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Toward an SDG-Based Typology for US Nonprofits

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ABSTRACT

The Sustainable Development Goals (SDGs) represent an emerging institutional logic that nonprofits must navigate alongside existing sector-specific frameworks. Drawing on institutional logics and organizational hybridity theories, we examine how nonprofits incorporate SDGs into their missions and what this reveals about managing institutional complexity. Using a large language model to analyze nearly 50,000 US nonprofit mission statements, we develop an SDG-based typology that captures mission hybridity—a key dimension existing classification systems obscure. We find that nonprofits embedded in strong professional logics (e.g., healthcare, education) show concentrated SDG alignment, while those spanning multiple institutional spheres demonstrate diverse engagement patterns. Mission statements relate to an average of 1.94 SDGs, with modest intergoal correlations suggesting context-specific rather than template-driven implementation strategies. Our study advances understanding of how organizations translate global frameworks through existing institutional arrangements, provides a quantitative measure of mission complexity, and offers practical insights for nonprofit alignment with global sustainability priorities.

1 | Introduction

The United Nations Sustainable Development Goals (SDGs) have emerged as a transformative global framework for addressing humanity's most pressing challenges, providing a common language for organizations working toward social and environmental progress (Jacob 2024). However, with less than a decade remaining to achieve these ambitious goals, progress is alarmingly off-track, with only 17% of the SDG targets on track to be met by 2030 (United Nations 2024). This lack of progress underscores the urgent need for innovative theoretical and practical approaches that integrate the SDGs into actionable frameworks across sectors, bridging strategic vision with operational implementation (Carmagnac et al. 2024; Sodhi and Tang 2024). While the private sector's engagement with the SDGs has been extensively studied (Agrawal et al. 2022; Boni et al. 2024; Lin et al. 2025; Mahajan et al. 2024; Mio et al. 2020; Urbieta 2024), less attention has been paid to how nonprofit organizations align their missions and activities with these goals (Meier 2023).

Although the SDGs' influence as a global institutional framework is growing (Kanie et al. 2019), our theoretical understanding of how nonprofits incorporate and navigate the SDGs remains underdeveloped (Meier 2023). From an institutional theory perspective, the SDGs can be seen as a double-edged sword for nonprofits. On the one hand, the SDGs offer a globally recognized and cross-sectoral logic that is less idiosyncratic than existing logics that are used to organize nonprofit activities (i.e., traditional classification systems). On the other hand, the SDGs add further complexity by requiring nonprofits to navigate between existing sector-specific institutional logics and the emerging sustainability logics represented by the SDGs. This potential increase in institutional complexity, and the alignment between the existing logic and this

new sustainability logic, remains insufficiently theorized in the nonprofit context (Mariani et al. 2022). This contrasts with research on traditional commercial entities (for-profits), where exploration of how corporations navigate different levels of SDG implementation is well underway (Carmagnac et al. 2024; Sodhi and Tang 2024).

We draw on institutional logics theory and organizational hybridity theory to address these gaps. Institutional logics theory is typically used to study how organizations handle competing institutional frameworks (i.e., logics) and translate between different systems of meaning (Thornton et al. 2012). Previous studies conceptualized the SDGs as an emerging global institutional logic (Kanie et al. 2019), and we argue that nonprofits increasingly have to engage with this new logic alongside their traditional sector-specific logics. As a further theoretical lens to study how nonprofits incorporate this new emerging logic, we draw on hybridity theory, which provides a framework for understanding how organizations navigate multiple, potentially conflicting, missions and identities (Battilana and Lee 2014; Mair et al. 2015). Mission hybridity is a common phenomenon in nonprofits (Beaton et al. 2021) as these organizations often address multiple social challenges simultaneously. We propose that the SDG framework, with its broad but interconnected goals and targets, offers a promising lens for quantifying and making sense of mission hybridity in a standardized way across organizations.

The theoretical gap in NPO-SDG engagement is mirrored by a significant empirical imbalance in SDG research across sectors. While there is a rich literature looking at the private sector's engagement with the SDGs (Agrawal et al. 2022; Boni et al. 2024; Lin et al. 2025; Mahajan et al. 2024; Mio et al. 2020; Urbieta 2024), far less attention has been paid to how nonprofits align their activities and missions with these goals (Meier 2023). The resulting blind spot in SDG implementation is concerning as nonprofits play an essential role in addressing social and environmental challenges in contexts where private-sector and governmental efforts fall short (Nordin et al. 2024). Furthermore, the mission-driven nature of nonprofits may offer unique insights into how SDG integration operates in practice. This is because nonprofits face different demands and operate under distinct accountability structures compared to for-profits and governments, which have been shown to be prone to selectively adopting the SDGs (Nilsson et al. 2018; McGowan et al. 2019). We therefore argue that nonprofits, with their mission-driven nature, can serve as a unique lens on SDG implementation practice.

The gap in studying NPO-SDG engagement can partly be explained by the limitations of existing nonprofit classification systems. Traditional frameworks like the International Classification of Non-Profit Organizations (ICNPO) and the National Taxonomy of Exempt Entities (NTEE) were not designed to accommodate the interrelated and multidimensional nature of the SDGs. As a result, these existing frameworks fall short in capturing the plurality (i.e., hybridity) of cause areas within organizations. This significantly limits their utility for analyzing how nonprofits address complex, interrelated, and overlapping goals such as the SDGs. We are therefore in need of a more contemporary and flexible framework that is up to this task.

To address these theoretical, empirical, and practical gaps, we propose using the SDGs as a classification system for nonprofit organizations. The SDGs offer a more nuanced framework than existing classification systems for understanding nonprofit activities and missions. Next to furthering our theoretical understanding of institutional logic navigation, adopting the SDGs as a classification framework also offers a theoretically grounded measure of mission hybridity.

Our study is guided by the following three primary research questions:

1. How do organizations navigate between sector-specific institutional logics (NTEE) and global sustainability logics (SDGs)?
2. How do different types of nonprofits (as categorized by sector) vary in their patterns of mission hybridity?
3. How are SDG implementation activities correlated within hybrid-goal organizations?

To examine these questions, we utilize a state-of-the-art large language model (LLM) to assign SDGs to mission statements from almost 50,000 US public charities. This computational approach allows us to develop an empirical SDG-based typology at scale, providing both theoretical insights into nonprofit positioning within institutional frameworks and practical tools for understanding nonprofit contributions to sustainable development.

By integrating the SDGs into nonprofit classification, our study makes several significant contributions. Theoretically, we advance understanding of how nonprofits navigate institutional complexity and manage mission hybridity in the context of global sustainability frameworks. Methodologically, we demonstrate the viability of using large language models to develop organizational typologies at scale. Practically, we provide a framework that enhances nonprofit organizations' ability to align with global priorities, communicate their impact, and form cross-sector partnerships. By offering both theoretical advancement and practical application, our study contributes to bridging the gap between the nonprofit sector and the SDG agenda, enhancing our understanding of how nonprofits can be more effectively conceptualized and positioned as key actors in achieving the 2030 Agenda for Sustainable Development.

2 | Theoretical Framework and Literature Review

2.1 | The Rise of SDGs as a Global Institutional Framework

The SDGs represent a significant evolution from previous frameworks like the Millennium Development Goals (MDGs) in both reach and scope. In contrast to the MDGs, which primarily targeted developing nations, the SDGs foster collective responsibility by requiring actions from all countries (Pizzi et al. 2021; Scharlemann et al. 2020; Mio et al. 2020), thereby engaging a wider range of stakeholders (Mio et al. 2020). By focusing on a broad array of environmental, economic, and social issues, the scope of the SDGs is also far broader and includes topics that were less central to the MDGs (e.g., inequality, climate change,

and sustainable consumption) (Mio et al. 2020). Another defining characteristic of the SDGs is their explicit emphasis on interconnectedness, which promotes a systems-thinking approach that acknowledges synergies and trade-offs between goals (Alcamo et al. 2020; Erzurumlu et al. 2023; Nilsson et al. 2018; Scharlemann et al. 2020). Institutionally, the SDGs therefore demand new governance mechanisms that focus on cross-sector collaboration and local adaptation, moving beyond the more top-down–oriented approach of the MDGs (Collste et al. 2017).

The SDGs are therefore more than just a list of targets and can be conceptualized as an influential institutional framework that shapes global norms and expectations for organizations (Blackstock et al. 2023; Carmagnac et al. 2024; Kanie et al. 2019). The SDGs provide a normative structure that influences organizational behavior by highlighting the need for collective action to address complex global challenges and prompting organizations to embed sustainable practices within their core strategies (Rosati et al. 2023; Sánchez et al. 2020). In response to this, organizations are increasingly adopting innovative, sustainable business models, thereby reshaping norms around corporate governance and accountability (Rosati et al. 2023). The influence of and alignment with this new institutional framework is further driven by institutional investors who push for greater corporate transparency regarding SDG contributions (Sánchez et al. 2020). In summary, this new institutional framework is far-reaching and sector-spanning, as the SDGs encourage collaborative efforts among diverse stakeholders such as governments, businesses, and civil society to achieve the shared sustainability objectives.

2.2 | Nonprofits as a Unique Lens on SDG Implementation Practice

Despite the integrated vision of the 2030 Agenda, a notable gap exists between this aspiration and the practical realities of SDG implementation. Instead of taking a holistic approach to the SDGs, governments and corporations often selectively implement or "cherry-pick" SDGs, focusing on resource-aligned or politically convenient goals while neglecting others (Forestier and Kim 2020; Nilsson et al. 2018; McGowan et al. 2019). Such selective prioritization, whether driven by varying national contexts or socio-economic concerns, can lead to policy incoherence and hinder progress toward comprehensive sustainability as envisioned by the SDGs (Asadikia et al. 2024; Basheer et al. 2022). Even when organizations align with SDGs, other factors such as a lack of understanding regarding SDG interdependencies, resource constraints, or strategic interests can lead to siloed strategies, fragmented approaches, and a focus on specific targets (Asadikia et al. 2022; Falcone and Tutore 2025; Nilsson et al. 2018; Toth et al. 2022). Such a focus on specific targets can also be explained by the trade-offs between different goals. For example, strong tensions frequently arise between economic development objectives and environmental protection (Wei et al. 2021; Baffoe et al. 2021). On the other hand, patterns of SDG adoption can also be explained by synergies between SDGs. Such synergies are especially well documented for environmental goals (e.g., SDG-13, SDG-15), where promoting green economies or specific interventions like afforestation can yield co-benefits for ecosystem health, carbon storage, and potentially economic sectors (Luttikhuis and Wiebe 2023; Xu et al. 2022). The documentation of these dynamics has led to calls for integrated frameworks, such as the nexus approach, which emphasize analyzing overlapping interactions to optimize synergies and mitigate trade-offs, rather than treating goals in isolation (van Zanten and Van Tulder 2021a; van Zanten and Van Tulder 2021b).

