Donor Perceptions of Nonprofit Organizations' Transparency: Conceptualization and Operationalization

Fanny Dethier (✉)
ICHEC Brussels Management School, Belgium
Email: fanny.dethier@ichec.be

Cécile Delcourt
HEC Liège – Management School of the University of Liège, Belgium
Email: cecile.delcourt@uliege.be

Laurence Dessart
HEC Liège – Management School of the University of Liège, Belgium
Email: Laurence.Dessart@uliege.be

COMPLIANCE WITH ETHICAL STANDARDS

Funding: This study was supported by a grant awarded to Fanny Dethier by the University of Liège of Belgium in 2016.

Conflict of interest: The authors declare that they have no conflict of interest.

Ethical Approval: The research was conducted in compliance with research ethics policies at the University of the First Author. Informed consent was obtained from all individual participants included in the study. This article does not contain any studies with animals performed by any of the authors.

ABSTRACT

In the wake of unethical practices by some nonprofit organizations (NPOs), donors have called for better monitoring, to which some NPOs have responded by adjusting their donor-based transparency practices. Yet despite momentum for such efforts, a comprehensive conceptualization and operationalization of NPOs' transparency remains missing, partly because knowledge about donors' information requirements is limited. Accordingly, the present research proposes conceptualizing NPOs' transparency, as perceived by donors, as a three-dimensional construct, composed of information accessibility, completeness, and accuracy. With a scale development procedure and three distinct empirical studies, this article establishes a reliable, valid measure of NPOs' perceived transparency. Combined, the conceptualization and operationalization offer a comprehensive overview of donors' information needs that can enhance the study of organizational transparency.

Keywords

Perceived transparency – Scale development – Donors – Trust – Disclosure

INTRODUCTION

Transparency in nonprofit organizations (NPOs) is crucial for establishing trust with donors, supporters, and the wider public; attracting new and continuing donations (Alhidari et al., 2018); and ensuring stakeholders of organizational effectiveness with regard to appropriate uses of donor funds (Liket & Maas, 2015). Without access to transparent information, donors may hesitate to contribute or prefer to support other NPOs that offer greater transparency. Demands for transparency in the nonprofit sector also have been intensifying (Barber et al., 2022; Bodem-Schrötgens & Becker, 2020; Chu & Luke, 2023), for several reasons. In particular, NPOs generally are held to very high ethical standards (Becker, 2018), and as public funding has grown more unstable, these organizations must be transparent about their effectiveness in managing their operations and finances (Liket & Maas, 2015). Furthermore, some well-publicized cases of dysfunctional NPOs have created mistrust regarding the integrity and efficiency of such organizations overall (Prakash & Gugerty, 2010). Transparency about their activities, finances, and performance can enable NPOs to demonstrate their commitment to ethical and responsible conduct, build trust with stakeholders, and ensure the effective use of donor funds to attract further funding.

Yet little consensus exists regarding how to conceptualize and operationalize NPOs' transparency, which in turn makes it challenging to establish the current state of extant research or determine whether and where new research may be needed (Bergkvist & Eisend, 2021). Developing a construct requires providing a definition, establishing a valid measure, and mapping its relationships with other constructs—especially with its antecedents and outcomes (Bergkvist & Eisend, 2021). Therefore, two research questions guide the present study: (1) *How should NPOs' transparency be conceptualized?* and (2) *How should NPOs' transparency be operationalized*? Providing both a conceptualization and an operationalization of NPOs' transparency can benefit scholars and practitioners, for whom "the lack of definition and inconsistent measures raise questions about the validity of research results and comparability across studies" (Bergkvist & Eisend, 2021, p. 521).

For scholars, a sound conceptualization and operationalization lay a foundation for understanding and analyzing complex concepts (Bergkvist & Eisend, 2021). When a concept is well-defined and measured, scholars can use it to generate hypotheses, design experiments, and interpret data. Furthermore, unified conceptualizations and operationalizations help researchers avoid ambiguity and confusion in their writing and communication. With a unified understanding of NPOs' transparency, scholars can better share their findings with other researchers and the broader community too. Furthermore, a comprehensive conceptualization and operationalization ensure that the concept informs newly developed theories that are well-defined, unambiguous, and precise, which then allow for the rigorous development and testing of hypotheses. In summary, a sound and unified conceptualization and operationalization can help scholars (1) understand the complex and multi-dimensional construct of NPOs' transparency, (2) communicate ideas effectively, (3) develop theories, and (4) test hypotheses—all of which contribute to generate new knowledge and advance the very concept of transparency in NPOs.

For practitioners, well-defined concepts and comprehensive measures offer four main benefits. First, a sound definition and measure of NPOs' transparency help managers make more informed decisions. With a clear understanding of what is being measured, managers can make more effective decisions (e.g., where to allocate resources to improve transparency and donors' perceptions of it). Second, a unified definition and measure of transparency encourages all stakeholders to share the same meaning, so that practitioners in turn can communicate more effectively with their teams, colleagues, and other stakeholders. Third, comprehensive conceptualization and operationalization is necessary for effective performance monitoring. When practitioners have a clear understanding of what they need to measure and how, they can track progress, identify areas for improvement, and make necessary adjustments. Fourth, an accurate conceptualization and operationalization help practitioners identify which resources they need to enhance the transparency of their NPO. By understanding various (sub)dimensions of NPOs' transparency and how it influences specific organizational objectives, managers can make more informed decisions about where to allocate resources to improve transparency and thus achieve organizational objectives. In summary, a sound and unified conceptualization and operationalization are essential to managers who seek to (1) make better decisions, (2) communicate more effectively, (3) monitor performance more accurately, and (4) allocate resources more efficiently.

On the basis of a comprehensive literature review, we propose a conceptualization of NPOs' transparency, as perceived by donors, together with a rationale for modeling transparency as a third-dimensional formative construct. Furthermore, we offer extended insights into donors' informational needs by drawing on in-depth interviews with 19 donors (Study 1), consultations with 19 experts about donors' giving decisions (Study 2), and analyses of 515 regular donors' preferences through an online survey (Studies 3a and 3b). Building on these contributions, we construct a reliable, valid scale for examining donors' perceptions of NPOs' transparency and thus for assessing the transparency practices of NPOs. Finally, whereas most existing research has been conducted in Anglo-Saxon contexts, we undertake various data collections in Western Europe to contribute to a better understanding NPOs' transparency in diverse, relevant, often disregarded contexts. Studies conducted in Anglo-Saxon contexts can provide some insights for NPOs established in Western Europe, but they likely may not generalize across Europe, considering the many differences between Anglo-Saxon and European NPOs (Salamon et al., 2017).

Importance of NPOs' transparency

Calls for transparency in the nonprofit sector have resonated widely (Barber et al., 2022; Bodem-Schrötgens & Becker, 2020; Chu & Luke, 2023), for three main reasons. First, considering the sector's societal welfare mission, advocacy for high moral standards in general (Willems & Faulk, 2019), and centrality of ethics and morality (Jeavons, 2016), transparency represents an essential ethical standard, irrespective of pragmatic outcomes in terms of stakeholder support (Becker, 2018). Second, the instability of public funding for NPOs and the emergence of for-profit alternatives in markets traditionally served by NPOs have intensified competition for funding (Sharp, 2018). In response, NPOs have grown more performant in their fundraising strategies, such as by seeking to demonstrate organizational effectiveness (Hyndman & McConville, 2016; Liket & Maas, 2015), for which donors need transparency to verify these effectiveness claims (Liket & Maas, 2015). Third, high-profile cases of fund misappropriation, organizational inefficiency, and abuses of power (e.g., Oxfam's scandal in Haiti) have challenged the sector's overall reputation (Prakash & Gugerty, 2010) and undermined donor trust (Becker et al., 2020; Hornsey et al., 2020). Due to the sector's inevitable reliance on donors' financial commitments, such mistrust is particularly critical (Becker, 2018; Chapman et al., 2021), to the point of posing a viability threat (Archambeault & Webber, 2018). As a means to promote trust (Schnackenberg & Tomlinson, 2016), NPO transparency also might limit the potential for negative spillovers from other NPOs' misbehaviors (Prakash & Gugerty, 2010). Although the impacts of transparency on donation decisions are uncertain (Haski-Leventhal & Foot, 2016b), broader access to relevant, clear information appeals to donors, according to other nonprofit studies (Saxton et al., 2014).

Donors are especially salient stakeholders, to which NPOs are accountable, because they largely determine their long-term survival through regular funding (Chu & Luke, 2023; Connolly & Hyndman, 2013). Therefore, examining donors' preferences about how and what an NPO should communicate is crucial (e.g., Harris & Neely, 2021; Haski-Leventhal & Foot, 2016a); donors might struggle to assess NPOs' effectiveness and efficiency as a result of the relatively minimal reporting standards for NPOs' activity (Chu & Luke, 2023) or due to the intangible aspects of their service provision (Prakash & Gugerty, 2010). Yet being transparent also might threaten detrimental consequences, such as inducing donors' overhead aversion, as occurs when donors reject (even necessary) nonprogram spending, like fundraising, administrative, human resource, financial, or technology costs (Hung et al., 2022).

The concept of transparency holds multiple meanings (Schnackenberg & Tomlinson, 2016), but for this research, it is understood as "the perceived quality of intentionally shared information from a sender" (Schnackenberg & Tomlinson, 2016, p. 1788). Academic research on transparency addresses the nonprofit sector, both theoretically (Dumont, 2013) and empirically (Farwell et al., 2019; Harris & Neely, 2021). Yet though some intuitive measures appear to capture NPOs' uses of transparency practices oriented toward donors (Gandía, 2011), donors' actual perceptions of NPOs' transparency have not been conceptualized or operationalized convincingly. We know of no perceived transparency operationalizations that reflect a thorough scale development process (Churchill, 1979) or focus on donors' evaluations of NPOs' effortful transparency practices. Therefore, we seek to develop a sound and unified conceptualization and operationalization, as detailed next.

