries informally considered as safe, for example Tunisia are classified as economic migrants, prevented from accessing the asylum procedure and handed removal decisions." (https://asylumineurope.org/reports/country/italy/asylum-procedure/access-procedure-and-registration/hotspots/#_ftn13)

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