Nonprofits can offer a distinctive lens on SDG implementation that addresses many of the above-mentioned concerns. There are two main reasons for this. First, nonprofits are inherently mission-driven and thus approach sustainability from a values-based perspective (Green and Dalton 2016). Indeed, as argued by Green and Dalton (2016, 303), "the not-for-profit values motive can be likened to the profit motive of for-profit businesses." Second, the accountability structures of nonprofits also differ fundamentally from profit-driven organizations, as they are primarily accountable to their missions and beneficiaries rather than shareholders (Rey-Garcia et al. 2017). This should make nonprofits less likely to "cherry-pick" SDGs based on political or strategic interests (Nilsson et al. 2018; McGowan et al. 2019). The mission-driven nature combined with the distinct accountability structures should therefore allow nonprofits to integrate the social, environmental, and economic facets of the SDGs more holistically. This is in line with the findings of Mariani et al. (2022, 1089), who found that nonprofit-led sustainability initiatives "extend their scope across the environmental, social, and economic dimensions, with wider effects that reach beyond those cases where the impact tends to be limited to a single dimension."

2.3 | Institutional Logics, Hybridity, and the Challenge of Measuring Mission Breadth

While nonprofits are uniquely positioned to holistically implement the SDGs through their mission-driven nature, they still face institutional complexities that potentially shape their sustainability approaches. These institutional complexities arise because NPOs frequently operate at the intersection of the state, market, and community (Meier and von Schnurbein 2024; Suykens et al. 2020) and therefore must balance demands related to their social mission (mission logic), financial sustainability (market logic), and regulatory compliance (state logic). Institutional logics theory provides a valuable lens for understanding how organizations manage the resulting complexity that arises from such potentially conflicting frameworks or guiding principles (i.e., logics).

While nonprofits are generally successful in navigating these multiple logics (Suykens et al. 2023), the emergence of global sustainability frameworks like the SDGs introduces a new, influential logic into this already complex landscape (Erzurumlu et al. 2023; van Zanten and Van Tulder 2021a). This SDG logic, by encouraging adherence to globally recognized sustainability metrics and goals, reshapes expectations and operational strategies across sectors (Kanie et al. 2019). For NPOs, this creates pressure to integrate the SDG logic into their existing missions and operational frameworks. On the one hand, this new SDG logic is attractive for nonprofits as it is globally recognized, adopted across sectors, and less

idiosyncratic than existing logics that are used to organize nonprofit activities (i.e., traditional classification systems) (Meier and von Schnurbein 2024). On the other hand, this new logic could increase complexity for nonprofits by requiring them to navigate between existing sector-specific logics and this emerging sustainability logic.

The concept of "organizational hybridity" provides a valuable framework for studying how organizations blend and manage such tensions that can arise from operating under multiple institutional logics (Mair et al. 2015). In nonprofit studies, "hybridity typically refers to the complex organizational forms that arise as voluntary, charitable, and community organizations confront differentiated task, legitimacy, or resource environments" (Skelcher and Smith 2015, 433). The literature suggests that organizations can experience different forms of hybridity, including "mission hybridity", which captures the manifestation of the phenomenon where organizations pursue multiple, potentially diverse objectives simultaneously (Boni et al. 2025). Mission hybridity is closely related to what other scholars have termed "mission breadth" (Valentinov and Larsen 2011; Kirk and Beth Nolan 2010). Mission breadth is defined as the degree of generality or specificity in an organization's mission and the range of activities it undertakes. While mission hybridity/breadth can be beneficial, for example by attracting more stakeholders and fostering innovation and new partnerships, it may also dilute focus and increase decision-making complexity (Fu and Cooper 2024; Kirk and Beth Nolan 2010). It therefore requires sophisticated strategies to manage potential conflicts and ensure "logic compatibility" (Fitzgerald and Shepherd 2018). Given that mission breadth and hybridity increasingly define the nonprofit sector's approach to social challenges (Malhotra et al. 2025; Mmbaga et al. 2022), developing robust frameworks to conceptualize and empirically measure these dimensions becomes essential for understanding how nonprofits can effectively balance multiple institutional demands while maximizing their social impact.

We argue that the SDGs are uniquely positioned to conceptualize and empirically measure the multifaceted nature of nonprofits' missions. The specific yet wide-ranging goals within the SDG framework can help nonprofits align their diverse activities with measurable outcomes, potentially driving deeper integration of social, economic, and environmental objectives into core practices. The SDGs are broad enough to allow nonprofits to align competing institutional logics in a hierarchy of goals, which has been shown to facilitate a balance between diverse institutional demands (Pinz et al. 2024). By serving as a framework to conceptualize mission breadth, the SDGs also allow us to measure and quantify the degree to which organizations pursue multiple objectives that may require navigating conflicting institutional demands.

The number of SDGs that a nonprofit's mission relates to provides a natural candidate for measuring mission breadth. The more SDGs an organization relates to, the broader its mission scope, indicating a potentially higher degree of complexity as the organization engages with a wider array of societal challenges. Furthermore, the specific combination of SDGs that an organization relates to provides a nuanced measure of this complexity. This is made possible by the fact that the SDGs span distinct domains, often conceptualized as Biosphere (e.g., SDGs 13, 14, 15), Society (e.g., SDGs 1, 3, 4, 5), and Economy (e.g., SDGs 8, 9, 10) (Coenen et al. 2022; Rockström and Sukhdev 2016). An organization whose mission relates to SDGs across distinct domains arguably navigates more complex institutional demands due to the potentially conflicting requirements, trade-offs, and accountability structures associated with each domain (van Zanten and Van Tulder 2021a). As documented by previous research, navigating the synergies and trade-offs that arise from addressing multiple SDGs simultaneously could be central to managing this deeper form of mission complexity (Wei et al. 2021; Luttikhuis and Wiebe 2023). Similarly, simultaneously addressing SDGs that have been shown to be trade-offs might be more challenging (i.e., lead to greater hybridity) than addressing SDGs that have been shown to be synergetic. The resulting nuanced understanding of mission breadth and depth enabled by the multi-domain structure of the SDGs is a unique advantage compared to existing classification systems. Existing systems like the NTEE or ICNPO categorize organizations based on their primary mission, thereby inherently failing to account for the breadth and potential complexity of missions that span different domains. The SDGs therefore provide a theoretical basis and empirical framework for conceptualizing and measuring mission breadth that existing classification systems (e.g., the NTEE codes) lack.

3 | Methodology and Data

3.1 | Data and Sample

Our analysis draws from the 2019 filings of Form 990, the annual informational tax document required for US tax-exempt organizations, sourced from the "990 Part 1 Missions" data mart provided by the GivingTuesday Data Commons (GivingTuesday Data Commons 2024). These publicly available filings have become a standard and widely used data source for large-scale nonprofit research (Searing and Grasse 2023). To ensure a homogeneous sample of comparable organizations, we first applied standard eligibility criteria to the full population: restricting to public charities, excluding private foundations, and including only organizations required to file Form 990. From this eligible population, we drew a random sample of 50,000 mission statements. We focus specifically on mission statements because they succinctly encapsulate organizational goals and values and are considered a primary data source for conceptualizing the nonprofit sector (LePere-Schloop 2022; Ma 2021; Meier and von Schnurbein 2024). As the data mart does not include NTEE codes, we retrieved them for each organization using the public API provided by GivingTuesday.

The sample was subsequently preprocessed to ensure data quality. We removed all observations with an NTEE value of "Unknown" ($n = 4$) or where the LLM classification (detailed below) did not return a valid response ($n = 1162$). In most of these cases, not enough information was present in the mission statement to determine SDG relevance (e.g., "see schedule O" as a mission statement). However, in some cases, the model

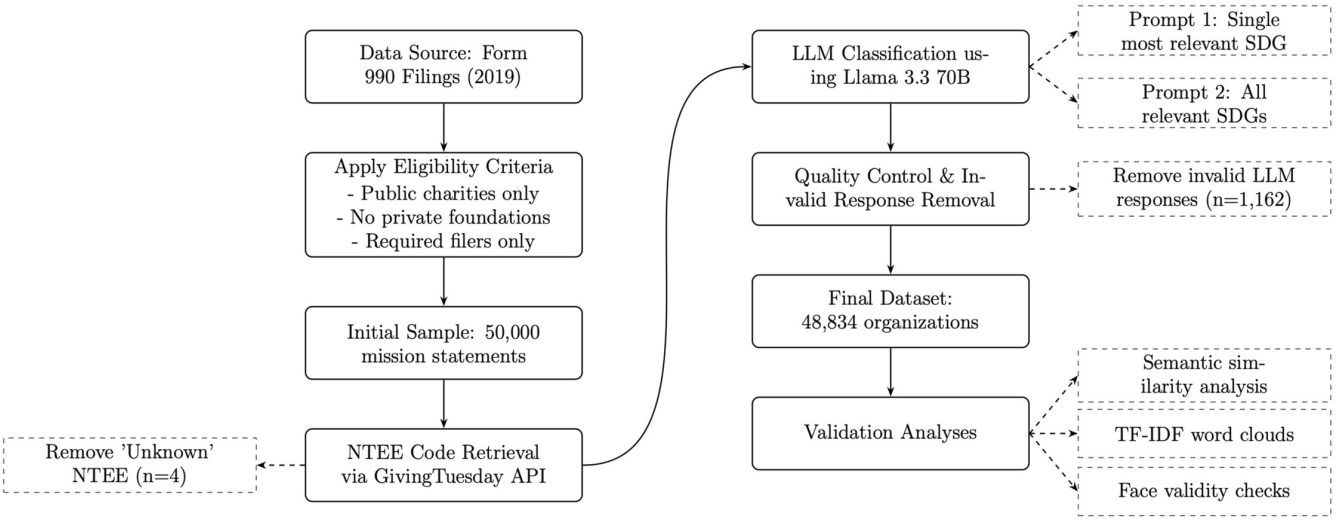

FIGURE 1 | Data collection and classification process overview.

did indeed not assign an SDG. This was most often the case for purely religious organizations (e.g., "religious purposes" or "church" as a mission statement). Figure A1 in the appendix displays word clouds showing the most frequent words in mission statements for each of the three groups of invalid responses. Our final dataset thus contains 48,834 nonprofit mission statements. Figure 1 provides a visual overview of the complete data collection and classification process, while Table 1 presents detailed sample characteristics, including the distribution of organizations across the primary NTEE categories.

3.2 | SDG Classification Methodology

To assign SDGs to the nearly 50,000 nonprofit mission statements, we required a robust method for categorizing textual data. The established approach in SDG classification relies on query-based systems, which use keyword combinations to assign SDGs to texts (Meier et al. 2025; Wulff et al. 2024). These systems range from simple keyword searches to complex queries using multiple operators, and their individual limitations have been addressed by combining them into a state-of-the-art ensemble model.