TOWARD A CONCEPTUALIZATION AND OPERATIONALIZATION OF NPOS' TRANSPARENCY

To conceptualize and develop a valid, reliable scale of NPOs' transparency as perceived by donors, we conduct three empirical studies in West European countries, articulated around the following scale development process (Churchill, 1979; DeVellis, 2016; Diamantopoulos & Winklhofer, 2001; Netemeyer et al., 2003): (1) construct conceptualization, (2) item generation and data collection, (3) scale purification, and (4) scale reliability and validity evaluation. The complete process, detailed in the next sections, is summarized in Table 1.

[Insert Table 1 here]

STAGE 1: CONSTRUCT CONCEPTUALIZATION

To define the construct of interest—that is, NPOs' perceived transparency—we prioritize the subjective interpretation of one organization's transparency practices (i.e., NPO) by information recipients (i.e., donors) (Dethier et al., 2021; Walk et al., 2021). From a review of different conceptualizations of perceived transparency across disciplines (Table 2), we undertake a refinement to ensure applicability to the nonprofit context, based on prior literature, in both the nonprofit sector (e.g., Farwell et al., 2019) and other domains, and our three empirical studies (see Table 1). Specifically, through Studies 1 (donors' interviews) and 3 (donors' survey), donors' distinct information requisites and their individual conceptualizations of NPOs' transparency are incorporated, thereby facilitating the enhancement of our concept's definition; Study 2 enabled the further refinement of this conceptual framework by integrating essential insights from academic experts' knowledge. Consequently, the resultant definition emerged from a cyclic process that entailed interplay between theoretical foundations and empirical evidence. Thus, we define *donor perceptions of NPO transparency* as the quality of information intentionally shared by an NPO, in terms of accessibility, completeness, and accuracy, as perceived by donors. This definition is purposefully specific to the NPO–donor context, because transparency evaluations in this setting differ from those in other organizational settings. It is necessary to establish specific views on governance mechanisms, such as transparency, for the nonprofit domain, due to its particularities, namely, the complexity of stakeholders' networks (Van Puyvelde et al., 2012) and ownership structures (Ben-Ner & Ren, 2015); its less hierarchical organizational cultures

(Speckbacher, 2008); its collaborative, rather than competitive, nature (Sharp, 2018); and the centrality of societal missions (Hansmann, 1980).

The relevance of this exercise specific to donors also is justified by several factors. First, donors are highly sensitivity to transparency (Barber et al., 2022; Bodem-Schrötgens & Becker, 2020; Harris & Neely, 2021). Second, a general expectation holds that NPOs, with their charitable mandate, should follow ethical standards strictly (Becker, 2018), more so than other, non–sustainability-oriented organizations. Third, the increasing professionalization of fundraising methods (Ni et al., 2017) creates demand for efficient fundraising and, as a result, accountability, as well as recruitment of full-time employees to manage fundraising. These effortful investments may lead donors to demand even more transparency with regard to how their donations are used. Transparency can contribute to better accountability, thus creating a virtuous circle in the professionalization of fundraising. Fourth, donors' perceptions about the emotional act of donation enhance their preferences for more transparency too (Bennett, 2013; Sneddon et al., 2020). Fifth, NPOs can better protect themselves, using transparency, from the risks of reputational harm (Auger, 2014). Greater transparency and accountability allow NPOs to anticipate and manage donor perceptions and their reputations by demonstrating their responsibility for their actions.

Existing measures

Due to this strong interest in transparency, scholars across disciplines have proposed intuitive measures or scales to capture stakeholders' perceptions of it (see Table 2). In reviewing these studies, we note which stakeholders' perceptions are included and their positions relative to the organization, with the expectation that organizational perceptions differ between insiders (e.g., employees) and outsiders (e.g., resource providers) (Brown et al., 2006).

[Insert Table 2 here]

As Table 2 shows, four main issues appear common to currently available transparency scales. First, they operationalize transparency as a unidimensional construct, but conceptualizations (e.g., Rawlins, 2008; Schnackenberg & Tomlinson, 2016) consistently define it as a multidimensional construct. Unidimensional scales restrict the likelihood of capturing a complex construct such as transparency accurately (Jarvis et al., 2003).

Second, only three of the ten measures in Table 2 stem from a thorough scale development process (Churchill, 1979), that is a systematic and rigorous method that ensures the creation of a valid, reliable, and theoretically-driven instrument—the scale—for assessing a concept not directly observable—the construct (Churchill, 1979; MacKenzie, 2003; Netemeyer et al., 2003).[1] More specifically, only one (Dapko, 2012) specifies the direction—reflective or formative—of the (sub)dimensions and respective items. Indeed, specifying a measurement model requires specifying the direction—reflective or formative—of the relationship between the construct and the indicator variables, at each level of the measurement model. A formative relationship assumes the indicator variables cause the measurement of the construct while a reflective relationship assumes the indicator variables represent the effects of an underlying construct (Diamantopoulos & Winklhofer, 2001). This directionality specification and its justification is essential, because any misspecification of a measurement model leads to potentially detrimental consequences, such as inaccuracy and imprecisions in the developed scales, deterioration of the construct internal consistency and validity, or emergence of collinearity issues (Jarvis et al., 2003; for a review, see Diamantopoulos & Siguaw, 2006).

Third, in terms of validity, most of the scales of Table 2 are based on weak nomological validity exercises (i.e., confirming that the scale reproduces theoretically established predictions). Despite the fact that all the measures test their relationship with outcomes (i.e., factors expected to be influenced by the construct of interest), no antecedents (i.e., factors expected to influence the construct of interest) are proposed for half the measures. Verifying both antecedents and outcomes is essential for establishing nomological validity, as it facilitates a thorough evaluation of the construct's alignment within the theoretical framework. Additionally, the particular contexts used to construct three scales (i.e., environmental transparency in Vaccaro & Patiño Echeverri, 2010; transparency of social responsibility efforts in Hustvedt & Kang, 2013; e-participation programs within the Seoul Metropolitan Government portal site in Kim & Lee, 2012) limits their applicability to other contexts.

Fourth, none of the existing scales addresses the NPO–donor relationship, which represents a major gap. As we noted, the conceptualization of transparency in the nonprofit sector, and thus its operationalization, is both relevant and unique relative to other sectors. With our context-specific study , we seek to ensure high internal validity (i.e., accuracy and precision within the context should be greater than across contexts), relevance for stakeholders, and innovative insights (i.e., creative ideas may arise in specific contexts and have general appeal, even if the specific empirical results do not generalize) (Stremersch et al., 2023).

Accordingly, we (1) develop a valid and reliable scale with a multidimensional conceptualization, (2) follow other scholars' recommendations for developing and evaluating constructs with formative (sub)dimensions and reflective items (Diamantopoulos & Winklhofer, 2001; MacKenzie et al., 2005; Sarstedt et al., 2017), (3) control for nomological validity, and (4) conduct empirical studies in an NPO context to account for its uniqueness (Stremersch et al., 2023).

Dimensionality and measurement type

In both prior literature and our three empirical studies, we identify consistent support for three primary formative dimensions of NPO transparency, pertaining to perceptions of information accessibility, completeness, and accuracy. The structure of each of these dimensions is complex, comprising at least two subdimensions. First, perceived information *accessibility* exists if donors recognize their access to comprehensible, disclosed information (Liu et al., 2015) that is clear, attractive, easy to find, and easy to understand (Schnackenberg & Tomlinson, 2016). As such, accessibility consists of three formative subdimensions: visual attractiveness, findability, and understandability.

Second, perceived information *completeness* entails donors' sense that their demands for information are being satisfied (adapted from Rawlins, 2008). Two subdimensions form it: usefulness and balance. That is, donors expect transparent organizations to disclose valuable information (usefulness) that offers nuanced insights into their actions (balance), by sharing all relevant information, regardless of whether it is positive or negative in valence (Fung et al., 2007).

Third, perceived information *accuracy* arises if donors believe the information is exact, which depends on the two formative subdimensions of timeliness and reliability, both of which are necessary for donors to develop a precise and valid sense of NPOs' activities (Schnackenberg & Tomlinson, 2016).

In support of this conceptualization, in the qualitative interviews of Study 1, donors consistently referred to their evaluations of transparency as complex processes, occurring at multiple levels of abstraction. They frequently cited information accessibility (e.g., "You don't want [the NPO] to drown us either … too much information kills information"), completeness (e.g., "I expect [the NPO] to give access to a detailed study that is 80 pages long"), and accuracy (e.g., "In terms of data, I wouldn't want an abstract that is just emotional and where there is no sourced element").

With regard to the measurement model for developing the scale, in reflective models, the construct, or latent variable, reflects its dimensions; whereas in formative measurement models, the construct, or composite variable, is determined by its dimensions (Diamantopoulos & Winklhofer, 2001). In our case, all three dimensions capture specific aspects of the overall construct, are not necessarily correlated, and are not interchangeable, so accessibility, completeness, and accuracy represent formative dimensions. To capture the entire construct domain, we must measure all three dimensions, and an NPO must score high on all three to be perceived as transparent by donors. Accordingly, we define donors' perceptions of NPO transparency as a third-order (meaning that the construct is measured at three levels of abstraction simultaneously (i.e., subdimension, dimension, and construct levels)) formative construct, with accessibility, completeness, and accuracy as second-order formative dimensions and visual attractiveness, findability, understandability, usefulness, balance, timeliness, and reliability as first-order formative subdimensions, measured reflectively by manifest items, as detailed in Figure 1. The measurement structure of perceived transparency aligns with the type II model, as defined by Jarvis et al. (2003), characterized by its formative nature at the higher construct and (sub)dimension levels, and its reflective nature at the item level.

[Insert Figure 1 here]

STAGE 2: ITEM GENERATION AND DATA COLLECTION

To produce a primary list of items that capture the complexity of NPOs' transparency, we first consider existing measures (Table 2). After dropping redundant items, this primary list included 36 manifest items. Next, we conducted our three empirical studies to gather relevant, complementary items from donors and experts and thereby refine the primary list of items (Appendix 1).

Study 1: Qualitative study with donors

We conducted 19 in-depth, semi-structured interviews with experienced donors regarding their giving decisions. In June 2020, we interviewed 13 male and 6 female donors, aged between 24 and 89 years, with an average age of 45 years. We recruited participants mainly through snowball sampling, asking some selected respondents to identify other potential participants who shared the characteristics of interest for this study (e.g., being an experienced donor) (see Appendix 2 for further details). Throughout these interviews, we paid attention to the whole process of giving, including determinants of the giving decision and the process used to evaluate this decision. After adjusting the primary list according to the results of Study 1, we obtained a list of 42 items.

