

The Cultural-Cognitive-Normative (CCN) Framework: Understanding Organ Donation Intentions in Vietnam



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ABSTRACT: This study introduces the Cultural-Cognitive-Normative (CCN) framework, a novel theoretical integration that explains organ donation intentions within culturally sensitive contexts. We examine how cultural values moderate the attitude-intention relationship in organ donation decisions by drawing on the Theory of Planned Behavior, the Health Belief Model, and the Value-Belief-Norm Theory. Using structural equation modeling with data from 305 Vietnamese citizens, we found strong support for our proposed model ($R^2=0.588$ for donation intention). Results reveal that the perceived severity of organ shortage ($\beta=0.569$) and perceived behavioral control ($\beta=0.458$) strongly affect attitudes toward donation. At the same time, religious and cultural values significantly moderate the attitude-intention relationship ($\beta=-0.328$). This study contributes to organ donation literature by demonstrating how traditional cultural beliefs can attenuate the translation of positive attitudes into behavioral intentions. Our findings offer implications for policymakers and healthcare practitioners seeking to enhance organ donation rates in collectivistic societies with strong ancestral traditions.

KEYWORDS: Organ donation, Cultural-Cognitive-Normative framework, Theory of Planned Behavior, Health Belief Model, Cultural values, Vietnam

1. INTRODUCTION

Organ transplantation represents one of modern medicine's most significant achievements, offering life-saving solutions for patients with end-stage organ failure. However, a critical global challenge persists: the shortage of donated organs relative to demand (Shepherd et al., 2014; Irving et al., 2012). This disparity is particularly acute in developing countries with emerging transplantation capabilities but limited donation infrastructures (Muthusamy et al., 2018). In Vietnam, despite performing over 9,089 organ transplantations since the first kidney transplant in 1992, the waiting list for organs continues to grow exponentially (Ministry of Health, 2024). While 95,607 Vietnamese citizens have registered as potential donors, brain-death donations—the most valuable source of transplantable organs—remain exceptionally rare, with only 41 cases in 2024, the highest annual figure to date (Government of Vietnam, 2024).

This significant disparity between registration intentions and actual donations demands deeper theoretical exploration. Previous research has applied various psychological frameworks to explain organ donation intentions, including the Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975), the Theory of Planned Behavior (TPB) (Ajzen, 1991), the Health Belief Model (HBM) (Rosenstock, 1974), and Value-Belief-Norm Theory (VBN) (Stern et al., 1999). However, these individual theories fail to capture the complex interplay between cultural traditions, cognitive processes, and social norms that characterize decision-making in collectivistic societies with strong ancestral traditions (Hyde & White, 2009; Wong & Chow, 2017).

The Vietnamese context offers a compelling case study due to its unique sociocultural characteristics. Despite the introduction of major religions, Vietnamese society maintains indigenous beliefs, particularly ancestor worship, which views death as a transition to another realm where bodily integrity remains important (Le, 2024). Traditional beliefs emphasizing the return of an intact body to ancestors directly conflict with organ donation practices, creating tension between modern medical ethics and cultural traditions (Phan, 2012).

This study addresses this complex phenomenon by introducing the Cultural-Cognitive-Normative (CCN) framework, which integrates elements from established behavioral theories while explicitly accounting for the moderating role of cultural values. We seek to answer two critical questions: (1) What are the primary determinants of attitudes toward organ donation in the

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Vietnamese context? and (2) How do cultural and religious values moderate the translation of positive attitudes into donation intentions?

Our research makes several significant contributions. First, we develop and empirically validate the CCN framework, offering a more culturally sensitive theoretical lens for understanding organ donation intentions. Second, we provide the first comprehensive examination of organ donation determinants in Vietnam, addressing the geographical bias in existing literature toward Western contexts. Third, we empirically demonstrate how traditional cultural values can attenuate the attitude-intention relationship, explaining the "intention gap" observed in many collectivistic societies.

The remainder of this paper is structured as follows: Section 2 reviews relevant literature and develops our theoretical framework and hypotheses. Section 3 describes our research methodology. Section 4 presents our findings, followed by a discussion of theoretical and practical implications in Section 5. We conclude with limitations and future research directions in Section 6.

2. THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT

2.1 The Organ Donation Context

Organ donation involves the voluntary gifting of viable organs for transplantation to patients with end-stage organ failure. This process may occur during a donor's lifetime (living donation) or after death (deceased donation). Brain death donation represents a particularly crucial source of multiple viable organs (Domínguez-Gil et al., 2021). Despite technological advances in transplantation procedures, the global shortage of donated organs remains a critical public health challenge (WHO, 2022).

In Vietnam, the 2006 Law on Donation, Removal, and Transplantation of Human Tissues and Organs established the legal framework for transplantation activities. However, cultural factors impede donation rates (Phan, 2012). A study by Duong et al. (2024) found that while 94.2% of medical students acknowledged that organ donation saves lives, only 55.4% were willing to register as donors, highlighting the discrepancy between knowledge and behavioral intention.

2.2 Existing Theoretical Frameworks

Several theoretical frameworks have been applied to understand organ donation intentions:

The theory of Reasoned Action (TRA) posits that behavioral intentions are primarily determined by attitudes toward the behavior and subjective norms (Fishbein & Ajzen, 1975). However, TRA assumes complete volitional control over behavior, overlooking external constraints.

The theory of Planned Behavior (TPB) extends TRA by adding perceived behavioral control as a determinant of intentions and behavior (Ajzen, 1991). Several studies have applied TPB to organ donation contexts (Hyde & White, 2009; Masser et al., 2009), finding that attitude, subjective norms, and perceived behavioral control significantly predict donation intentions.

The Health Belief Model (HBM) focuses on health-related perceptions, including perceived susceptibility, severity, benefits, barriers, and self-efficacy (Rosenstock, 1974). In the context of organ donation, HBM components have explained willingness to register as donors (Quick et al., 2012; Pradeep et al., 2023).

Value-Belief-Norm Theory (VBN) links value systems, beliefs, and personal norms to prosocial behaviors (Stern et al., 1999). While originally developed for environmental behaviors, VBN offers insights into altruistic actions like organ donation.

Despite their contributions, these frameworks inadequately address the cultural dimension of health decisions, particularly in non-Western contexts where collectivistic values and ancestral traditions significantly influence individual choices.

2.3 The Cultural-Cognitive-Normative (CCN) Framework

To address these limitations, we propose the Cultural-Cognitive-Normative (CCN) framework (Figure 1), which integrates elements from TPB, HBM, and VBN while explicitly accounting for cultural values. The CCN framework posits that three interconnected dimensions shape organ donation intentions:

1. Cultural dimension: Encompasses religious beliefs, ancestral traditions, and cultural values that shape fundamental worldviews regarding body integrity, death, and the afterlife.
2. Cognitive dimension: Includes perceived benefits, barriers, severity, susceptibility, and behavioral control—cognitive assessments that individuals make when considering organ donation.
3. Normative dimension: Comprises subjective norms and perceived social expectations regarding organ donation behaviors.

The CCN framework proposes that cognitive and normative factors directly influence attitudes toward organ donation, while cultural values moderate the translation of attitudes into behavioral intentions. This moderation effect may explain why positive attitudes toward donation do not necessarily translate into registration or consent behaviors in cultural contexts where ancestral beliefs emphasize bodily integrity after death.