We initially planned on using this state-of-the-art system to label the mission statements with the SDGs, and we conducted a pilot which utilized the text2sdg package. We soon realized that this approach resulted in many false negatives (i.e., no SDG detected, although the mission statement clearly relates to one or more SDGs). Indeed, 15.2% of all mission statements in the sample were not assigned a single SDG with the text2sdg ensemble model. Given the charitable nature of these organizations, it is highly unlikely that about one sixth of the mission statements do not relate to any SDG. We suspect two reasons are responsible for this high share of false negatives. First, the labelling systems that the text2sdg ensemble model draws on were mainly developed to detect SDGs in academic texts (Meier et al. 2025; Wulff et al. 2024). The language used in these kinds of texts can be quite idiosyncratic and is likely quite different from the language used in NPO mission statements. Second, the mission statements are quite short. As shown by Wulff et al. (2024), the text2sdg ensemble model struggles to detect SDGs in short texts.

We therefore decided to take advantage of recent developments in large language models (LLMs) and used such a model to label the mission statements with SDGs (our main results also hold when using text2sdg to assign SDGs, see appendix). Evaluations show that using LLMs to detect SDGs in text works very well, with some models even outperforming the text2sdg ensemble model.[1] The zero-shot performance of LLMs (i.e., applying the model to tasks that it was not trained for) is remarkable and very often better than the performance of smaller, but domain-specific, models (Kheiri and Karimi 2023). We used the state-of-the-art open-source Llama 3.3 70B model, which outperforms closed-source competitors like GPT-4o and Claude 3.5 Sonnet in some benchmarks.[2]

Using an LLM instead of text2sdg has another unique advantage that is especially relevant in our case. Although we appreciate the ability of text2sdg to report all of the SDGs found within a mission statement, there is also a benefit to assigning the most relevant SDG for a given mission statement. This functionality allows for a fairer comparison and clearer crosswalk with the NTEE codes since each organization only belongs to one NTEE code. However, as having multiple SDGs per mission statement is one of the unique advantages of the SDG as compared to the NTEE classification system, we also used a prompt where the model was tasked to return all SDGs that the mission statement "directly relates to." The full prompts are provided in the appendix. We used the Fireworks AI API to prompt the model, with temperature set to 0 and all other parameters left at their defaults.

The Llama model successfully assigned an SDG to all 7426 mission statements that were not assigned an SDG by the text2sdg system. Table 2 shows a random selection of mission statements per SDG (as assigned by Llama 3.3) from the subset of mission statements that were not assigned to an SDG by the text2sdg system. For each mission statement, the relation to the SDG is quite clear, which provides face validity for the Llama labeling and evidence for the superiority of an LLM approach in this case. We detail several other measures of validity in the Results section.

TABLE 1 | Sample characteristics by NTEE main category.

NTEE main category	*n*	% of sample	Avg. mission length (words)
Education	8102	16.6%	26.5
Human services	7722	15.8%	26.1
Arts, culture & humanities	4530	9.3%	27.1
Health care	4201	8.6%	25.0
Housing and shelter	3481	7.1%	22.1
Recreation and sports	2453	5.0%	25.9
Philanthropy, voluntarism and grantmaking foundations	2293	4.7%	26.2
Community improvement and capacity building	1790	3.7%	26.6
Religion-related	1649	3.4%	25.8
Animal-related	1403	2.9%	26.1
Youth development	1403	2.9%	27.3
Mental health and crisis intervention	1386	2.8%	25.7
Environment	1349	2.8%	28.4
International, foreign affairs and national security	1286	2.6%	28.1
Public safety, disaster preparedness and relief	1172	2.4%	18.5
Crime and legal-related	893	1.8%	28.1
Voluntary health associations and medical disciplines	760	1.6%	27.4
Food, agriculture and nutrition	676	1.4%	25.4
Employment	606	1.2%	23.3
Public and societal benefit	507	1.0%	27.0
Civil rights, social action and advocacy	408	0.8%	28.3
Medical research	354	0.7%	29.3
Science and technology	265	0.5%	29.4
Social science	98	0.2%	24.5
Mutual and membership benefit	47	0.1%	17.8
Total	**48,834**	**100.0%**	**25.9**

3.3 | Validation and Analysis Methods

To assess the quality of the SDG classification and determine whether SDGs provide a meaningful alternative to NTEE codes, we employed multiple validation approaches. First, we calculated semantic similarities between mission statements within each classification group using embeddings from the Jina V3 model (Sturua et al. 2024), a state-of-the-art text embedding model that has shown strong performance in semantic similarity tasks. For each organization, we computed its average cosine similarity to all other organizations within the same SDG group and within the same NTEE group. Cosine similarity provides a measure between −1 and 1, where higher values indicate greater semantic similarity between texts. If the SDG classification system effectively groups similar organizations together, we would expect to see average within-group similarities comparable to the established NTEE system.

Second, we generated word clouds showing the most distinctive terms for each SDG using term frequency-inverse document frequency (tf-idf) scores. This metric gives high weight to words that are particularly characteristic of mission statements within a specific SDG group while controlling for their overall frequency in the corpus, thereby revealing distinctive terminology associated with each SDG category. Third, we identified the most stereotypical mission statement for each SDG by finding the statement with the highest average similarity to all other statements in that SDG group. Additional validation approaches using the text2sdg package are presented in the appendix.

To examine patterns of SDG co-occurrence and institutional complexity, we calculated correlation coefficients between all SDG pairs and applied hierarchical clustering to identify systematic groupings. We also computed Gini coefficients to quantify the concentration of SDG engagement within each NTEE

TABLE 2 | Examples of mission statements per SDG (as assigned by Llama 3.3 70B) that were not assigned to any SDG by the text2sdg algorithm.

Mission statement	SDG
To provide support for needy individuals in the central Virginia area.	SDG-01—No Poverty
Provide food for the needy.	SDG-02—Zero Hunger
To provide free urgent care for the uninsured and to assist in identifying continuity of care.	SDG-03—Good Health and Well-Being
To facilitate increased communication and scholarly exchanges among teachers, researchers, and students in the field of Asian American studies through the national annual conference.	SDG-04—Quality Education
Accelerating the success of female founders and funders to build a more prosperous and equitable future.	SDG-05—Gender Equality
Working together for healthy watersheds on the peninsula	SDG-06—Clean Water and Sanitation
Operation round-up is a voluntary rounding up of consumers' utility bills and is disbursed to assist in keeping with the spirit and purpose of the fund after board approval.	SDG-07—Affordable and Clean Energy
To maintain, enhance, improve, and enlarge the employment base of Madisonville and Hopkins County, Kentucky.	SDG-08—Decent Work and Economic Growth
The Pennsylvania Biotechnology Center of Bucks County is the result of a unique partnership to create a historic and transformational force from which discoveries will be born, students will be trained, and new companies will be launched.	SDG-09—Industry, Innovation, and Infrastructure
To create a fair, just, and equitable Minnesota.	SDG-10—Reduced Inequalities
Rehabilitation of blighted real estate and conservancy.	SDG-11—Sustainable Cities and Communities
To improve social and environmental standards for companies, by educating consumers, investors and entrepreneurs.	SDG-12—Responsible Consumption and Production
Promote healthy landscapes and safe communities by educating the public of everyone's shared responsibility to prevent human-caused wildfires.	SDG-13—Climate Action
Widecast is a scientific network active in 43 countries. The network was chartered in 1981 with the objective of preventing the extinction of six species of endangered sea turtles that live in the wider Caribbean region.	SDG-14—Life Below Water
Unite all Americans to ensure wildlife thrives in a rapidly changing world.	SDG-15—Life on Land
To provide legal defense services in the western district of Kentucky for indigent persons charged with federal offenses.	SDG-16—Peace, Justice, and Strong Institutions
To reinvent how public, private, and social interests engage to solve global challenges.	SDG-17—Partnerships for the Goals

category, providing a measure of how specialized versus diversified different nonprofit sectors are in their sustainability focus.

4 | Results

4.1 | Classification Quality

The SDG classification system demonstrated strong internal consistency comparable to the established NTEE system. Figure 2 illustrates the distribution of within-group semantic similarities for both classification systems. While NTEE-based similarities ($M = 0.397$, $SD = 0.082$) were statistically higher than SDG-based similarities ($M = 0.371$, $SD = 0.068$), $t(48833) = -86.54$, $p < 0.001$, $d = 0.39$, this 6.5% difference is modest considering that the NTEE system contains almost 50% more categories (25 NTEE main categories vs. 17 SDGs). The positive correlation between SDG and NTEE similarity scores ($r = 0.62$, $p < 0.001$) indicates that organizations well-clustered in one system tend to be moderately well-clustered in the other, although substantial dispersion suggests the two systems capture distinct organizational aspects.

Within SDG groups, median similarity scores ranged between 0.3 and 0.5, with SDG-17 (Partnerships), SDG-01 (No Poverty), and SDG-14 (Life Below Water) exhibiting the highest median similarities. Some SDGs contained low-similarity outliers