Study 2: Content analysis with experts

Nineteen academic experts on NPO transparency and donor behaviors assessed the relevance and clarity of the 42 items. To check the content validity of the items, we asked them to rate, on 5-point Likert scales, the clarity (i.e., whether the item is understandable) and representativeness (i.e., whether the item represents or captures relevant subdimensions) of each item for capturing the concept of NPOs' donor-based transparency and its (sub)dimensions. The experts also could comment on the items individually or add any item they considered missing. On the basis of these data, we dropped items that at least five experts judged as unclear or unrepresentative or those whose average score on clarity or representativeness was below 3. From the list of 42 items remaining at the end of Study 1, we dropped 14 items and added 7, producing a refined list of 35 items, as detailed in Appendix 1.

Study 3: Questionnaire design and quantitative data collection

To assess the adequacy of the refined list of 35 items, we designed a questionnaire to capture, on a 5-point Likert scale, donors' level of agreement on the items, taking into consideration their perception of one specific NPO that they had recently supported financially. The survey also included sociodemographic questions and items to appraise their position on the constructs chosen to validate the proposed transparency scale. Details about the scales and related items used in the survey (Study 3) for validity checks are available in Appendix 3.

We investigate the Belgian nonprofit sector for this study, which is relevant for several reasons. First, in this *corporatist* nonprofit sector, government spending on social welfare is high, and the sector itself is large (Salamon et al., 2017; Salamon & Anheier, 1998). In turn, donations tend to be somewhat lower than in the countries often studied in existing empirical research, so NPOs must devote significant effort to convincing citizens to donate. Second, the Belgian nonprofit sector is subject to weak reporting rules and standards; no rule covers the provision of information other than financial details, so Belgian NPOs have substantial flexibility in terms of how they respond to calls for transparency (Verbruggen et al., 2011).

Most of the Belgian population speaks Dutch or French, so we made an online survey available in both languages online in November 2020 through Qualtrics. Then to expand our scope beyond the unique Belgian context, we extended our panel to three other European countries: France, Luxembourg, and the Netherlands. We contacted NPOs in each country and asked them to spread the survey through their donor communities.[2] The selected countries feature distinct philanthropist traditions and varied donation practices (Salamon et al., 2017),[3] such that the responses reflect perceptions of relatively diverse donors, in terms of their philanthropic practices.

As Podsakoff et al. (2012) recommend, we took several procedural precautions to avoid common method variance issues (i.e., variance attributable to the measurement method rather than the constructs they represent). First, we protected respondents' anonymity and specified that there were no right or wrong answers, to discourage dishonesty or acquiescence. Second, we spread the survey internationally with the help of the NPOs as intermediaries.

Third, we carefully constructed the items, as detailed in the "Item generation and data collection" section.

After discarding incomplete responses from an initial sample of 990 responses, we obtained a final sample of 515 usable answers, 77% of which were in French. On average, respondents were 52 years of age, highly educated, and currently employed; 57% were women. For validation purposes, we split the data randomly into two subsamples: a calibration sample (Study 3a; n = 258) and a validation sample (Study 3b; n = 257). Both samples are sufficiently large to support exploratory and confirmatory analyses, according to multiple recommendations (MacCallum et al., 1999; Mundfrom et al., 2005).[4] With the calibration sample, we develop the scale; we use the validation sample to verify its dimensionality and establish its psychometric properties.

STAGE 3: SCALE PURIFICATION

In Stage 3, we analyze the survey data from Study 3 related to all 35 items that capture the focal concept, separately for the calibration sample (Study 3a) and validation sample (Study 3b), using an iterative scale purification process (Churchill, 1979). In Study 3a, we perform an exploratory factor analysis on the calibration sample to confirm the existence of the subdimensions conceptually defined in Stage 1 and their composition, as proposed at Stage 2. In Study 3b, in addition to corroborating these results thanks to an exploratory factor analysis performed on the validation sample, the confirmatory factor analysis supports the structure and grouping of the subdimensions proposed in Stage 1 (Figure 1). The results of each analysis are in Table 3 for reflectively measured subdimensions and Table 4 for the formatively measured construct and dimensions. The detailed procedures for these exploratory and confirmatory analyses are available in Appendix 4.

[Insert Table 3 and 4 here]

Stage 4: Scale reliability and validity

For Stage 4, we used Study 3b (validation sample) to confirm the scale internal reliability and validity (that is, checking the reliability and validity of the internal measurement model), on the basis of analyses that support the (sub)dimensions of NPO transparency (see Appendix 5 for detailed descriptions). For the formatively measured dimensions and construct, results are available in Table 4. Table 5 contains the results of various tests that confirm the soundness of the seven reflectively measured subdimensions.

[Insert Table 5 here]

In Stage 4, we also check for the external validity of the scale thanks to convergent (i.e., the extent to which a scale correlates positively with other existing measures of the construct), discriminant (i.e., the extent to which a scale correlates moderately with a measure capturing a similar, but conceptually different, construct), and nomological validity checks of the NPOs' transparency scale (see Appendix 6 for detailed descriptions). By conducting these complementary validity checks, we ensure (1) that our scale is measuring what it intends to measure, (2) that it can effectively differentiate between different concepts, and (3) that it aligns with established theoretical expectations. Figure 2 presents the nomological network, which contains an overview of key antecedents and outcomes of NPOs' transparency in a theoretical model, according to a partial least square–structural equation modeling (PLS-SEM) estimation, as recommended by Sarstedt et al. (2019).

[Insert Figure 2 here]

Discussion and conclusion

We propose a multidimensional conceptualization and a valid and reliable scale of donor perceptions of NPOs' transparency, both of which reflect an extensive overview of donors' information needs. Despite growing research on transparency in the NPO sector (e.g., Harris & Neely, 2021; Hyndman & McConville, 2018), our analysis reveals several issues with previous conceptualizations and measures of transparency (Table 2). With three empirical studies, our research overcomes these drawbacks.

First, we propose a *multidimensional,* higher-order conceptualization of transparency that is specific to NPOs. Considering prior literature and the results of Studies 1–3, we suggest that NPOs' donors-oriented transparency should be conceptualized as a three-dimensional construct, composed of information accessibility, completeness, and accuracy. With this sound conceptualization, we propose an ad hoc scale. Even when previous conceptualizations of transparency have acknowledged that it is multidimensional (e.g., Rawlins, 2008; Schnackenberg & Tomlinson, 2016), they have proposed only unidimensional scales that do not reflect its complexity sufficiently or accurately.

Second, we undertake a thorough scale development process (Table 1), including specification of the formative–reflective dimensions. So far, only three existing measures had been subjected to a complete scale development process (Dapko, 2012; Eggert & Helm, 2003; Hustvedt & Kang, 2013), and only Dapko explicitly specifies the reflective form of the scale; in the other two, it can be deduced from the methodology used. Because each of the dimensions we propose—accessibility, completeness, and accuracy—captures a specific content domain and can behave independently, we assert that in our context, defining transparency as a reflective construct may lead to severe operationalizations problems (Jarvis et al., 2003). With a higher-order formative conceptualization, we instead develop a sound measure of transparency that can address these concerns.

Third, to confirm the validity of the developed scale, we perform a comprehensive assessment, including convergent, discriminant, and nomological validity checks. The convergent validity step specifies that transparency perceptions differ from setting to setting, revealing both similarities and divergences between our NPO transparency operationalization and Dapko's (2012) measure, developed in a for-profit setting.

Fourth, we focus on NPO–donor relations, a particularly emblematic and relevant case of transparency-seeking organizations and stakeholders' perceptions of transparency (Barber et al., 2022; Bodem-Schrötgens & Becker, 2020; Gandía, 2011). Prior research features both for-profit and public settings as contexts to build transparency scales (Table 2), but a dedicated scale of donor perceptions of NPO transparency has been missing thus far.

CONTRIBUTIONS AND IMPLICATIONS

This study carries significant theoretical and practical implications for both scholars and NPO managers. First, by defining NPOs' perceived transparency as the quality of the information intentionally shared by an NPO, in terms of its accessibility, completeness, and accuracy, as perceived by donors, we establish a clear and unified frame of reference that scholars can use to understand the structure of this complex concept. This clear conceptualization is equally valuable for managers, providing a comprehensive view of donors' information requirements. By leveraging the identified transparency dimensions, managers can enhance decision-making and effectively respond to increasing demands for transparency (e.g., Barber et al., 2022; Bodem-Schrötgens & Becker, 2020; Gandía, 2011). In the current era of information overload (Koschmann et al., 2015; Laud & Schepers, 2009; Roetzel, 2019), the discerning assessment of transparency practices based on accessibility, completeness, and accuracy becomes pivotal. The (sub)dimensions of the scale emerge as critical components in shaping transparency strategies, aiding NPO managers in articulate communication about their transparency intentions.

Secondly, our findings facilitate practical application. The well-defined conceptualization and operationalization offer scholars and managers a foundation for effective communication and operationalization of transparency. NPO managers can monitor transparency performance meticulously and allocate resources efficiently. The complex conceptualization helps identify critical factors in analyzing and adopting transparency practices. With the insight that judgments of accessibility, completeness, and accuracy are key components, NPO managers can design actionable strategies for transparent positioning, utilizing the scale's (sub)dimensions as a dashboard for assessing transparency levels. Similar to studies of donors' information needs (McDowell et al., 2013; Saxton et al., 2014), we find that, even if they exhibit varying willingness or ability to implement transparency practices (Harris & Neely, 2021), NPOs always should provide complete, balanced information about their backgrounds, activities, governance, and financing while seeking new ways to enhance information accessibility (e.g., clear graphs or illustrations) and reliability (e.g., external audits, detailed data). Organizations should embrace all three dimensions—accessibility, completeness, and accuracy—to communicate transparently with stakeholders, particularly donors.