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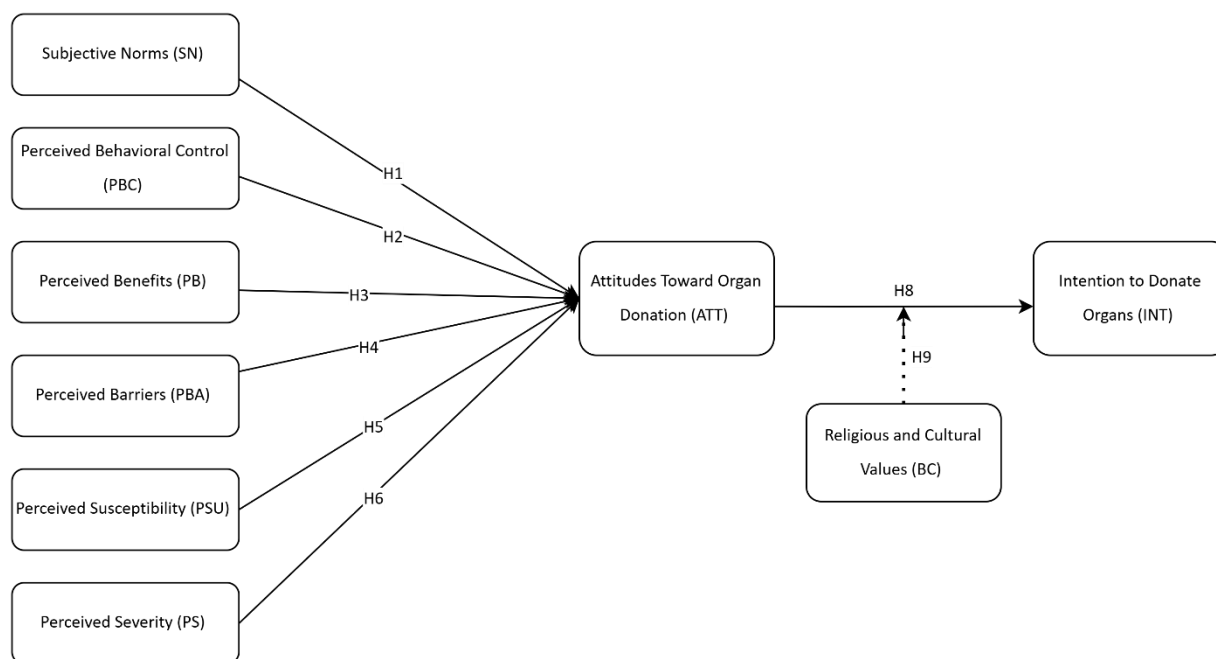


Figure 1. The Cultural-Cognitive-Normative (CCN) Framework

2.4 Hypothesis Development

Based on the CCN framework, we develop the following hypotheses:

2.4.1 Normative Dimension

Subjective norms (SN) represent perceived social pressure to perform or not perform a behavior (Fishbein & Ajzen, 2011). Family opinions in collectivistic cultures like Vietnam significantly influence health decisions (Jones et al., 2009). Studies have shown that family support correlates positively with signing donor cards (Reubsaet et al., 2001; Jacoby & Jaccard, 2010). Therefore:
H1: Subjective norms have a positive relationship with attitudes toward organ donation.

2.4.2 Cognitive Dimension

Perceived behavioral control (PBC) reflects individuals' perception of their ability to perform a behavior (Ajzen, 1991). This includes knowledge about procedures and confidence in making donation decisions in organ donation contexts. Feeley et al. (2007) found that greater knowledge about organ donation correlates with more positive attitudes. Thus:

H2: Perceived behavioral control positively correlates with attitudes toward organ donation.

Perceived benefits (PB) refer to positive outcomes expected from a behavior (Glanz & Bishop, 2010). Quick et al. (2016) found that perceived benefits positively correlate with attitudes toward organ donation. Therefore:

H3: Perceived benefits have a positive relationship with attitudes toward organ donation.

Perceived barriers (PBA) encompass perceived obstacles to performing a behavior (Champion & Skinner, 2008). Studies have identified concerns about medical system trustworthiness (Morgan et al., 2006) and procedural knowledge (Muaid & Chesney, 2022) as barriers to donation. Thus:

H4: Perceived barriers have a negative relationship with attitudes toward organ donation.

Perceived susceptibility (PSU) reflects individuals' assessment of their likelihood of needing an organ transplant (Champion & Skinner, 2008). Williamson (2017) found that perceiving oneself or loved ones as potential transplant recipients positively influences donation attitudes. Therefore:

H5: Perceived susceptibility has a positive relationship with attitudes toward organ donation.

Perceived severity (PS) refers to beliefs about the seriousness of organ shortage consequences (Rosenstock, 1974). Hyde et al. (2012) found that awareness of organ shortage severity correlates with stronger donation support. Thus:

H6: Perceived severity has a positive relationship with attitudes toward organ donation.