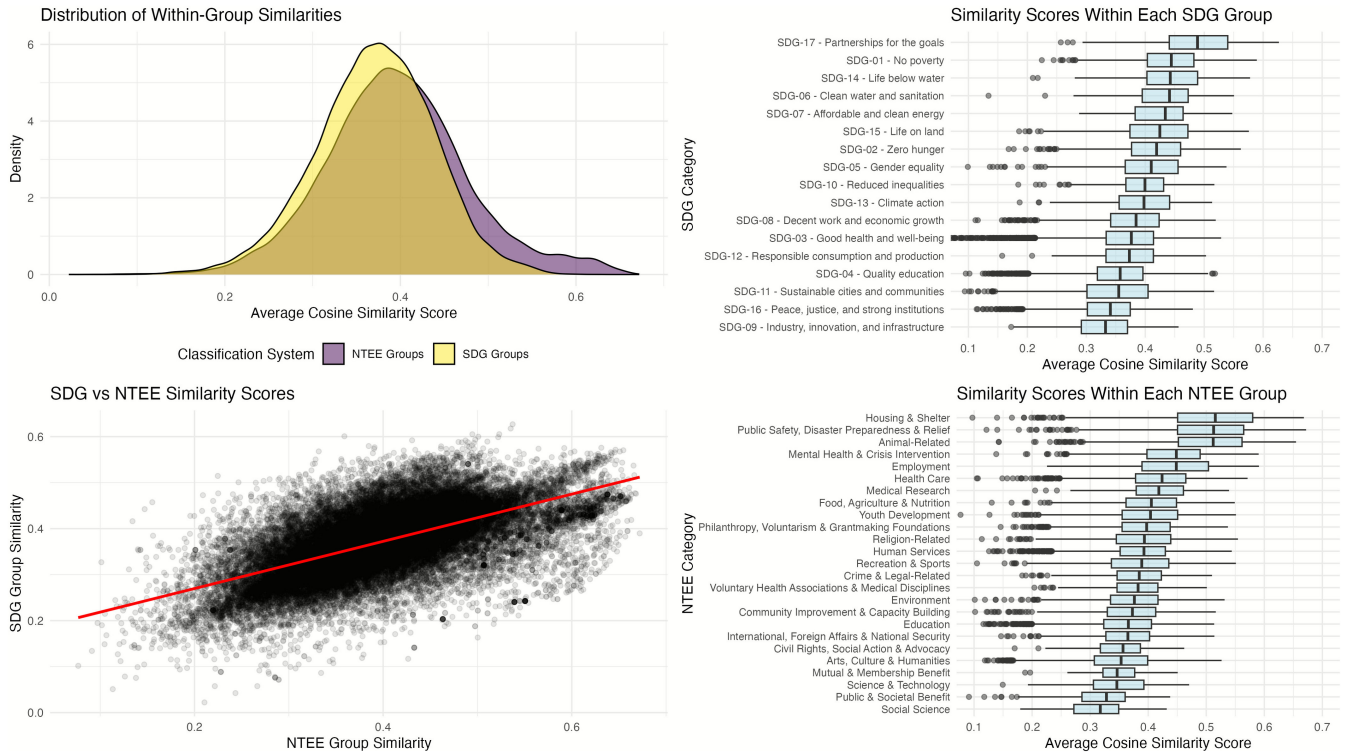

FIGURE 2 | Within-group semantic similarities across SDG and NTEE classifications. The top-left density plot compares the distributions of within-group semantic similarity scores for SDGs and NTEE categories, where higher scores indicate greater textual similarity among mission statements within the same group. While both distributions are similar, NTEE categories show slightly higher scores, particularly at the upper end. The bottom-left scatter plot shows the correlation ($r = 0.62$, $p < 0.001$) between SDG and NTEE similarities, revealing partial overlap in how organizations are grouped. The boxplots on the right provide a detailed view of within-group similarities. Both systems show relatively stable interquartile ranges, although outliers with low similarity scores are present in both systems. These analyses reveal that both systems achieve comparable levels of internal consistency in grouping organizations.

(cosine similarity below 0.2), particularly SDG-03 (Health), SDG-04 (Education), and SDG-16 (Peace and Justice). Notably, these outliers appeared in corresponding NTEE categories as well, especially in "Human Services," "Education," and "Arts, Culture & Humanities," indicating that the presence of outliers reflects genuine heterogeneity in mission statements rather than classification weakness.

The thematic coherence of the SDG classifications is further validated through distinctive vocabulary analysis. Word clouds generated using tf-idf scores (Figure 3) reveal that each SDG group contains highly characteristic terminology: SDG-01 features "poor," "homeless," and "income"; SDG-03 shows health-specific terms like "cancer," "patient," and "hospital"; environmental SDGs (13–15) show clear differentiation with climate, marine, and terrestrial vocabularies, respectively. Additional validation through the identification of stereotypical mission statements for each SDG (Table A1) and comparison with text2sdg classification (Appendix) further confirms the soundness of the LLM-based approach.

4.2 | Prevalence of SDGs

When restricted to single SDG assignment, SDG-4 (Quality Education, 32.6%), SDG-3 (Good Health and Well-Being, 26.3%), and SDG-11 (Sustainable Cities and Communities, 11.7%) emerged as most prevalent, while planet-related SDGs showed notably low representation (SDG-7: 0.2%, SDG-12: 0.3%, SDG-13: 0.4%). Allowing multiple SDG assignments revealed that mission statements relate to an average of 1.94 SDGs, with SDG-4 and SDG-8 gaining the most prevalence (+19.7 and +19.1 percentage points, respectively). Planet-related SDGs gained the least, remaining starkly underrepresented even when allowing multiple assignments, highlighting a significant gap in environmental engagement within the US nonprofit sector (Table 3).

4.3 | The Relationship Between SDGs and the NTEE

The relationship between traditional nonprofit categories and SDG alignment reveals both expected correspondences and surprising diversity. Figure 4's Sankey diagram shows clear one-to-one mappings for some NTEE categories: Nearly all "Health Care" organizations align with SDG-3, and "Education" organizations with SDG-4, providing face validity for the classification. However, other categories like "Human Services" fan out across multiple SDGs, revealing heterogeneity that the NTEE classification obscures. The treemap visualization (Figure 5) provides granular detail on this diversity, with "Public & Societal Benefit," "Environment," and "Community Improvement & Capacity Building" showing particularly diverse SDG engagement patterns.

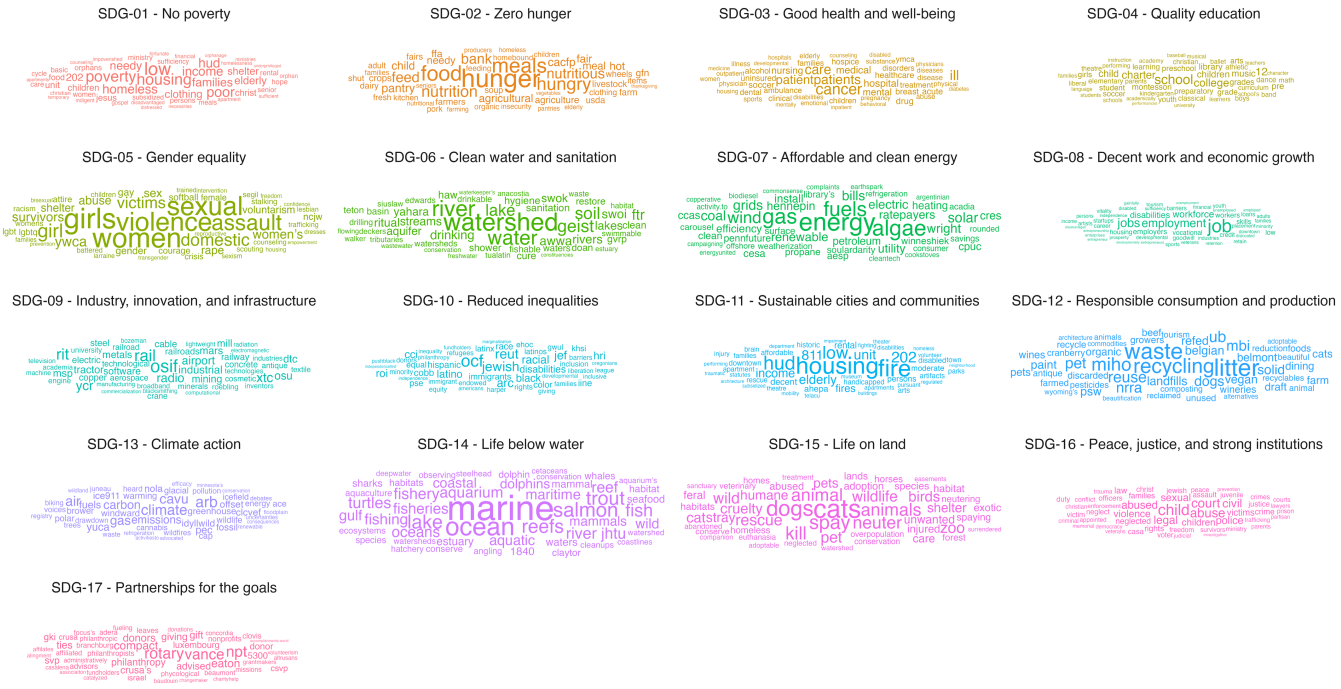

FIGURE 3 | Words with the highest tf-idf score by SDG. Word size is proportional to the tf-idf score.

This diversity becomes more pronounced when allowing multiple SDG assignments (Figures 6 and 7). Mission statements in "Housing & Shelter," "International Affairs," "Environment," and "Human Services" relate to nearly three SDGs on average, while "Animal-Related" and "Education" organizations show more focused engagement with approximately 1.3 SDGs per mission statement (Figure 8).

To quantify this diversity, we calculated Gini coefficients measuring SDG concentration within NTEE categories (Figure 9). In single-SDG assignment, coefficients ranged from below 0.6 for "Mutual & Membership Benefit" and "Public & Societal Benefit" (indicating balanced engagement across SDGs) to above 0.85 for "Health Care" and "Education" (indicating concentrated focus). When allowing multiple SDGs, Gini coefficients generally decreased, with the reduction proportional to the average number of SDGs per category. Ultimately, this diversity in SDG engagement showcases the complementary strengths of the SDG categories in conceptualizing nonprofit missions. This analysis also revealed that some NTEE categories act as specialists by targeting a narrow range of SDGs, while others serve as generalists, fostering diverse contributions across a wider array of goals. By allowing multiple SDGs per mission statement, the number of SDGs an organization contributes to could also be used as a measure of mission breadth.

4.4 | Patterns of SDG Co-Occurrence: Correlation and Clustering Analysis

To investigate patterns of SDG co-occurrence in nonprofit mission statements, we conducted both correlation analysis and hierarchical clustering. Figure 10 presents the correlation matrix, revealing generally weak to moderate relationships between SDG pairs, with most correlations falling between −0.2 and +0.2. This indicates that while some SDGs systematically co-occur, most operate relatively independently in nonprofit mission statements. This pattern suggests that nonprofit SDG implementation is shaped more by diverse, context-specific strategies rather than universal templates, a finding consistent with studies showing that SDG interactions vary significantly by context (Lusseau and Mancini 2019).

The correlation patterns reveal several notable relationships. The strongest positive correlations in our data emerge among environmentally focused SDGs: SDG-12 (Responsible Consumption and Production) and SDG-13 (Climate Action) show the highest correlation ($r = 0.43$), followed by SDG-13 and SDG-14 (Life Below Water) ($r = 0.41$), and SDG-14 and SDG-15 (Life on Land) ($r = 0.41$). This finding is noteworthy because, in country-level analyses, some of these same goals, particularly SDG-12, are frequently identified as sources of conflict and trade-offs with other SDGs (Pradhan et al. 2017).

Beyond the environmental domain, we observe meaningful positive correlations reflecting integrated approaches to socio-economic development. SDG-1 (No Poverty) correlates strongly with SDG-8 (Decent Work and Economic Growth) ($r = 0.41$) and SDG-2 (Zero Hunger) ($r = 0.37$). This indicates that organizations addressing poverty often do so in a multifaceted manner, a pattern consistent with the "socio-economic development cluster" identified in cross-country analyses (Pradhan et al. 2017; Hegre et al. 2020). Similarly, SDG-10 (Reduced Inequalities) shows notable correlations with SDG-8 ($r = 0.29$) and SDG-5 (Gender Equality) ($r = 0.28$), suggesting that equality-focused organizations understand the interconnections between different forms of inequality.

To systematically identify patterns of SDG co-occurrence, we applied hierarchical clustering to the correlation matrix. Figure 11 presents both three- and five-cluster solutions, which align with established SDG groupings in the sustainability literature and

TABLE 3 | Percentage of Organizations per SDG.