Thirdly, these results provide support for the formulation of new theories and exploration of untested hypotheses concerning NPOs' perceived transparency and related constructs such as image, legitimacy, and prosocial behaviors (e.g., Alhidari et al., 2018; Konrath & Handy, 2018). Evidence of the positive influence of transparency perceptions on donors' trust and support intentions mainly comes from econometric regressions, such that the level of total contributions collected by the organization partly depends on a (implemented) transparency index (Gandía, 2011; Saxton et al., 2014). Few studies question donors directly to learn their perceptions and intentions in relation to transparency (e.g., Becker et al., 2020; Farwell et al., 2019; Wymer et al., 2020). This study thus sheds new light on donors' behaviors by analyzing the psychological mechanisms.

LIMITATIONS AND FURTHER RESEARCH

The final data sample, from which we obtained the scale, includes answers from respondents from Western European countries. Further research could test this scale in different contexts, to confirm its generalizability. Our consideration of different countries with distinct philanthropic traditions already supports the generalizability of our results to some extent, but other contexts or geographical settings might still affect the results. Furthermore, we focus on donors' perceptions and information needs; other stakeholders' perceptions and expectations are important too. These other stakeholders might rely on different sources of information than donors, who are generally familiar with the organizations they support.

Notwithstanding such limitations, we offer an academically robust and unique NPO transparency scale that accommodates the multidimensional expressions of transparency in the nonprofit sector. As such, the scale provides researchers and practitioners with a new psychometric tool for analyzing and enhancing transparency practices in NPOs and other types of organizations that similarly require heightened attention to transparency.

APPENDIX 1: PRIMARY LIST OF ITEMS

Dimensions	Sub-dimensions	Manifest Items	Numer-ation
Dimension 1: Accessibility	Visual attractiveness	The information disclosed by the organization is visually attractive.	ATT1
		The layout of the information disclosed by the organization draws donors' attention.	ATT2
		The format of the information disclosed by the organization is appealing.	ATT3
		The organization values the visual aspect of the information it shares.	ATT4
		The information disclosed by the organization is generally accompanied by attractive visual supports.	ATT5
	Findability	The organization avoids overwhelming donors with information.	FIN1*
		The amount of information shared by the organization is well balanced (not too little, not too much).	FIN2*
		The organization makes it easy to find the information that donors need.	FIN3
		The organization discloses information for donors to easily locate the information they want.	FIN4
		The organization makes information findable when donors look for it.	FIN5
	Understandability	The information from the organization is clear to donors.	UND1*
		The information from the organization is understandable.	UND2
		The information from the organization is readable.	UND3
		The information from the organization is presented in a language donors understand.	UND4
		This organization provides information that is easy for donors to understand.	UND5
Dimension 2: Completeness	Usefulness	The organization satisfies the donors' information needs.	USE1
		The organization shares all relevant information with donors.	USE2
		The organization provides information that is useful to donors.	USE3
		The organization provides information that encompasses what donors want to know about it.	USE4*
		The organization discloses sufficient information to donors.	USE5
	Balance	Donors have information about the organization's failures and successes.	BAL1
		The organization presents information to give a balanced overview.	BAL2*
		The organization discloses both positive and negative information.	BAL3
		The organization shares information regarding its faced and unfaced challenges.	BAL4
		Donors have information about the ease and difficulties of the organization.	BAL5
Dimension 3: Accuracy	Timeliness	Donors receive information from the organization on a regular basis.	TIM1
		The organization reports to donors on a frequent basis.	TIM2
		The organization provides timely information to donors.	TIM3
		The information provided by the organization is up-to-date.	TIM4*
		The information provided by the organization is related to its current activities.	TIM5*
	Reliability	The organization provides reliable information.	REL1
		The information received from the organization is accurate.	REL2
		The information received from the organization is true.	REL3
		The information received from the organization is correct.	REL4
		The organization provides credible information.	REL5*

**Items deleted during the scale purification process.*

APPENDIX 2: INTERVIEWS AND INTERVIEWEES' CHARACTERISTICS

Date of the Interview	Channel	Age of Interviewee (in 2020)	Gender of Interviewee	Interview Duration
06/11/2020	Skype	26	M	60'
06/15/2020	Skype	30	M	58'
06/15/2020	Face-to-face	78	M	112'
06/15/2020	Face-to-face	39	M	48'
06/16/2020	Skype	41	F	47'
06/17/2020	Skype	26	M	77'
06/17/2020	Skype	24	F	52'
06/18/2020	Face-to-face	55	M	44'
06/19/2020	Face-to-face	89	F	37'
06/19/2020	Face-to-face	60	M	74'
06/22/2020	Face-to-face	30	M	58'
06/22/2020	Skype	41	M	76'
06/22/2020	Face-to-face	36	F	59'
06/23/2020	Face-to-face	30	M	57'
06/24/2020	Face-to-face	31	M	65'
06/24/2020	Face-to-face	57	F	59'
06/25/2020	Skype	62	M	51'
06/29/2020	Skype	39	F	78'
06/29/2020	Skype	62	M	43'

APPENDIX 3: SCALES AND RELATED ITEMS USED IN STUDY 3 TO ASSESS CONVERGENT, DISCRIMINANT AND NOMOLOGICAL VALIDITY

Scale and related items to assess convergent validity
Perceived firm transparency (adapted from Dapko, 2012)
[X] provides me with a learning opportunity about itself.
[X] enables me to know what it's doing.
[X] wants me to understand what it is doing.
Scale and related items to assess discriminant validity
Reputation (Sarstedt & Schloderer, 2010)
Likeability
[X] is an organization I can identify with better than with other organizations.
[X] is an organization I would miss more if it no longer existed than I would other organizations.
I regard [X] as a likeable organization.
Competence
[X] is a top NPO in its market.
As far as I know [X] is recognized world-wide.
I believe that [X] performs at a premium level.
Scale and related items to assess nomological validity – Antecedents
Goal clarity (adapted from Rainey, 1983)
[X]'s mission is clear to almost everyone who interact with it.
It is easy to explain the goals of [X] to outsiders.
[X] has clearly defined goals.
Closeness (Bennett, 2013)
I consider [X] to be part of myself.
I feel very close to [X].
I feel close to other supporters of [X].
There is a special bond between me and [X].
Scale and related items to assess nomological validity – Outcomes
Trust (Sargeant & Lee, 2004)
I would trust [X] to always act in the best interest of the cause.
I would trust [X] to conduct their operations ethically.
I would trust [X] to use donated funds appropriately.
I would trust [X] not to exploit their donors.
I would trust [X] to use fundraising techniques that are appropriate and sensitive.
Supportive behavior (Schultz et al., 2019)
I think it is good to donate to [X].
I think it is good to volunteer for [X].
If [X] needed someone like me, I could see myself volunteering for them.
I think it is good to defend [X] against criticism.
If a friend of mine criticized the [X], I could see myself defending it.
Imagine you had 100 Euro for donations this year. How much would you give to [X]?

Notes: [X] is replaced by the name of the organization chosen by the respondent.

APPENDIX 4: EXPLORATORY AND CONFIRMATORY ANALYSES

The *exploratory* process began with the computation of the reliability coefficient of Cronbach's alpha and resulted in seven dimensions with coefficient alphas ranging from 0.87 to 0.94. We then factor analyzed the pool of items to verify its dimensionality, using exploratory factor analysis (EFA) with a principal factor method and Varimax rotation (Bartholomew et al., 2008). The adequacy of the data for an EFA previously had been affirmed, according to the Kaiser-Meyer-Olkin measure of sampling adequacy, which equaled 0.95 (Kaiser, 1974), and the significant chi-square value for the Bartlett's test of sphericity. To identify the number of factors, we relied on the scree plot, examined the amount of variance explained, and considered theoretical expectations, which led to a seven-factor structure accounting for 98.10% of the variance. An iterative process eliminated 8 items with factor loadings below 0.5, cross-loadings with a difference in loadings below 0.2, and high uniqueness above 0.3 (Hair et al., 2009).

We repeated the iterative sequence of reliability examination and factor analyses until no further improvement in the coefficient alpha values occurred, and the seven factors collectively had a comprehensive factor structure. This process yielded a 27-item scale with seven subdimensions: visual attractiveness (5 items), findability (3 items), understandability (4 items), usefulness (4 items), balance (4 items), timeliness (3 items), and reliability (4 items). Table 3 contains the factor loadings for the 27 items and the coefficient alpha values for the seven subdimensions.

The *confirmatory* analysis uses partial least square structural equation modeling (PLS-SEM), as advised for theory development and formative latent variables (Hair et al., 2019). Following recommendations for reflective–formative hierarchical composite variables (Sarstedt et al., 2019), we adopted a repeated indicators approach with 'mode B' (i.e., regression weights) on the NPOs' transparency construct and the inner path weighting scheme. The analysis was conducted in SmartPLS 3 (Ringle et al., 2015) and resulted in the seven reflectively measured subdimensions in Table 3, for the formatively measured dimensions and construct in Table 4.

Appendix 5: Assessment of internal reliability and validity of (sub)dimensions of NPO transparency

Internal reliability and validity checks procedures differ across the nature—reflective or formative—of the measurement model and are performed on the validation sample only. Hair et al. (2019) recommend four steps to assess dimensions specified with *reflective* items, which we follow to check the seven subdimensions of transparency specified by the reflective manifest items. First, manifest items reflectively measuring the subdimensions should load at least at 0.7 to be reliable, as demonstrated by a confirmatory factor analysis (Table 3). Second, we confirm the internal consistency reliability (i.e., degree to which items measure the same underlying variable and correlate) for the subdimensions, in that their Cronbach's alpha, composite reliability, and ρ_A (Dijkstra & Henseler, 2015) coefficients are above 0.7 (Table 4). Third, internal convergent validity (i.e., degree to which the underlying variable converges to explain the variance of its items) is confirmed, in that the average variance extracted (AVE) of each subdimension exceeds 0.5 (Sarstedt et al., 2017) (Table 4). Fourth, to check the internal discriminant validity of the subdimensions (i.e., degree to which each variable is empirically distinct from others), we apply the Fornell–Larcker (1981) criterion: For each pair of subdimensions, the square root of the AVE of each dimension is greater than its interdimension correlations. In further support of discriminant validity, the heterotrait-monotrait (HTMT) ratio of the correlations of subdimensions is less than 0.85. Table 5 lists the subdimension correlations, HTMT ratio, and square root of their AVE.