2.4.3 Mediating Role of Attitudes

Attitudes toward organ donation represent overall evaluations of donation behaviors. According to TRA and TPB, attitudes mediate the relationships between belief-based constructs and behavioral intentions (Ajzen & Fishbein, 1980). Therefore:

H7a-f: Attitudes mediate the relationships between (a) subjective norms, (b) perceived behavioral control, (c) perceived barriers, (d) perceived benefits, (e) perceived susceptibility, and (f) perceived severity and intention to donate organs.

H8: Attitudes have a positive relationship with the intention to donate organs.

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2.4.4 Cultural Dimension as Moderator

Religious and cultural values (BC) encompass beliefs about bodily integrity, ancestral worship, and the afterlife that may conflict with organ donation practices. In Vietnam, ancestral worship creates obligations to ensure physical, material, and spiritual integrity for deceased family members (Le, 2024). Therefore:

H9: Religious and cultural values negatively moderate the positive relationship between attitudes and intention to donate organs.

3. METHODOLOGY

3.1 Sample and Data Collection

Data were collected surveying Vietnamese citizens aged 18 and above between January and March 2025. Using convenience sampling, we distributed online and in-person questionnaires across diverse geographical areas of Vietnam. Of 350 questionnaires distributed, 305 valid responses were obtained (87.1% response rate). Table 1 presents the demographic characteristics of the sample.

Table 1. Demographic Characteristics of Respondents (N=305)

Characteristic	Category	Frequency	Percentage
Gender	Male	128	42.1%
	Female	177	57.9%
Age	18-30	221	72.4%
	31-45	66	21.7%
	46-60	12	3.9%
	Over 60	6	2.0%
Education	Secondary school	22	7.2%
	High school	68	22.4%
	College/University	169	55.3%
	Postgraduate	46	15.1%
Monthly income (million VND)	Under 5	69	22.7%
	5-10	88	29.0%
	10-20	104	34.2%
	Over 20	44	13.8%
Residence	Urban	176	57.6%
	Rural	129	42.4%
Religion	Buddhism	97	31.9%
	Christianity	32	10.5%
	Folk traditions	46	15.1%
	No religion	122	40.1%
	Other	8	2.3%
Organ donor registration	Yes	43	14.1%
	No	262	85.9%

3.2 Measurement Instruments

All constructs were measured using multiple-item scales adapted from previous studies and translated into Vietnamese following Brislin's (1970) back-translation procedure. All items were measured on a 5-point Likert scale (1=strongly disagree, 5=strongly agree).

Subjective norms (SN) were measured using five items adapted from Ajzen (1991) and Park & Smith (2007), assessing perceived social pressure from family, friends, and important others regarding organ donation.

Perceived behavioral control (PBC) was measured using five items from Ajzen (1991) and Hyde & White (2009), capturing the perceived ability to register as an organ donor.

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Perceived benefits (PB) were assessed using five items from Champion & Skinner (2008) and Quick et al. (2012), measuring expected positive outcomes from organ donation.

Perceived barriers (PBA) were measured using five items from Champion & Skinner (2008) and Morgan et al. (2006), assessing perceived obstacles to donation.

Perceived susceptibility (PSU) was measured using five items adapted from Champion & Skinner (2008) and Williamson (2017), capturing the perceived likelihood of needing organ transplantation.

Perceived severity (PS) was assessed using five items from Rosenstock (1974) and Hyde et al. (2012), measuring the perceived seriousness of organ shortage.

Religious and cultural values (BC) was measured using six items explicitly developed for this study based on Le (2024) and Phan (2012), capturing beliefs about bodily integrity, ancestral traditions, and the afterlife.

Attitudes toward organ donation (ATT) was measured using five items from Ajzen (1991) and Morgan & Miller (2002), assessing overall evaluations of organ donation.

Intention to donate organs (INT) was measured using five items from Ajzen (1991) and Hyde & White (2009), capturing willingness to register as an organ donor.

3.3 Data Analysis

We employed a dual analytical approach combining partial least squares structural equation modeling (PLS-SEM). PLS-SEM was conducted using SmartPLS 4.0 software (Hair et al., 2017) to test the hypothesized relationships in our model. Following Hair et al.'s (2019) two-stage approach, we assessed the measurement model (reliability and validity) and then evaluated the structural model and hypothesized relationships. For the moderation analysis, we used the product indicator approach (Chin et al., 2003).