Comparison between single and multiple SDG assignments			
SDG	**Single SDG (%)**	**Multiple SDGs (%)**	**Percentage points difference**
SDG-01—No Poverty	6.52%	12.16%	5.63%
SDG-02—Zero Hunger	2.16%	5.19%	3.03%
SDG-03—Good Health and Well-Being	26.34%	32.31%	5.97%
SDG-04—Quality Education	32.63%	52.33%	19.70%
SDG-05—Gender Equality	1.94%	8.66%	6.71%
SDG-06—Clean Water and Sanitation	0.50%	1.76%	1.26%
SDG-07—Affordable and Clean Energy	0.20%	0.63%	0.43%
SDG-08—Decent Work and Economic Growth	4.68%	23.79%	19.12%
SDG-09—Industry, Innovation, and Infrastructure	0.56%	2.08%	1.52%
SDG-10—Reduced Inequalities	0.75%	8.76%	8.01%
SDG-11—Sustainable Cities and Communities	11.69%	17.42%	5.73%
SDG-12—Responsible Consumption and Production	0.30%	1.65%	1.35%
SDG-13—Climate Action	0.39%	2.16%	1.77%
SDG-14—Life Below Water	0.38%	1.67%	1.29%
SDG-15—Life on Land	3.87%	5.58%	1.71%
SDG-16—Peace, Justice, and Strong Institutions	6.56%	15.61%	9.05%
SDG-17—Partnerships for the Goals	0.51%	2.26%	1.74%

Note: Percentage of organizations per SDG. Cell shading is used as a simple heatmap: Within each column, darker blue (single SDG and multiple SDGs) and darker orange (percentage points difference) indicate higher percentages relative to other rows.

provide complementary insights into how nonprofits combine sustainability goals. These clustering levels correspond to common conceptual frameworks used in SDG research, from the basic three-pillar sustainability model to more nuanced five-group schemes like the UN's "5Ps" (People, Planet, Prosperity, Peace, Partnership) (Purvis et al. 2019; Tremblay et al. 2020).

The three-cluster solution reveals a fundamental structure that mirrors the widely recognized sustainability framework (Purvis et al. 2019; Barbier and Burgess 2017):

Cluster 1. Social-Institutional Goals encompasse the majority of SDGs (2–7, 9–10, 16–17), representing organizations focused on social welfare, education, health, and institutional development.

Cluster 2. Environmental Goals (SDGs 12–15) form a distinct group, which is consistent with studies that identify a separate environmental grouping of SDGs, particularly in high-income contexts (Lusseau and Mancini 2019).

Cluster 3. Economic-Urban Development (SDGs 1, 8, 11) combines poverty alleviation with economic growth and sustainable urbanization, reflecting the interconnected nature of economic empowerment and community development.

The five-cluster solution provides more granular insights that align with both the 5Ps framework and empirical SDG interaction studies (Tremblay et al. 2020; Nilsson et al. 2018):

Cluster 1. Education and Institutional Governance (SDGs 4, 5, 10, 16) represents organizations focused on systemic social change through education, equality, and institutional reform.

Cluster 2. Health and Well-Being (SDG-3) emerges as a distinct cluster, reflecting the specialized nature of health-focused nonprofits.

Cluster 3. Basic Needs and Infrastructure (SDGs 2, 6, 7, 9, 17) captures organizations addressing fundamental human needs and the infrastructure required to meet them.

Cluster 4. Environmental Sustainability (SDGs 12–15) remains cohesive across both clustering solutions in this dataset, highlighting its internal consistency among the nonprofits sampled.

Cluster 5. Economic-Urban Development (SDGs 1, 8, 11) also remains cohesive across both clustering solutions, reflecting the recognized nexus between poverty reduction, employment, and sustainable urban environments.

The clustering analysis reveals patterns consistent with key findings in the SDG interaction literature. First, the persistent separation of environmental SDGs aligns with evidence that SDG-12 is often identified as the goal most commonly associated with trade-offs with other SDGs (Pradhan et al. 2017). The formation of a distinct environmental cluster in our analysis is consistent with quantitative research showing that environmental goals, despite their complexity, have significantly fewer internal trade-offs compared to their social and economic counterparts (Coscieme et al. 2021). Second, the placement of SDG-17

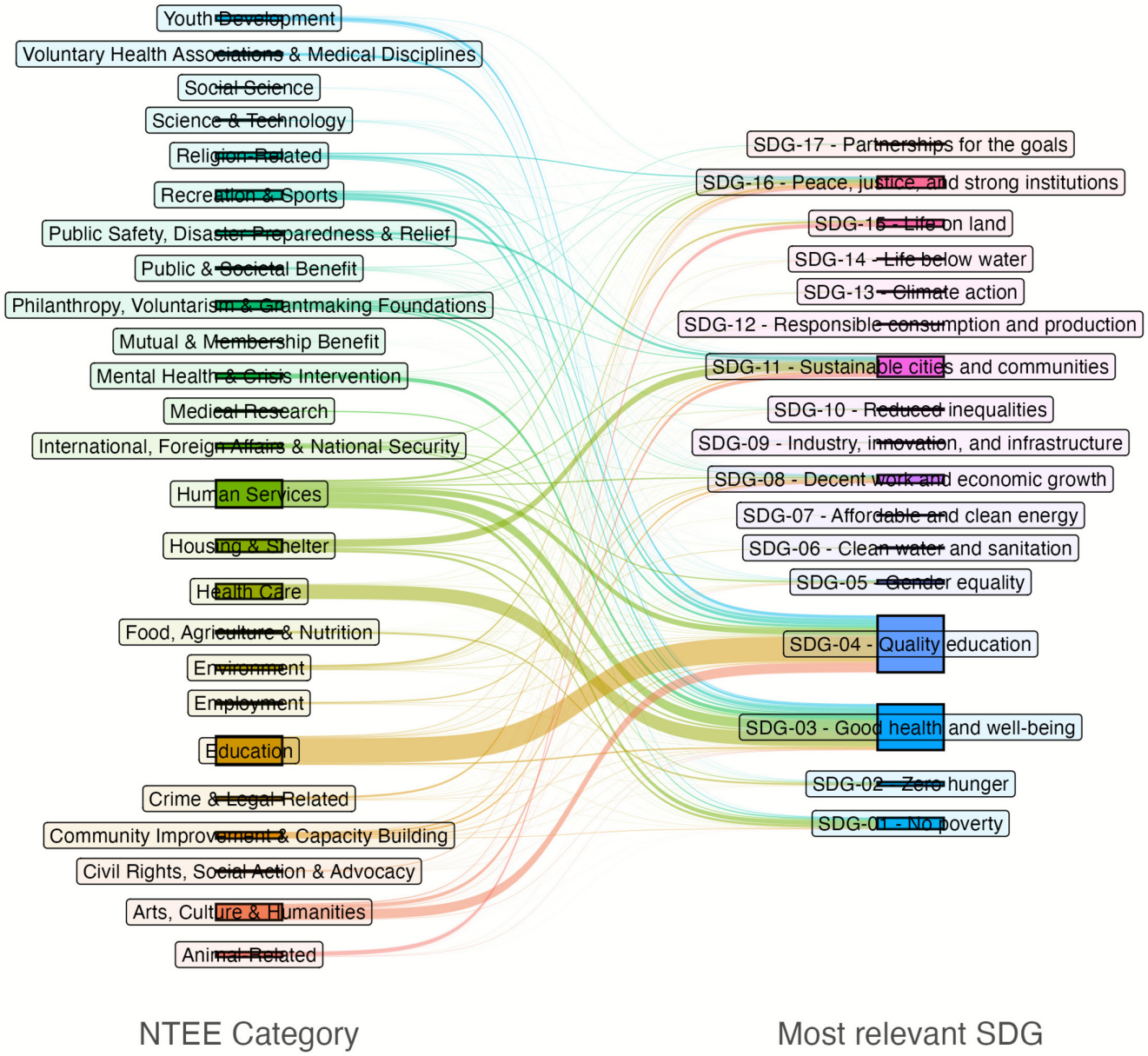

FIGURE 4 | Crosswalk between the NTEE categories and the assigned most relevant SDG of the mission statements.

(Partnerships) within the basic needs cluster rather than as a standalone cross-cutting goal contrasts with conceptual frameworks that position SDG-16 and SDG-17 as overarching enablers or hubs for the entire agenda (Breuer et al. 2019; Scharlemann et al. 2020). The negative correlations in our analysis, though less pronounced than positive ones, provide additional context. The strongest negative relationship exists between SDG-4 (Quality Education) and SDG-11 (Sustainable Cities and Communities) ($r = -0.26$), potentially reflecting specialization constraints where organizations focus on either educational programs or urban development initiatives.

These patterns have important implications for understanding nonprofit strategy. The modest overall correlations combined with distinct clustering suggest that while some nonprofits pursue integrated approaches within specific domains, there remains considerable diversity in how SDGs are combined. This diversity suggests that local contexts and organizational missions shape SDG implementation more than universal templates, consistent with findings that SDG interaction patterns vary significantly by context and income level (Lusseau and Mancini 2019). Organizations within the same cluster may find natural synergies and partnership opportunities, while those in different clusters might benefit from deliberate bridge-building efforts to address the interconnected nature of sustainable development challenges.

5 | Discussion

Our analysis of nearly 50,000 US nonprofit mission statements provides clear answers to our three research questions. First, we find that organizations navigate between sector-specific (NTEE) and global sustainability (SDG) logics through patterns of selective translation: those embedded in strong professional logics (e.g., Healthcare, Education) demonstrate concentrated