For the *formatively* measured dimensions and construct—accessibility, completeness, accuracy, and NPOs' perceived transparency—internal consistency is trivial, because each (sub)dimension examines a different aspect, and they are not necessarily correlated (MacKenzie et al., 2005). Internal validity thus depends on the strength and significance of the weight of the formatively designed dimensions of the construct (MacKenzie et al., 2005);

they are all significant and relevant (Table 4). The dimensions should not be highly correlated, which could indicate collinearity problems. With variance inflation factor values below the threshold of 3 (Hair et al., 2019), we do not identify any collinearity concerns though (Table 4).

Appendix 6: Assessment of the external validity of the construct

The external validity of the construct pertains to the theoretical relationship of the scale with other related variables. For the convergent, discriminant, and nomological (external) validity of the NPOs' transparency scale, we provide detailed measures in Appendix 3. As noted, convergent validity is the extent to which a scale correlates positively with other existing measures of the construct (Netemeyer et al., 2003). Without any existing measure of NPOs' transparency, convergent validity might be a concern. Therefore, among all measures of transparency available in prior literature (Table 2), we compare the proposed transparency scale with the measure of *perceived firm transparency* of Dapko (2012), because the latter results from a full scale development process and precises its reflective nature (but remains subject to two issues listed at Stage 1: it considers transparency as unidimensional and it refers to the specific context of firm-customers dynamics). The correlation of 0.71 indicates a significant, positive relation between these transparency operationalizations; both scales capture a similar construct. Yet the imperfect correlation also justifies the need for our new scale of organizational transparency.

To achieve discriminant validity, the developed scale should correlate moderately with a measure capturing a similar, but conceptually different, construct (Netemeyer et al., 2003). We compare the proposed scale with NPOs' *reputation,* which simultaneously captures stakeholders' emotional attitudes toward an organization (likeability) and their cognitive evaluations of its professional performance (competence) (Sarstedt & Schloderer, 2010). This choice reflects the imperfect similarities between constructs: perceptions of transparency favor the development of a positive reputation (Mitchell & Stroup, 2017; Willems et al., 2016), but a reputation involves broader aspects (Schultz et al., 2019). The correlation between donors' perceptions of NPOs' transparency and NPOs' reputation is 0.55, which confirms their similarities and divergences.

To determine nomological validity, we check whether the scale reproduces theoretically established predictions (Netemeyer et al., 2003). We test a nomological map in PLS-SEM, as recommended by Sarstedt et al. (2019). The significant path coefficient of 0.48 indicates that the clearer the NPO's mission is to the donor, the more transparent the organization is to them. Some research implies this positive impact of stakeholders' easy understanding of the goal of an organization on their perceptions of effective communication processes (Dapko, 2012; Willems et al., 2016). The closeness between the donor and the NPO, involving both physical and psychological aspects, also is a significant positive antecedent of NPO transparency perceptions (path coefficient = 0.34), as suggested by prior literature (Gössling, 2004). As is generally allowed (Becker et al., 2020; Farwell et al., 2019; Sekhon et al., 2014), we also verify, using the PLS-SEM estimations, that NPO transparency perceptions act like a trust-enhancing mechanism (path coefficient = 0.61). Finally, similar to Saxton and Guo (2011) or Harris and Neely (2021), we observe that NPO transparency perceptions enhance donors' supportive behaviors, including intentions to donate, volunteering, and defending the NPO against criticism (path coefficient = 0.53). The PLS-SEM estimations of this nomological map are in Figure 2.

ENDNOTES

[1] The remaining seven measures, which do not stem from a thorough scale development process, are predominantly intuitive in nature. This implies that these measures are based on the authors' viewpoints, drawing from either field practices or prior literature.

[2] No external sign identifies whether a person donates or not, so donor populations are challenging to recognize or to reach. Therefore, we contacted 1,300 NPOs by email, asking them to help spread the survey to their own donor communities. We obtained the contact information of the NPOs from open databases, proposed by organizations working toward greater visibility or ethics in fundraising practices: in Belgium, Donorinfo, testament.be, bonnecauses.be, NGOOpenbook, goodgift.be, and the Association pour une Éthique dans les Récoltes de Fonds; in France, Don en confiance; in Luxembourg, Don en confiance Luxembourg; and in the Netherlands, Centraal Bureau Fondsenwerving. In addition to providing contact information, these platforms regroup NPOs of various sectors according to their concerns about donors' perceptions, including transparency. These NPOs thus represent suitable intermediaries for spreading the survey to relevant respondents. In total, we received 236 answers from NPOs, 27% of which were positive, which is quite satisfactory, considering the challenges provoked by the global COVID-19 crisis at the time of the study and the sensitivity of the topics studied.

[3] According to Salamon and Anheier's (1998) social origins theory, the Belgian and French nonprofit sectors follow a corporatist structure, such that they are large and receive substantial government social welfare spending. The primary source of funding of NPOs is traditionally the government. The Dutch nonprofit sector, previously known to follow the socio-democratic structure (with a small nonprofit sector and high level of government social welfare spendings) (Wiepking & Handy, 2015), has been reconceptualized as a classic welfare

partnership model (Salamon et al., 2017). Because of a lack of recent data, the characterization of the Luxembourgish nonprofit sector is uncertain. In some respects (e.g., volume of volunteers, sector size, amount of government social welfare spending) (Blond-Hanten et al., 2010), it seems to follow a socio-democratic structure, similar to the Dutch one.

[4] Both samples exceed 130 responses, which is the minimum sample size Mundfrom et al. (2005) suggest for meeting a "good" level of agreement criterion, for high communality data, with a variables-to-factors ratio of 5, as is the case here.

REFERENCES

Alhidari, I. S., Veludo-de-Oliveira, T. M., Yousafzai, S. Y., & Yani-de-Soriano, M. (2018). Modeling the effect of multidimensional trust on individual monetary donations to charitable organizations. *Nonprofit and Voluntary Sector Quarterly*, *47*(3), 623–644.

Archambeault, D. S., & Webber, S. (2018). Fraud survival in nonprofit organizations: Empirical evidence. *Nonprofit Management and Leadership*, *29*(1), 29–46.

Auger, G. A. (2014). Trust me, trust me not: An experimental analysis of the effect of transparency on organizations. *Journal of Public Relations Research*, *26*(4), 325–343.

Barber, P., Farwell, M. M., & Galle, B. (2022). Does mandatory disclosure matter? The case of nonprofit fundraising. *Nonprofit and Voluntary Sector Quarterly*, *51*(1), 31–52.

Bartholomew, D. J., Steele, F., Moustaki, I., & Galbraith, J. I. (2008). *Analysis of multivariate social science data*. CRC Press.

Becker, A. (2018). An experimental study of voluntary nonprofit accountability and effects on public trust, reputation, perceived quality, and donation behavior. *Nonprofit and Voluntary Sector Quarterly*, *47*(3), 562–582.

Becker, A., Boenigk, S., & Willems, J. (2020). In nonprofits we trust? A large-scale study on the public's trust in nonprofit organizations. *Journal of Nonprofit & Public Sector Marketing*, *32*(2), 189–216.

Ben-Ner, A., & Ren, T. (2015). Comparing workplace organization design based on form of ownership: nonprofit, for-profit, and local government. *Nonprofit and Voluntary Sector Quarterly*, *44*(2), 340–359.

Bennett, R. (2013). Elements, causes and effects of donor engagement among supporters of UK charities. *International Review on Public and Nonprofit Marketing*, *10*(3), 201–220.

Bergkvist, L., & Eisend, M. (2021). The dynamic nature of marketing constructs. *Journal of the Academy of Marketing Science*, *49*(3), 521–541.

Blond-Hanten, C., Lejealle, B., Segura, J., & Waltzer, L. (2010). *Le secteur associatif au Luxembourg*. CEPS/INSTEAD.

Bodem-Schrötgens, J., & Becker, A. (2020). Do you like what you see? How nonprofit campaigns with output, outcome, and impact effectiveness indicators influence charitable behavior. *Nonprofit and Voluntary Sector Quarterly*, *49*(2), 316–335.

Brown, T. J., Dacin, P. A., Pratt, M. G., & Whetten, D. A. (2006). Identity, intended image, construed image, and reputation: An interdisciplinary framework and suggested terminology. *Journal of the Academy of Marketing Science*, *34*(2), 99–106.

Cambier, F., & Poncin, I. (2020). Inferring brand integrity from marketing communications: The effects of brand transparency signals in a consumer empowerment context. *Journal of Business Research*, *109*, 260–270.

Chapman, C. M., Hornsey, M. J., & Gillespie, N. (2021). To what extent is trust a prerequisite for charitable giving? A systematic review and meta-analysis. *Nonprofit and Voluntary Sector Quarterly*, *50*(6), 1274–1303.

Chu, V., & Luke, B. (2023). NPO web-based accountability: How can we know if NPOs are doing good things? *Nonprofit and Voluntary Sector Quarterly*, *52*(1), 75–105.

Churchill, G. A. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, *16*(1), 64–73.

Connolly, C., & Hyndman, N. (2013). Towards charity accountability: Narrowing the gap between provision and needs? *Public Management Review*, *15*(7), 945–968.

Dapko, J. (2012). *Perceived firm transparency: Scale and model development*. University of South Florida.

Dethier, F., Delcourt, C., & Willems, J. (2021). Transparency of nonprofit organizations: An integrative framework and research agenda. *Journal of Philanthropy and Marketing, e1725*.

DeVellis, R. F. (2016). *Scale development: Theory and applications*. Sage Publications.

Diamantopoulos, A., & Siguaw, J. A. (2006). Formative versus reflective indicators in organizational measure development: A comparison and empirical illustration. *British Journal of Management*, *17*(4), 263–282.

Diamantopoulos, A., & Winklhofer, H. M. (2001). Index construction with formative indicators: An alternative to scale development. *Journal of Marketing Research*, *38*(2), 269–277.

Dijkstra, T. K., & Henseler, J. (2015). Consistent partial least squares path modeling. *MIS Quarterly*, *39*(2), 297–316.

Dumont, G. E. (2013). Nonprofit virtual accountability: An index and its application. *Nonprofit and Voluntary Sector Quarterly*, *42*(5), 1049–1067.