4. RESULTS

4.1 Measurement Model Assessment

4.1.1 Indicator Reliability

All indicators showed outer loadings above the recommended threshold of 0.708 (Hair et al., 2019), ranging from 0.774 to 0.953, confirming indicator reliability.

4.1.2 Construct Reliability and Convergent Validity

As shown in Table 2, all constructs demonstrated excellent reliability with Composite Reliability (CR) values between 0.892 and 0.975, well above the recommended threshold of 0.70 (Hair et al., 2019). Cronbach's Alpha values (0.849-0.968) confirmed internal consistency reliability. Average Variance Extracted (AVE) values ranged from 0.624 to 0.886, exceeding the minimum threshold of 0.50, thus establishing convergent validity (Fornell & Larcker, 1981).

Table 2. Construct Reliability and Convergent Validity

Construct	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
ATT	0.849	0.892	0.624
BC	0.946	0.957	0.787
INT	0.968	0.975	0.886
PB	0.934	0.950	0.791
PBA	0.947	0.959	0.824
PBC	0.933	0.949	0.790
PS	0.932	0.948	0.786
PSU	0.939	0.953	0.803
SN	0.935	0.950	0.793

4.1.3 Discriminant Validity

Discriminant validity was assessed using the Heterotrait-Monotrait (HTMT) ratio of correlations (Henseler et al., 2015). All HTMT values were below the conservative threshold of 0.85, confirming discriminant validity. The maximum HTMT value was 0.626 between BC and INT, indicating that the constructs are empirically distinct.

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4.2 Structural Model Assessment

4.2.1 Direct and Moderating Effects

Table 3 presents the path coefficients, t-values, and significance levels for the hypothesized direct relationships and the moderating effect. All hypothesized relationships were statistically significant ($p < 0.001$), supporting hypotheses H1-H6, H8, and H9.

Table 3. Direct and Moderating Effects Analysis

Hypothesis	Relationship	Path Coefficient (β)	t-value	p-value	Supported
H1	SN \rightarrow ATT	0.325	9.696	<0.001	Yes
H2	PBC \rightarrow ATT	0.458	14.761	<0.001	Yes
H3	PB \rightarrow ATT	0.320	10.636	<0.001	Yes
H4	PBA \rightarrow ATT	-0.262	9.226	<0.001	Yes
H5	PSU \rightarrow ATT	0.137	3.672	<0.001	Yes
H6	PS \rightarrow ATT	0.569	18.217	<0.001	Yes
H8	ATT \rightarrow INT	0.348	10.885	<0.001	Yes
H9	BC \times ATT \rightarrow INT	-0.328	8.108	<0.001	Yes

Among the predictors of attitudes toward organ donation, perceived severity (PS) demonstrated the strongest effect ($\beta = 0.569$, $p < 0.001$), followed by perceived behavioral control (PBC) ($\beta = 0.458$, $p < 0.001$), subjective norms (SN) ($\beta = 0.325$, $p < 0.001$), and perceived benefits (PB) ($\beta = 0.320$, $p < 0.001$). Perceived barriers (PBA) had a significant negative effect ($\beta = -0.262$, $p < 0.001$), while perceived susceptibility (PSU) showed the weakest, though still significant, positive effect ($\beta = 0.137$, $p < 0.001$).

Attitudes toward organ donation (ATT) positively influenced intention to donate (INT) ($\beta = 0.348$, $p < 0.001$), supporting H8. The interaction term (BC \times ATT) demonstrated a significant negative effect on intention ($\beta = -0.328$, $p < 0.001$), confirming H9 and supporting the moderating role of religious and cultural values. This negative moderation effect indicates that for individuals with strong traditional cultural values, the positive relationship between attitudes and intention was substantially weaker than those with weaker cultural ties, supporting a key tenet of our CCN framework.

4.2.2 Mediating Effects

Table 4 presents the results of the specific indirect effects analysis, examining the mediating role of attitudes in the relationships between predictors and intention to donate organs.