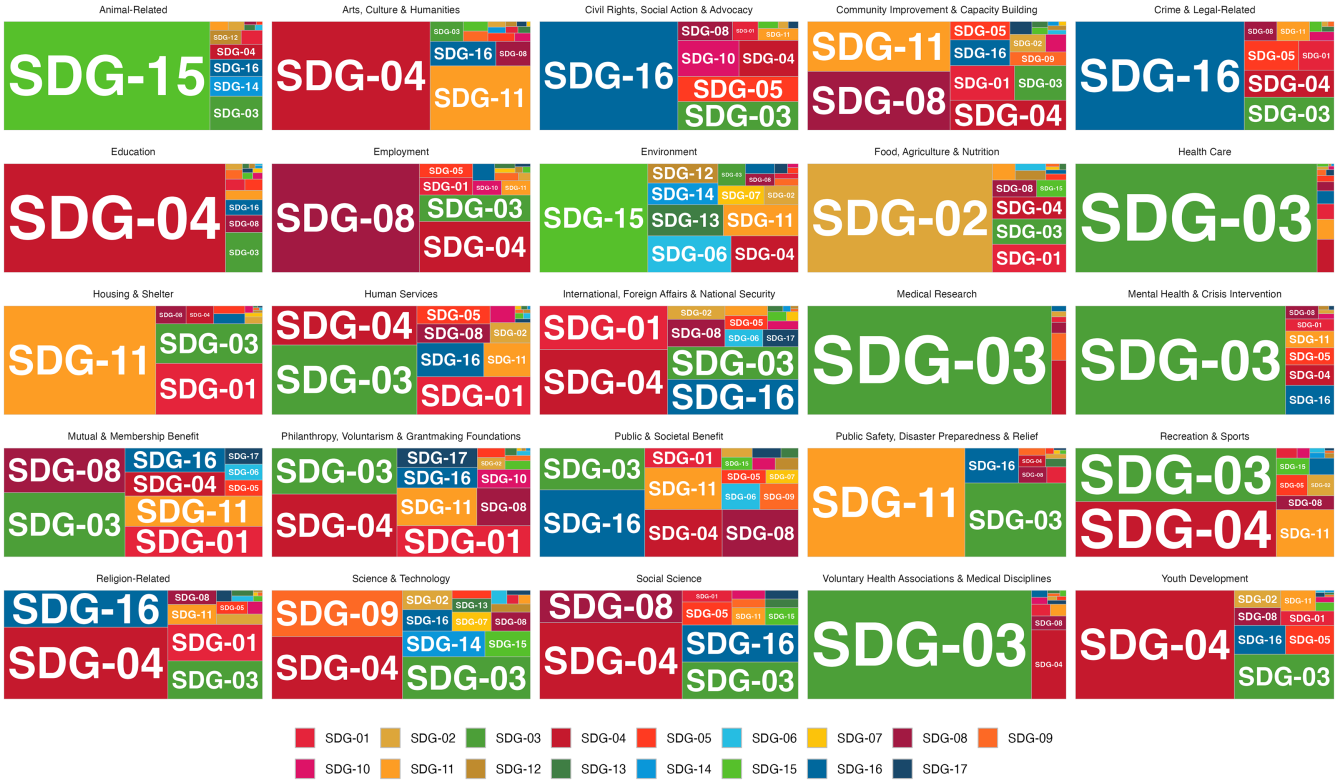

FIGURE 5 | Treemap of most relevant SDGs by NTEE Main Categories. This figure shows the distribution of SDGs within each NTEE main category. The size of the blocks indicates the relative prevalence of each SDG within that NTEE category.

SDG alignment, while those operating across multiple institutional spheres show diverse SDG engagement. Second, nonprofit sectors exhibit different degrees of mission hybridity, with organizations operating at the intersection of multiple institutional spheres (e.g., Housing and Shelter, International Affairs) showing broader SDG engagement than those embedded in single professional logics (e.g., Animal-Related, Education). Third, SDG implementation activities show modest correlations overall (mostly between −0.2 and +0.2), with the strongest positive correlations among environmental SDGs (12–15) and socioeconomic development goals (1, 8, 11), indicating that while some systematic patterns exist, nonprofits pursue diverse, context-specific strategies rather than universal templates.

The comparable internal consistency achieved by our SDG-based classification system, despite having 50% fewer categories than the NTEE system, provides important methodological validation that the SDGs capture meaningful organizational distinctions while offering greater flexibility through multiple goal assignments. Through the theoretical lenses of institutional logics and organizational hybridity, three key insights emerge about how nonprofits incorporate SDGs into their missions and what this reveals about contemporary nonprofit organizing.

5.1 | Institutional Logics and Sectoral Alignment Patterns

Our findings reveal striking differences in how nonprofit sectors align with the SDGs, with some sectors having strong alignment with a single SDG and other sectors aligning with a wide variety of SDGs. This suggests that established institutional logics act as powerful filters through which global frameworks are interpreted and implemented. For example, organizations operating within NTEE categories characterized by strong professional logics—such as Healthcare and Education—demonstrate highly concentrated SDG alignment. The near-universal assignment of Healthcare organizations to SDG-3 (Good Health and Well-Being) and Education organizations to SDG-4 (Quality Education) reflects how deeply embedded professional norms and practices shape organizational missions. These sectors operate under what Thornton et al. (2012) describe as dominant institutional logics that provide clear templates for organizational action.

In contrast, NTEE categories such as Human Services, Public and Societal Benefit, and Community Improvement and Capacity Building exhibit remarkably diverse SDG engagement patterns. The Gini coefficients for these categories (below 0.6) indicate broad distribution across multiple SDGs, suggesting these organizations operate at the intersection of multiple institutional logics without a single dominant framework. This heterogeneity aligns with institutional theory's predictions about organizations facing institutional complexity (Greenwood et al. 2011). Rather than being a weakness, this diversity may represent an adaptive response to serving constituencies with multifaceted needs that cannot be addressed through single-logic approaches.

The variation in SDG concentration across NTEE categories extends our understanding of how institutional logics influence organizational responses to new global frameworks. While

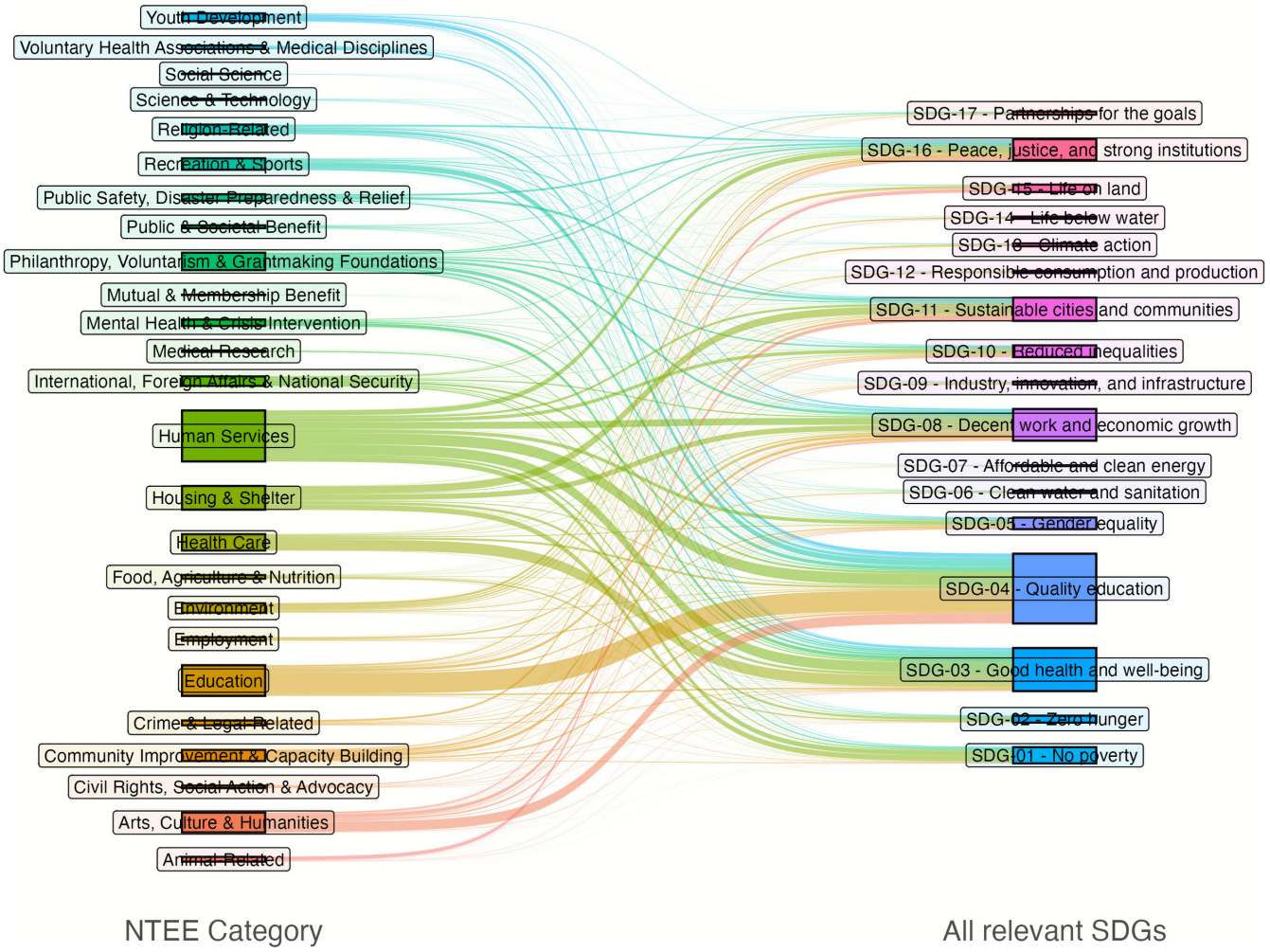

FIGURE 6 | Crosswalk between the NTEE categories and all assigned SDGs of the mission statements.

Carmagnac et al. (2024) documented how supply chain organizations navigate between operational and strategic SDG implementation, our findings suggest that in the nonprofit sector, the degree of logic multiplicity fundamentally shapes how organizations engage with the SDG framework. Organizations embedded in strong professional logics translate the SDGs through existing institutional templates, while those operating across multiple logics demonstrate greater flexibility in SDG adoption. This pattern suggests that institutional embeddedness both enables and constrains how organizations interpret and implement global sustainability frameworks.

5.2 | Mission Hybridity and Organizational Complexity

The substantial variation in the number of SDGs per mission statement—ranging from an average of 1.3 for animal-related organizations to nearly 3.0 for housing and shelter and international affairs organizations—provides new insights into organizational hybridity in the nonprofit sector. This variation is not random but appears to reflect systematic differences in operational scope and stakeholder complexity. Our analysis advances hybridity research by demonstrating that mission breadth can be empirically measured through SDG alignment patterns, providing a novel operationalization of what Mair et al. (2015, 715) term "institutional plurality."

The ability to assign multiple SDGs to each organization reveals previously hidden complexity in nonprofit missions that traditional classification systems obscure. While the NTEE system forces organizations into single categories, our SDG-based approach captures the multidimensional nature of contemporary nonprofit work. For instance, Housing and Shelter organizations align not only with SDG-11 (Sustainable Cities and Communities) but frequently also with SDG-1 (No Poverty), SDG-8 (Decent Work and Economic Growth), and SDG-10 (Reduced Inequalities). This multiplicity reflects what Battilana and Lee (2014) identify as hybrid organizing—the pursuit of multiple, potentially competing objectives within a single organizational form. Our clustering results add further nuance to this concept. An organization managing hybridity by combining goals from within the same conceptual cluster (e.g., SDG-1 and SDG-8, both in the 'Economic-Urban Development' group) may face fewer strategic trade-offs than an organization whose mission spans separate clusters (e.g., combining SDG-8 with SDG-14, 'Life Below Water'). The latter represents a deeper form of mission complexity, requiring the navigation of fundamentally different domains and stakeholder expectations.

FIGURE 7 | Treemap of all relevant SDGs by NTEE Main Categories. This figure shows the distribution of SDGs within each NTEE main category. The size of the blocks indicates the relative prevalence of each SDG within that NTEE category.