Eggert, A., & Helm, S. (2003). Exploring the impact of relationship transparency on business relationships: A cross-sectional study among purchasing managers in Germany. *Industrial Marketing Management*, *32*(2), 101–108.

Farwell, M. M., Shier, M. L., & Handy, F. (2019). Explaining trust in Canadian charities: The influence of public perceptions of accountability, transparency, familiarity and institutional trust. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, *30*(4), 768–782.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*(1), 39–50.

Fung, A., Graham, M., & Weil, D. (2007). *Full disclosure: The perils and promise of transparency*. Cambridge University Press.

Gandía, J. L. (2011). Internet disclosure by nonprofit organizations: Empirical evidence of nongovernmental organizations for development in Spain. *Nonprofit and Voluntary Sector Quarterly*, *40*(1), 57–78.

Gössling, T. (2004). Proximity, trust and morality in networks. *European Planning Studies*, *12*(5), 675–689.

Grimmelikhuijsen, S., & Meijer, A. J. (2014). Effects of transparency on the perceived trustworthiness of a government organization: Evidence from an online experiment. *Journal of Public Administration Research and Theory*, *24*(1), 137–157.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). *Multivariate data analysis* (7th ed.). Pearson Prentice Hall.

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, *31*(1), 2–24.

Halachmi, A., & Greiling, D. (2013). Transparency, e-government, and accountability: Some issues and considerations. *Public Performance & Management Review*, *36*(4), 562–584.

Hansmann, H. B. (1980). The role of nonprofit enterprise. *Yale Law Journal*, *89*(5), 835–901.

Harris, E., & Neely, D. (2021). Determinants and consequences of nonprofit transparency. *Journal of Accounting, Auditing & Finance*, *36*(1), 195–220.

Haski-Leventhal, D., & Foot, C. (2016a). The relationship between disclosure and household donations to nonprofit organizations in Australia. *Nonprofit and Voluntary Sector Quarterly*, *45*(5), 992–1012.

Haski-Leventhal, D., & Foot, C. (2016b). The relationship between disclosure and household donations to nonprofit organizations in Australia. *Nonprofit and Voluntary Sector Quarterly*, *45*(5), 992–1012. Academic Search Premier.

Hornsey, M. J., Chapman, C. M., Mangan, H., La Macchia, S., & Gillespie, N. (2020). The Moral Disillusionment Model of Organizational Transgressions: Ethical Transgressions Trigger More Negative Reactions from Consumers When Committed by Nonprofits. *Journal of Business Ethics*.

Hung, C., Hager, M. A., & Tian, Y. (2022). Do donors penalize nonprofits with higher non-program costs? A meta-analysis of donor overhead aversion. *Nonprofit and Voluntary Sector Quarterly*, *0*(0).

Hustvedt, G., & Kang, J. (2013). Consumer perceptions of transparency: A scale development and validation. *Family and Consumer Sciences Research Journal*, *41*(3), 299–313.

Hyndman, N., & McConville, D. (2016). Transparency in reporting on charities' efficiency. *Nonprofit and Voluntary Sector Quarterly*, *45*(4), 844–865.

Hyndman, N., & McConville, D. (2018). Making charity effectiveness transparent: Building a stakeholder-focussed framework of reporting. *Financial Accountability & Management*, *34*(2), 133–147.

Jarvis, C. B., MacKenzie, S. B., & Podsakoff, P. M. (2003). A critical review of construct indicators and measurement model misspecification in marketing and consumer research. *Journal of Consumer Research*, *30*(2), 199–218.

Jeavons, T. H. (2016). Ethical nonprofit management. In D. O. Renz & R. D. Herman (Eds.), *The Jossey-Bass Handbook of Nonprofit Leadership and Management* (pp. 188–216). John Wiley & Sons, Ltd.

Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, *39*(1), 31–36.

Kim, S., & Ferguson, M. A. T. (2018). Dimensions of effective CSR communication based on public expectations. *Journal of Marketing Communications*, *24*(6), 549–567.

Kim, S., & Lee, J. (2012). E-participation, transparency, and trust in local government. *Public Administration Review*, *72*(6), 819–828.

Konrath, S., & Handy, F. (2018). The development and validation of the motives to donate scale. *Nonprofit and Voluntary Sector Quarterly*, *47*(2), 347–375.

Koschmann, M. A., Isbell, M. G., & Sanders, M. L. (2015). Connecting nonprofit and communication scholarship: A review of key issues and a meta-theoretical framework for future research. *Review of Communication*, *15*(3), 200–220.

Laud, R. L., & Schepers, D. H. (2009). Beyond transparency: Information overload and a model for intelligibility. *Business and Society Review*, *114*(3), 365–391.

Liket, K. C., & Maas, K. (2015). Nonprofit organizational effectiveness: Analysis of best practices. *Nonprofit and Voluntary Sector Quarterly*, *44*(2), 268–296.

Liu, Y., Eisingerich, A. B., Auh, S., Merlo, O., & Chun, H. E. H. (2015). Service firm performance transparency: How, when, and why does it pay off? *Journal of Service Research*, *18*(4), 451–467.

MacCallum, R. C., Widaman, K. F., Zhang, S., & Hong, S. (1999). Sample size in factor analysis. *Psychological Methods*, *4*(1), 84–99.

MacKenzie, S. B. (2003). The Dangers of Poor Construct Conceptualization. *Journal of the Academy of Marketing Science*, *31*(3), 323–326.

MacKenzie, S. B., Podsakoff, P. M., & Jarvis, C. B. (2005). The problem of measurement model misspecification in behavioral and organizational research and some recommended solutions. *Journal of Applied Psychology*, *90*(4), 710–730.

McDowell, E. A., Li, W., & Smith, P. C. (2013). An experimental examination of US individual donors' information needs and use. *Financial Accountability & Management*, *29*(3), 327–347.

Mitchell, G. E., & Stroup, S. S. (2017). The reputations of NGOs: Peer evaluations of effectiveness. *The Review of International Organizations*, *12*(3), 397–419.

Mundfrom, D. J., Shaw, D. G., & Ke, T. L. (2005). Minimum sample size recommendations for conducting factor analyses. *International Journal of Testing*, *2*(5), 159–168.

Netemeyer, R. G., Bearden, W. O., & Sharma, S. (2003). *Scaling procedures: Issues and applications*. Sage Publications.

Ni, N., Chen, Q., Ding, S., & Wu, Z. (2017). Professionalization and cost efficiency of fundraising in charitable organizations: The case of charitable foundations in China. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, *28*(2), 773–797.

Park, H., & Blenkinsopp, J. (2011). The roles of transparency and trust in the relationship between corruption and citizen satisfaction. *International Review of Administrative Sciences*, *77*(2), 254–274.

Pirson, M., & Malhotra, D. (2011). Foundations of organizational trust: What matters to different stakeholders? *Organization Science*, *22*(4), 1087–1104.

Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, *63*(1), 539–569.

Prakash, A., & Gugerty, M. K. (2010). Trust but verify? Voluntary regulation programs in the nonprofit sector. *Regulation & Governance*, *4*(1), 22–47.

Rainey, H. G. (1983). Public agencies and private firms: Incentive structures, goals, and individual roles. *Administration & Society*, *15*(2), 207–242.

Rawlins, B. (2008). Give the emperor a mirror: Toward developing a stakeholder measurement of organizational transparency. *Journal of Public Relations Research*, *21*(1), 71–99.

Ringle, C. M., Wende, S., & Becker, J. U. (2015). *SmartPLS 3*. SmartPLS GmbH.

Roetzel, P. G. (2019). Information overload in the information age: A review of the literature from business administration, business psychology, and related disciplines with a bibliometric approach and framework development. *Business Research*, *12*(2), 479–522.

Salamon, L. M., & Anheier, H. K. (1998). Social origins of civil society: Explaining the nonprofit sector cross-nationally. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, *9*(3), 213–248.

Salamon, L. M., Sokolowski, S. W., & Haddock, M. A. (2017). *Explaining civil society development: A social origins approach*. JHU Press.

Sargeant, A., & Lee, S. (2004). Trust and relationship commitment in the United Kingdom voluntary sector: Determinants of donor behavior. *Psychology & Marketing*, *21*(8), 613–635.

Sarstedt, M., Hair, J. F., Cheah, J.-H., Becker, J.-M., & Ringle, C. M. (2019). How to specify, estimate, and validate higher-order constructs in PLS-SEM. *Australasian Marketing Journal (AMJ)*, *27*(3), 197–211.

Sarstedt, M., Ringle, C. M., & Hair, J. F. (2017). Partial least squares structural equation modeling. In C. Homburg, M. Klarmann, & A. Vomberg (Eds.), *Handbook of Market Research* (pp. 1–40). Springer.

Sarstedt, M., & Schloderer, M. P. (2010). Developing a measurement approach for reputation of non-profit organizations. *International Journal of Nonprofit and Voluntary Sector Marketing*, *15*(3), 276–299.

Saxton, G. D., & Guo, C. (2011). Accountability online: Understanding the web-based accountability practices of nonprofit organizations. *Nonprofit and Voluntary Sector Quarterly*, *40*(2), 270–295.

Saxton, G. D., Neely, D. G., & Guo, C. (2014). Web disclosure and the market for charitable contributions. *Journal of Accounting and Public Policy*, *33*(2), 127–144.

Schnackenberg, A. K., & Tomlinson, E. C. (2016). Organizational transparency: A new perspective on managing trust in organization-stakeholder relationships. *Journal of Management*, *42*(7), 1784–1810.

Schultz, C., Einwiller, S., Seiffert-Brockmann, J., & Weitzl, W. (2019). When reputation influences trust in nonprofit organizations. The role of value attachment as moderator. *Corporate Reputation Review*, *22*(4), 159–170.

Sekhon, H., Ennew, C., Kharouf, H., & Devlin, J. (2014). Trustworthiness and trust: Influences and implications. *Journal of Marketing Management*, *30*(3–4), 409–430.

Sharp, Z. (2018). Existential angst and identity rethink: The complexities of competition for the nonprofit. *Nonprofit and Voluntary Sector Quarterly*, *47*(4), 767–788.

Sneddon, J. N., Evers, U., & Lee, J. A. (2020). Personal values and choice of charitable cause: An exploration of donors' giving behavior. *Nonprofit and Voluntary Sector Quarterly*, *49*(4), 803–826.

Song, C., & Lee, J. (2016). Citizens' use of social media in government, perceived transparency, and trust in government. *Public Performance & Management Review*, *39*(2), 430–453.

Speckbacher, G. (2008). Nonprofit versus corporate governance: An economic approach. *Nonprofit Management and Leadership*, *18*(3), 295–320.

Stremersch, S., Gonzalez, J., Valenti, A., & Villanueva, J. (2023). The value of context-specific studies for marketing. *Journal of the Academy of Marketing Science*, *51*(1), 50–65.

Vaccaro, A., & Patiño Echeverri, D. (2010). Corporate transparency and green management. *Journal of Business Ethics*, *95*(3), 487–506.

Van Puyvelde, S., Caers, R., Du Bois, C., & Jegers, M. (2012). The governance of nonprofit organizations: Integrating agency theory with stakeholder and stewardship theories. *Nonprofit and Voluntary Sector Quarterly*, *41*(3), 431–451.

Verbruggen, S., Christiaens, J., & Milis, K. (2011). Can resource dependence and coercive isomorphism explain nonprofit organizations' compliance with reporting standards? *Nonprofit and Voluntary Sector Quarterly*, *40*(1), 5–32.

Walk, M., Scott, C., & Littlepage, L. (2021). It's not all the same: Implemented and perceived HR practices in the volunteer context. *Review of Public Personnel Administration*.

Wiepking, P., & Handy, F. (Eds.). (2015). *The Palgrave handbook of global philanthropy*. Palgrave Macmillan UK.

Willems, J., & Faulk, L. (2019). Does voluntary disclosure matter when organizations violate stakeholder trust? *Journal of Behavioral Public Administration*, *2*(1), 1–16.

Willems, J., Jegers, M., & Faulk, L. (2016). Organizational effectiveness reputation in the nonprofit sector. *Public Performance & Management Review*, *39*(2), 454–475.

Wymer, W., Becker, A., & Boenigk, S. (2020). The antecedents of charity trust and its influence on charity supportive behavior. *International Journal of Nonprofit and Voluntary Sector Marketing, e1690*.

TABLE 1: SCALE DEVELOPMENT PROCESS

Stage in scale development process	Methods	Results
1. Construct conceptualization	• Literature review of existing transparency scales (Table 2) • Iteration among Studies 1–3	• Conceptualization and dimensionality[a] of donors' perceptions of NPOs' transparency (Figure 1)
2. Items generation and data collection	• Literature review of existing transparency scales (Table 2) • Iteration among Studies 1–3	• A refined list of 35 manifest items, reflectively[b] measuring the seven subdimensions of donors' perceptions of NPOs' transparency, a third-order[c] formative[b] construct (Appendix 1) • A usable sample (n = 515) regarding donors' information preferences, composed of two subsamples: calibration sample (n = 258) and validation sample (n = 257)
3. Scale purification	• Exploratory and confirmatory factor analyses using, respectively, the calibration and validation samples of Study 3a and 3b (Appendix 4 and Tables 3 and 4).	• A final list of 27 manifest items reflectively measuring the seven subdimensions of donors' perceptions of NPOs' transparency (Appendix 1)
4. Scale reliability and validity	• Assessment of the measurement model using the validation sample of Study 3b (Appendix 5; Tables 3, 4 and 5) • Structural equation modeling on the validation sample of Study 3b (Appendix 6 and Figure 2)	• Confirmation of the reliability[d] of the (sub)dimensions and the final scale of donors' perceptions of NPOs' transparency • Confirmation of the convergent[e], discriminant[f], and nomological[g] validity of the final scale of donors' perceptions of NPOs' transparency

Notes: Study 1 relies on in-depth, semi-structured interviews with experienced donors (n = 19). Study 2 involves a survey of academic experts in NPOs' transparency and donors' behavior (n = 19). Study 3 collects and analyzes data regarding donors' information preferences (n = 515).

[a] Dimensionality: the number of the distinct underlying dimensions of the construct. [b] Reflective versus formative measure: a formative measure assumes the indicator variables cause the measurement of the construct; a reflective measure assumes the indicator variables represent the effects of an underlying construct. [c] The order of a construct indicates the level of abstraction at which the construct is measured. [d] Reliability refers to the replicability and consistency of the results. [e] Convergent validity refers to the extent to which a scale correlates positively with other existing measures of the construct. [f] Discriminant validity refers to the extent to which a scale correlates moderately with a measure capturing a similar, but conceptually different, construct. [g] Nomological validity refers to the extent to which a scale reproduces theoretically established predictions.

TABLE 2: TRANSPARENCY MEASURES IN ORGANIZATIONAL STUDIES

Paper	Construct	Definition	Information Sender and Receiver	Scale Development Process?	Final Measure Form	Nomological Map: Antecedents (A) and Outcomes (O)
For-profit organization setting						
Eggert & Helm, 2003	Relationship transparency	Individual, subjective perception of being informed about the relevant actions and properties of the other party in the interaction.	From vendors to buyers	Yes	Unidimensional 4 items	**A.:** n.a.: **Direct O.:** customer value (+); customer satisfaction (+). **Indirect O.:** repurchase intention (+), search for alternatives (-), word-of-mouth intention (+).
Vaccaro & Patiño Echeverri, 2010	Perceived environmental transparency	People's perceptions of the willingness of the utility to make public information on activities that have impacts on the environment and stakeholders.	From electricity suppliers to customers	No	Unidimensional 4 items	**Direct A.:** environmental awareness (-) **Direct O.:** willingness to engage in pro-environmental behavior.
Pirson & Malhotra, 2011	Transparency	Perceived willingness to share trust-relevant information with vulnerable stakeholders.	From firm to suppliers, investors & customers	No	Unidimensional 4 items	**A.:** n.a. **Direct O.:** trust (+) in shallow relationship.
Dapko, 2012	Perceived firm transparency	Extent to which a stakeholder perceives a firm's conduct is forthright and open regarding matters relevant to the stakeholder.	From firm to customers	Yes	Unidimensional 3 reflective items	**Direct A.:** consumer effort (-), reciprocity (+), firm-damaging information (+). **Direct O.:** skepticism (-), attitude (+), trust (+), purchase intention (+).
Hustvedt & Kang, 2013	Consumer perceptions of the transparency of social responsibility efforts	Consumer perceptions of transparency related to labor and manufacturing processes in the production of apparel and footwear, but no clear definition.	From labor and manufacturing processes of the production of apparel and footwear to customers	Yes	Unidimensional 5 items	**Direct A.:** brand trustworthiness (+), brand social responsibility (+). **Direct O.:** brand purchasing intention (+), brand word of mouth intention (+).

(To be continued)

Paper	Construct	Definition	Information Sender and Receiver	Scale Development Process?	Final Measure Form	Nomological Map: Antecedents (A) and Outcomes (O)
Kim & Ferguson, 2018	Transparency	Openness of CSR information disclosure, both good and bad.	From firm to customers	No	Unidimensional 3 items	**A.:** n.a.: **Direct O.:** effective CSR communication (+).
Cambier & Poncin, 2020	Brand transparency	"The extent to which an entity reveals information about its own decision process, procedures, functioning and performance" (Grimmelikhuijsen & Meijer, 2014, p. 139).	From firm to customers	No	Unidimensional 4 items	**A:** n.a.: **Direct O.:** perceived empowerment (+), perceived brand integrity (+) **Indirect O:** behavioral intentions (+).
Public organization setting						
Park & Blenkinsopp, 2011	Transparency	Availability of information to the general public and clarity in government rules, regulations, and decisions.	From government to citizens	No	Unidimensional 5 items	**A.:** n.a.: **Direct O.:** satisfaction (+), corruption (-), trust (+).
Kim & Lee, 2012	Assessment of government transparency	No clear definition.	From local government to citizens	No	Unidimensional 5 items	**Direct A.:** e-participants' developments (+), influence on decision-making (+). **Indirect A.:** satisfaction with e-participation application (+), satisfaction with government responsiveness (+). **Direct O.:** e-participants' trust in government (+).
Song & Lee, 2016	Perceived transparency of government	Extent to which citizens are able to access government agencies and officials and are informed about what the government is doing (Halachmi & Greiling, 2013).	From government to citizens	No	Unidimensional 2 reflective items	**Direct A.:** citizens' use of social media in government; (+). **Direct O.:** trust (+).

Notes: n.a.: Not available. (+): Positive relation hypothesized. (-): Negative relation hypothesized.

TABLE 3: EXPLORATORY AND CONFIRMATORY ANALYSES OF REFLECTIVELY MEASURED SUBDIMENSIONS (STUDY 3A AND 3B)

	Exploratory Factor Analysis (Calibration Sample/Validation Sample)							Confirmatory Analysis Loading (Calibration Sample/Validation Sample)
	Factor 1/1	Factor 6/7	Factor 2/2	Factor 7/5	Factor 3/4	Factor 5/6	Factor 4/3	
Items	Visual attractiveness	Findability	Understandability	Usefulness	Balance	Timeliness	Reliability	
ATTR_1	.74/.80							.89/.89
ATTR_2	.77/.73							.87/.87
ATTR_3	.79/.83							.91/.90
ATTR_4	.78/.77							.88/.89
ATTR_5	.79/.81							.87/.88
FIN_3		.69/.69						.92/.92
FIN_4		.65/.69						.91/.93
FIN_5		.64/.67						.91/.91
UND_2			.72/.71					.92/.91
UND_3			.79/.78					.95/.94
UND_4			.76/.81					.93/.93
UND_5			.71/.83					.91/.94
USE_1				.58/.65				.89/.85
USE_2				.57/.70				.89/.91
USE_3				.50/.67				.86/.89
USE_5				55/.67				.90/.88
BAL_1					.69/.73			.85/.85
BAL_3					.78/.73			.89/.84
BAL_4					.68/.66			.84/.82
BAL_5					.74/.72			.86/.86
TIM_1						.66/.73		.93/.94
TIM_2						.68/.77		.91/.94
TIM_3						.69/.63		.93/.92
REL_1							.61/.63	.84/.86
REL_2							.84/.81	.94/.92
REL_3							.82/.89	.90/.96
REL_4							.77/.81	.90/.91
Eigenvalue	13.2/12.6	.63/.58	2.28/2.24	.57/1.13	1.58/1.60	.74/1.13	1.05/1.25	
% of variance explained	67.5/63.6	3.2/2.9	11.6/11.3	2.9/5.7	8.0/8.1	3.8/4.7	5.3/6.2	

Notes: Loadings equal to or less than 0.36 are not displayed, to improve the readability of the table. For the results presentation to correspond to our theoretical framework (see Figure 1), the factor "Findability" is positioned as the second factor despite its little explanatory power.