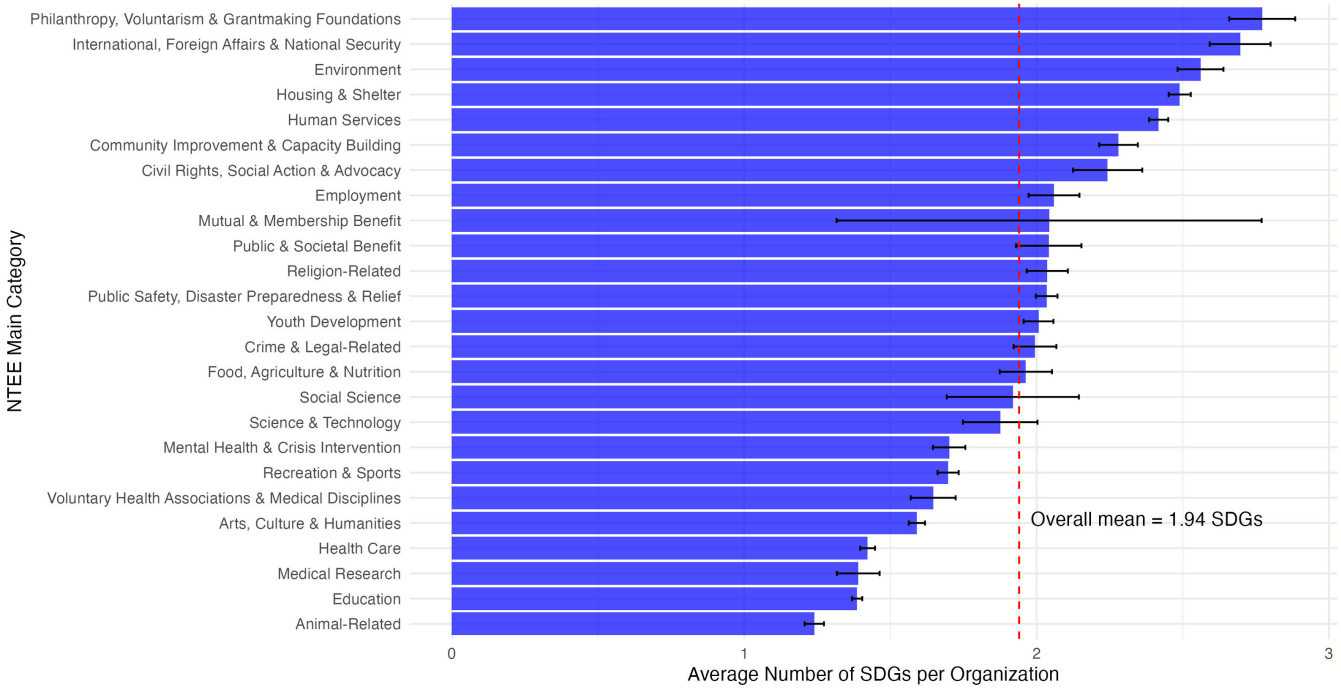

FIGURE 8 | Average number of assigned SDGs per NTEE category. Error bars represent 95% confidence intervals.

Furthermore, the distinction between organizations with concentrated versus diverse SDG engagement maps onto different approaches to managing institutional complexity. Organizations with a narrow SDG focus appear to employ what Pinz et al. (2024) describe as a "hierarchy of goals" strategy, prioritizing one dominant logic while subordinating others. Conversely, organizations engaging with multiple SDGs demonstrate what might be termed "logic bridging,"

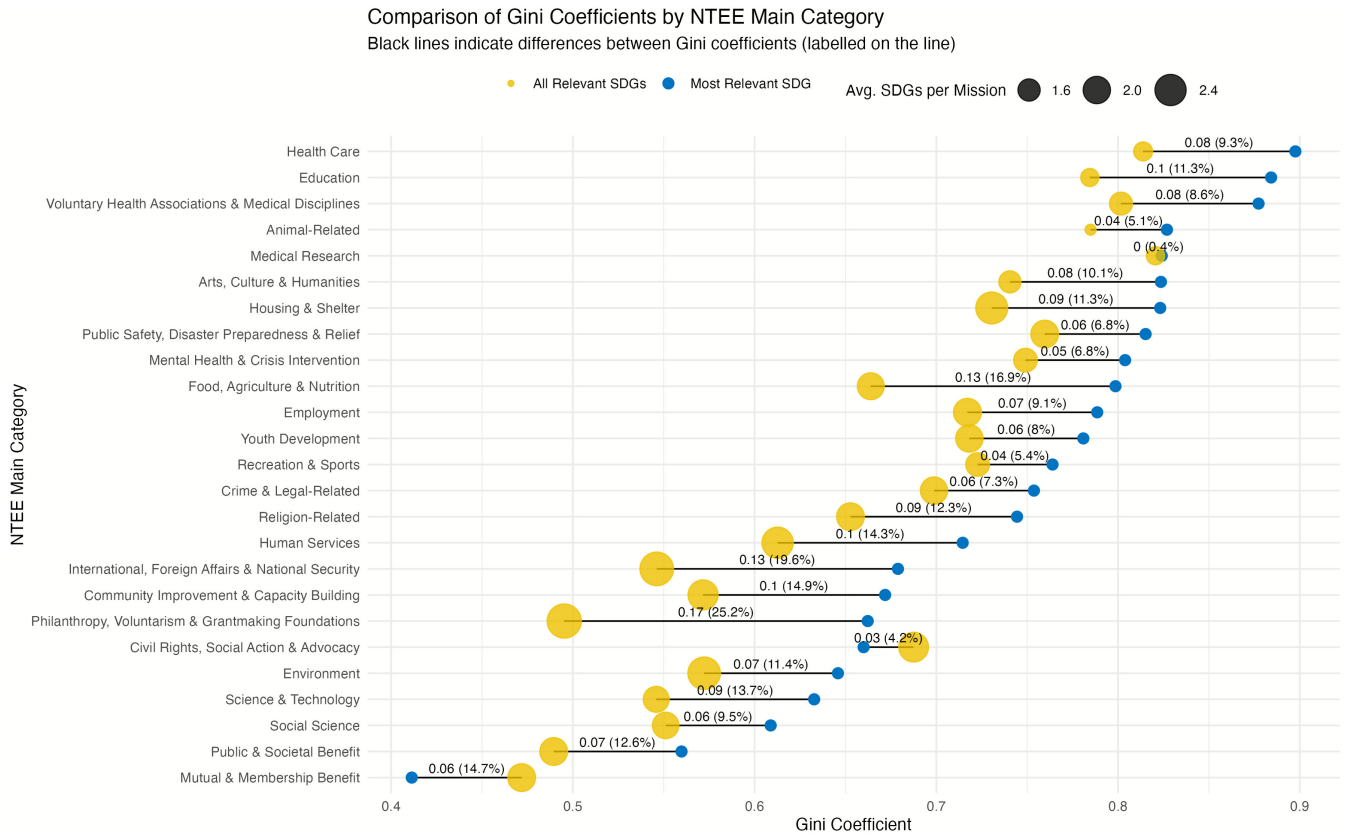

FIGURE 9 | This figure shows whether organizations within each NTEE category focus on a few SDGs or engage with many. Higher Gini coefficients indicate greater concentration on fewer SDGs, while lower values reflect broader engagement. Blue dots represent Gini coefficients for the most relevant SDG, and orange dots for all relevant SDGs. Labels on the lines show the absolute difference and percentage change in concentration. This comparison reveals the degree to which each NTEE category is aligned with a concentrated versus diverse set of SDGs, offering insights into the breadth of their contributions to sustainable development.

actively maintaining connections across different institutional spheres. This finding extends our theoretical understanding by suggesting that mission hybridity is not merely a response to external pressures but can be a deliberate organizational strategy for addressing complex social challenges that span traditional sectoral boundaries.

5.3 | SDG Interdependencies and Strategic Navigation

The correlation patterns among SDGs in nonprofit mission statements reveal sophisticated approaches to navigating the interconnected nature of sustainability challenges. The strongest correlations occur among environmentally focused SDGs (12–15), suggesting that organizations addressing environmental issues recognize the systemic nature of ecological challenges. Interestingly, this empirical clustering slightly differs from influential conceptual models like the "wedding cake," which places core "Biosphere" goals (SDGs 6, 13, 14, 15) as the foundation for all others, and situates SDG-12 (Responsible Consumption and Production) in the top "Economy" layer (Rockström and Sukhdev 2016). The strong linkage of SDG-12 to the biosphere cluster in our data suggests that nonprofits are practically and strategically connecting consumption patterns directly to their planetary impacts.

Equally revealing is the Economic Development and Urban Planning cluster (SDG-1, SDG-8, SDG-11), which reflects an integrated understanding of socioeconomic development. These patterns suggest that nonprofits addressing human welfare recognize the multifaceted nature of disadvantage—that poverty is not merely about income but is deeply interconnected with employment and the urban environments where people live. This holistic approach contrasts sharply with the siloed implementation often critiqued in sustainability policy, underscoring the need for integrated strategies that tackle interconnected challenges rather than addressing goals in isolation (Nilsson et al. 2018).

The modest overall correlations between most SDG pairs (falling between −0.2 and +0.2) indicate that nonprofits pursue diverse strategies in combining SDGs, rather than following predetermined templates. This diversity suggests that SDG implementation in the nonprofit sector is shaped more by local contexts and specific organizational missions than by universal patterns of goal interdependence. The few negative correlations, particularly between SDG-4 (Quality Education) and SDG-11 (Sustainable Cities), may reflect resource constraints that force organizations