TABLE 4: EXPLORATORY AND CONFIRMATORY ANALYSIS OF FORMATIVELY MEASURED DIMENSIONS AND CONSTRUCT (STUDY 3A AND 3B)

	PLS-SEM Weights (Calibration Sample/Validation Sample)				Internal Reliability and Validity Analyses							
					Internal consistency reliability			Convergent validity	Collinearity VIF values			
	Dimensions			Construct					Dimensions			Construct
(Sub)dimensions	Accessibility	Completeness	Accuracy	NPOs' transparency	Cronbach alpha	CR	ρ_A	AVE	Accessibility	Completeness	Accuracy	NPOs' transparency
Visual attractiveness	.45*/.47*				.93	.95	.93	.79	1.55			
Findability	.28*/.29*				.91	.94	.91	.85	1.69			
Understandability	.42*/.43*				.95	.96	.95	.87	1.80			
Usefulness		.60*/.64*			.91	.93	.91	.78		1.35		
Balance		.51*/.51*			.87	.91	.87	.71		1.35		
Timeliness			.52*/.50*		.93	.95	.93	.87			1.34	
Reliability			.66*/.65*		.93	.95	.93	.84			1.34	
Accessibility				.51*/.50*								2.13
Completeness				.32*/.31*								2.52
Accuracy				.28*/.30*								2.51

* The t-test is significant at the threshold of 1%.

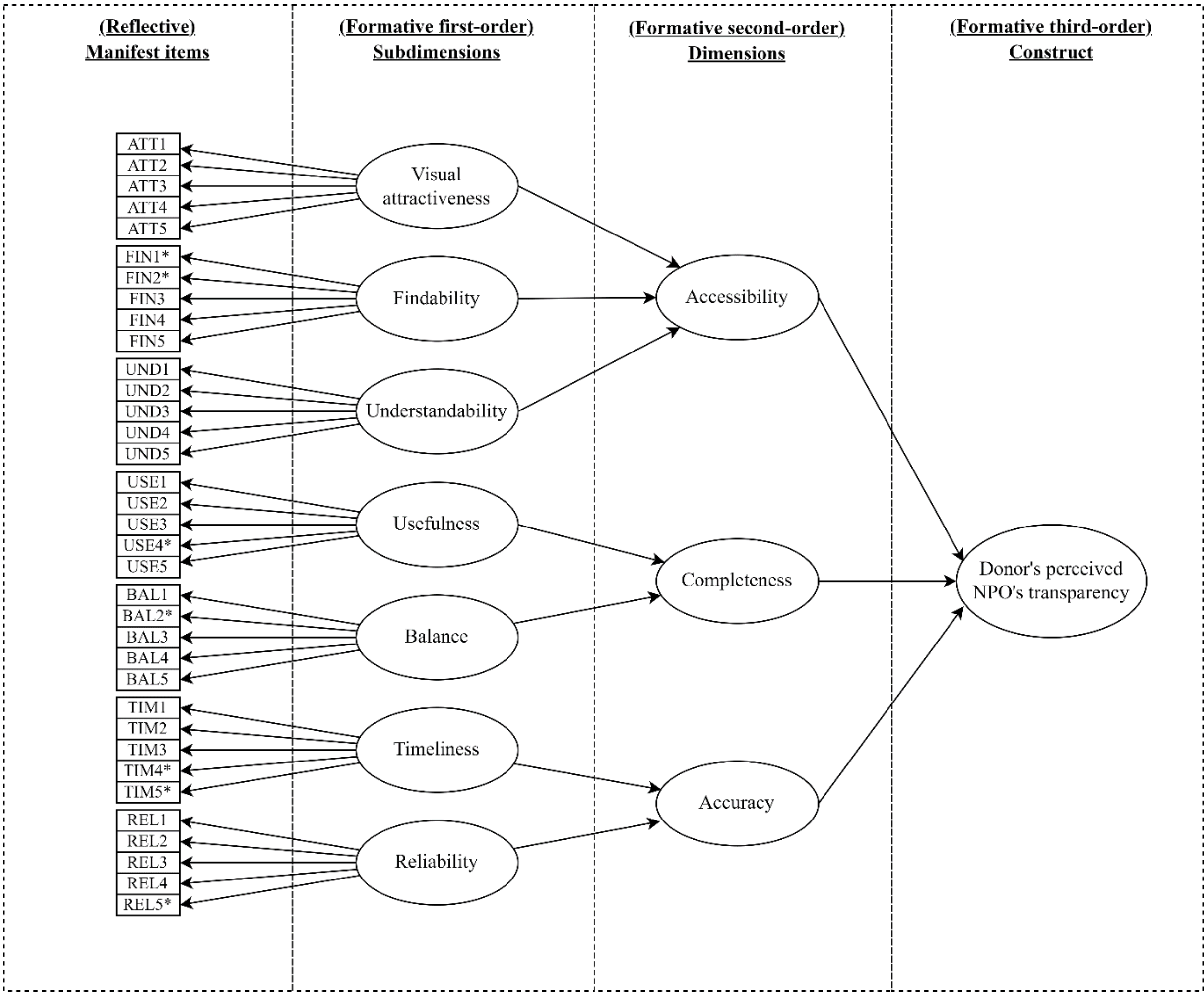
Notes: CR: composite reliability. ρ_A: rho A, as defined by Dijkstra and Henseler (2015). AVE: average variance explained. VIF: variance inflation factor.

TABLE 5: INTERNAL DISCRIMINANT VALIDITY OF SUBDIMENSIONS

	Visual attractiveness	Findability	Understandability	Usefulness	Balance	Timeliness	Reliability
Visual attractiveness	***.88 / .79***						
Findability	.55 (.60) / .51(.55)	***.91 / .85***					
Understandability	.64 (.68) / .55(.58)	.62(.68) / .60(.65)	***.93 / .87***				
Usefulness	.56(.61) /.50(.54)	.67(.74) / .60(.66)	.68(.73) / .59(.63)	***.88 / .78***			
Balance	.36(.39) / .38(.41)	.53(.59) / .51(.57)	.42(.45) / .40(.44)	.61(.69) / .51(.57)	***.86 / .71***		
Timeliness	.56(.60) / .57(.61)	.60(.66) / .47(.51)	.58(.62) / .55(.58)	.66(.72) / .63(.69)	.60(.66) / .53(.59)	***.92 / .87***	
Reliability	.39(.42) / .37(.40)	.55(.60) / .54(.58)	.55(.59) / .51(.55)	.64(.70) / .59(.64)	.49(.55) / .47(.42)	.44(.48) / .50(.54)	***.89 / .84***

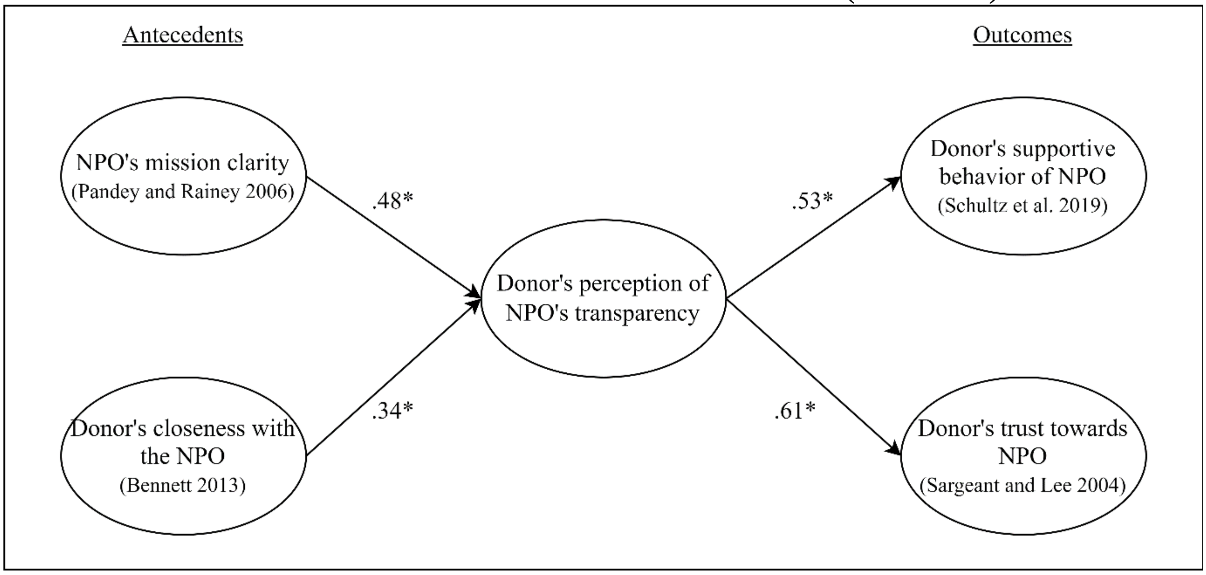
Notes: The score of the square root of average variance extracted (AVE) is on the diagonal (in bold and in italic). The heterotrait-monotrait (HTMT) ratio is between parentheses. Two sets of values are reported: values for the calibration sample before the slash, and for the validation sample after it.

FIGURE 1: CONCEPTUALIZATION OF NPOS' PERCEIVED TRANSPARENCY



*Items deleted through the scale purification process.
Notes: The direction of arrows indicates the nature (reflective versus formative) of the relation: the arrow to the left (←) represents a reflective measurement model while the arrow to the right (→) represents a formative measurement model.

FIGURE 2: NOMOLOGICAL NETWORK OF NPOS' TRANSPARENCY (STUDY 3B)



* The t-test is significant at $p < .01$.