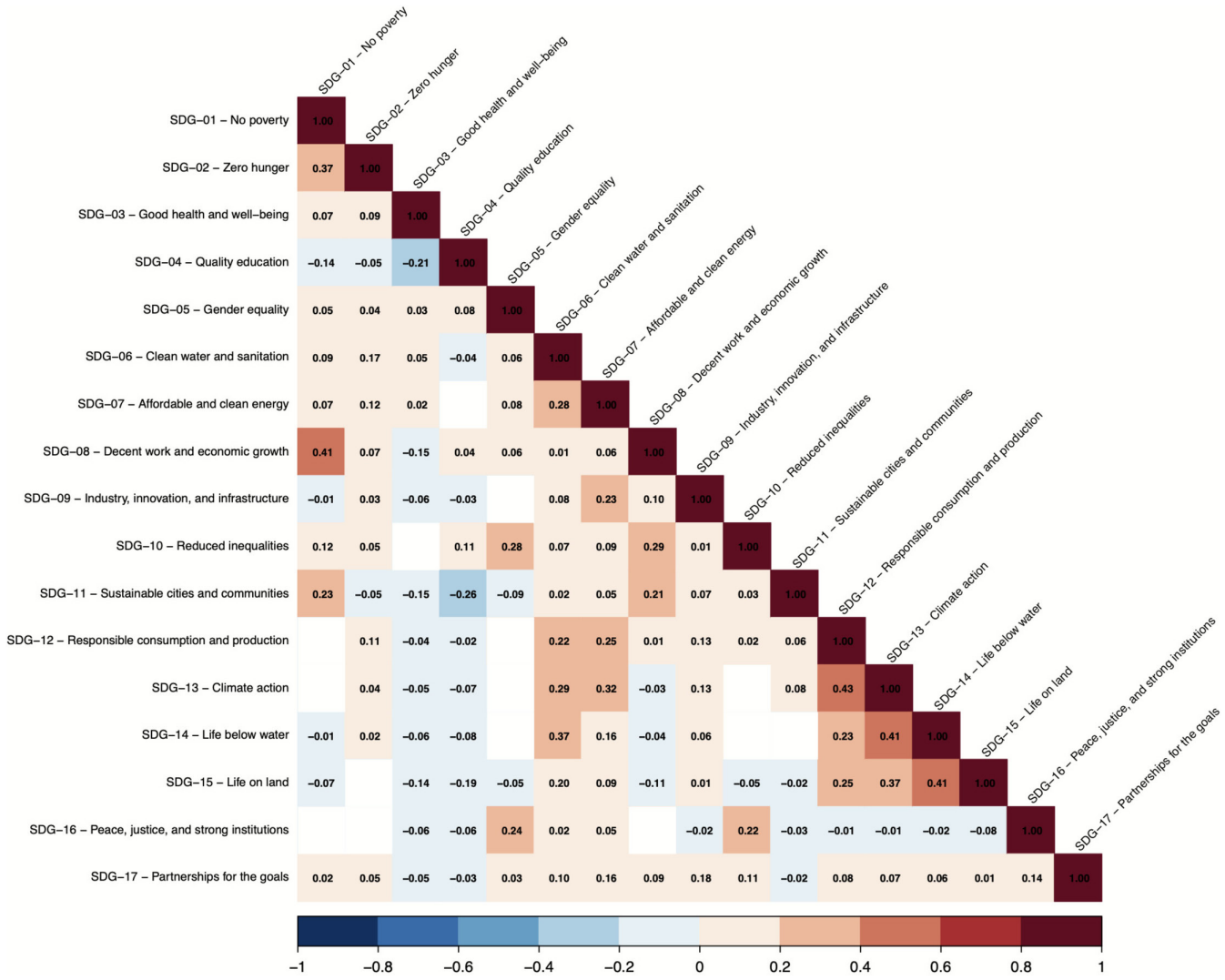

FIGURE 10 | Correlations between SDGs in the mission statements.

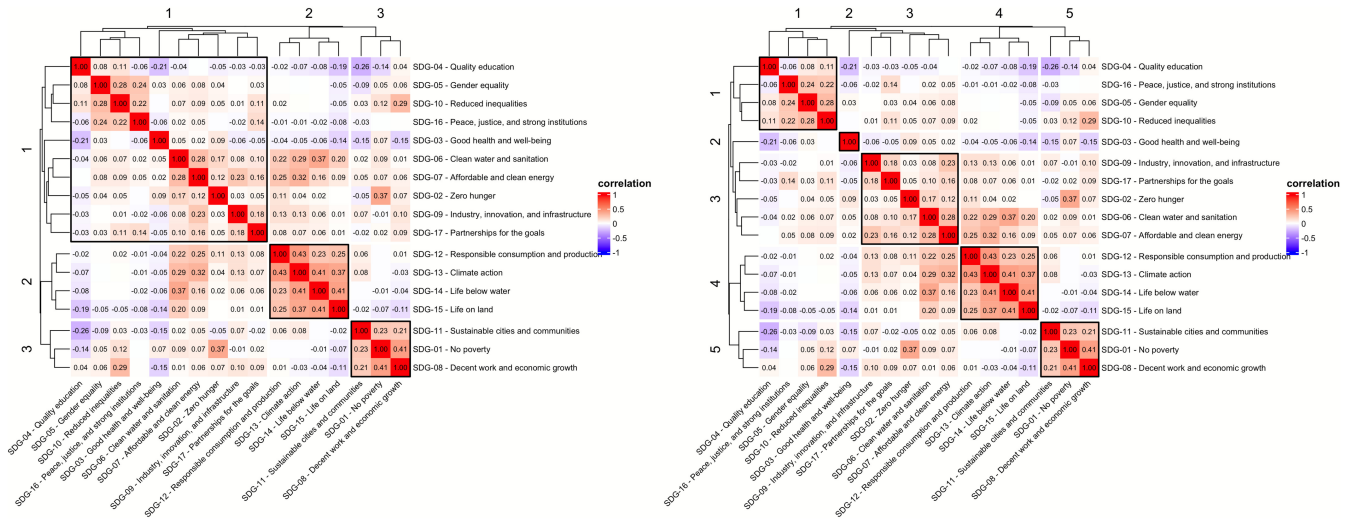

FIGURE 11 | Hierarchical clustering of the correlations between SDGs in the mission statements. Clustering solutions for $n = 3$ (left) and $n = 5$ (right) clusters shown.

to specialize rather than indicating fundamental incompatibilities between goals. This finding contributes to debates about SDG trade-offs and synergies by demonstrating that organizational-level patterns may differ from macro-level interdependencies identified in the SDG literature (Pradhan et al. 2017).

5.4 | Implications for Theory and Practice

Our findings make several contributions to organizational theory and nonprofit management. First, we extend institutional logics theory by demonstrating how sector-specific logics mediate the adoption of global frameworks. The SDGs do not simply layer onto existing organizational forms but are actively translated through established institutional arrangements. This suggests that global frameworks achieve local implementation not through uniform adoption but through diverse interpretations shaped by existing institutional contexts. This finding resonates with Kanie et al. (2019), who argue that the SDGs represent a new form of governance through goal-setting, but extends their analysis by showing how this governance mode interacts with established organizational fields.

Second, our study advances organizational hybridity research by providing a quantitative measure of mission complexity. The number and diversity of SDGs an organization addresses offer a proxy for the degree of institutional plurality it manages. This operationalization opens new avenues for research on the antecedents and consequences of organizational hybridity. Future studies could examine whether organizations with higher SDG diversity demonstrate different performance patterns, stakeholder relationships, or adaptive capacities compared to those with a concentrated SDG focus.

From a practical perspective, our findings suggest that the SDGs offer nonprofits a valuable framework for articulating and managing mission complexity. Rather than being constrained by single-category classifications, organizations can use SDG alignment to communicate the multifaceted nature of their work to stakeholders. This is particularly relevant for fundraising and partnership development, as the global recognition of the SDGs provides a common language for cross-sector collaboration. The framework also enables nonprofits to identify potential partners through shared SDG interests, even when organizations operate in different traditional sectors. This partnership identification function is particularly valuable given the SDGs' cross-sectoral and cross-national structure, which can facilitate new forms of collaboration between diverse organizational types (Martinez 2023; Tudor et al. 2024).

The underrepresentation of environmental SDGs (6, 7, 12–15) across the nonprofit sector highlights a critical gap in sustainability efforts. While this may partly reflect the composition of the US nonprofit sector, it also suggests opportunities for expanding nonprofit engagement with environmental challenges. Funders and policymakers might use these insights to identify underserved SDGs and develop targeted support for organizations willing to address these gaps. Additionally, the strong correlations among environmental SDGs suggest that organizations entering this space might achieve greater impact by addressing multiple related goals rather than focusing on single environmental issues.

5.5 | Limitations and Future Directions

Several limitations bound our findings. First, our reliance on mission statements, while methodologically sound and consistent with prior research, may not fully capture the scope of organizational activities. Second, our cross-sectional analysis using 2019 data represents an early stage of SDG implementation and cannot capture temporal dynamics. Third, the geographic limitation to US nonprofits constrains generalizability, as nonprofit structures and regulatory environments vary significantly across countries.

These limitations point to several promising research directions. Future studies should triangulate mission statements with program descriptions, annual reports, and websites to provide more comprehensive SDG engagement pictures (Thammaraksa et al. 2024). Longitudinal analysis could reveal whether SDG alignment increases over time and follows diffusion patterns predicted by institutional theory. Comparative international research would illuminate whether our patterns reflect universal features of nonprofit organizing or US-specific characteristics, particularly regarding how different welfare state models influence SDG implementation.

Future research should also examine performance implications of different SDG alignment strategies: Do organizations with concentrated SDG focus achieve greater depth of impact, while those with diverse engagement achieve greater breadth? How do funders respond to different alignment patterns? These questions are crucial for understanding SDG adoption's influence on nonprofit effectiveness (Adomako and Nguyen 2024). While examining relationships between SDG alignment and organizational financial performance represents an important avenue, the current study establishes the necessary methodological foundation for such analyses.

6 | Conclusions

This study demonstrates that the SDGs offer a viable and valuable classification framework for nonprofit organizations, providing both theoretical insights and practical tools for a sector largely overlooked in SDG research. By successfully mapping nearly 50,000 US nonprofits to the SDGs, we reveal how organizations translate global sustainability frameworks through existing institutional logics, resulting in patterns ranging from concentrated alignment in professionally dominated fields to diverse multigoal engagement in organizations spanning multiple institutional spheres. Our SDG-based typology achieves comparable validity to established classification systems while offering a crucial advantage: the ability to capture and quantify mission hybridity in an era where social challenges increasingly transcend traditional categories. Perhaps most importantly, this research establishes the methodological and conceptual foundation for integrating the nonprofit sector into the broader SDG agenda. As the 2030 deadline approaches with only 17% of targets on track (United Nations 2024), the SDG framework offers nonprofits not just a classification system but a strategic tool for positioning their work within humanity's most pressing challenges, potentially reshaping how we understand, evaluate, and support nonprofit contributions to sustainable development.

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Conflicts of Interest

The authors declare no conflicts of interest.

Endnotes

[1] https://github.com/SDGClassification/benchmark.

[2] https://artificialanalysis.ai, accessed December 23, 2024.

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Supporting Information

Additional supporting information can be found online in the Supporting Information section. **Table A1:** Mission statements that are most similar (i.e., most representative) to all other mission statements that were assigned the same SDG. **Figure A1:** Word clouds of mission statements that were not assigned an SDG by the LLM. **Figure A2:** Words with the highest tf-idf score by SDG from mission statements that were not assigned any SDG by text2sdg. Word size is proportional to the tf-idf score. **Figure A3:** Comparison of LLM and text2sdg SDG prevalence. **Figure A4:** Average number of SDGs by NTEE category. **Figure A5:** Crosswalk between the NTEE categories and all text2sdg assigned SDGs of the mission statements. **Figure A6:** Treemap of all text2sdg assigned SDGs by NTEE Main Categories. This figure shows the distribution of SDGs within each NTEE main category. The size of the blocks indicates the relative prevalence of each SDG within that NTEE category.