Table 4. Specific Indirect Effects Analysis

Hypothesis	Indirect Path	Indirect Effect	t-value	p-value	Supported
H7a	SN \rightarrow ATT \rightarrow INT	0.113	7.332	<0.001	Yes
H7b	PBC \rightarrow ATT \rightarrow INT	0.159	9.798	<0.001	Yes
H7c	PB \rightarrow ATT \rightarrow INT	0.111	7.789	<0.001	Yes
H7d	PBA \rightarrow ATT \rightarrow INT	-0.091	7.116	<0.001	Yes
H7e	PSU \rightarrow ATT \rightarrow INT	0.048	3.503	<0.001	Yes
H7f	PS \rightarrow ATT \rightarrow INT	0.198	9.848	<0.001	Yes

All indirect effects were statistically significant ($p < 0.001$), supporting H7a-f and confirming the mediating role of attitudes. The strongest indirect effect was from perceived severity to intention through attitudes ($\beta = 0.198$, $p < 0.001$), followed by perceived behavioral control ($\beta = 0.159$, $p < 0.001$), subjective norms ($\beta = 0.113$, $p < 0.001$), and perceived benefits ($\beta = 0.111$, $p < 0.001$). Perceived barriers had a significant negative indirect effect on intention through attitudes ($\beta = -0.091$, $p < 0.001$), while perceived susceptibility showed the weakest indirect effect ($\beta = 0.048$, $p < 0.001$).

4.2.3 Coefficient of Determination (R^2) and Effect Sizes (f^2)

The model explained 74.3% of the variance in attitudes toward organ donation ($R^2 = 0.743$) and 58.8% in intention to donate organs ($R^2 = 0.588$). These R^2 values indicate substantial explanatory power according to Hair et al.'s (2019) guidelines.

The f^2 values for the predictors of attitudes were: perceived severity ($f^2 = 1.243$, large effect), perceived behavioral control ($f^2 = 0.809$, large effect), subjective norms ($f^2 = 0.409$, large effect), perceived benefits ($f^2 = 0.393$, large effect), perceived barriers

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($f^2=0.265$, medium effect), and perceived susceptibility ($f^2=0.072$, small effect). For the intention to donate, attitudes had a medium-to-large effect ($f^2=0.292$), while the moderating effect of religious and cultural values had a medium effect ($f^2=0.217$).

5. DISCUSSION

5.1 Theoretical Implications

This study introduces and empirically validates the Cultural-Cognitive-Normative (CCN) framework, addressing significant gaps in existing organ donation literature. Our findings offer several important theoretical contributions.

First, our results demonstrate the value of integrating multiple theoretical perspectives to understand complex health behaviors, particularly in culturally specific contexts. The strong explanatory power of our model ($R^2=0.743$ for attitudes and $R^2=0.588$ for intentions) supports the CCN framework's efficacy in explaining organ donation decisions more comprehensively than single-theory approaches. This echoes calls from scholars (e.g., Hyde & White, 2009; Wong & Chow, 2017) for more integrated theoretical models that account for cultural dimensions in health behavior research.

Second, our findings reveal the hierarchy of factors influencing attitudes toward organ donation in the Vietnamese context. The dominant role of perceived severity ($\beta=0.569$) highlights the importance of awareness regarding organ shortage consequences. This finding extends previous research by demonstrating that severity perceptions may be particularly influential in developing countries where public awareness of health issues is evolving (Williamson et al., 2017; Park et al., 2019). Similarly, the strong effect of perceived behavioral control ($\beta=0.458$) underscores the importance of knowledge and self-efficacy in shaping donation attitudes, consistent with Feeley et al.'s (2007) findings among university students.

Third, our demonstration of the moderating effect of religious and cultural values represents a significant theoretical advancement. The negative moderation effect ($\beta=-0.328$) empirically validates the core premise of our CCN framework: traditional cultural values can impede the translation of positive attitudes into behavioral intentions. This helps explain the "attitude-behavior gap" observed in organ donation research (Siegel et al., 2010) and offers a theoretical mechanism for understanding why some societies with positive attitudes toward donation still exhibit low registration rates. This finding resonates with Le's (2024) qualitative insights about ancestral worship in Vietnam and extends them through quantitative validation.

Finally, by examining organ donation in Vietnam, our study addresses the geographical bias in existing literature, which predominantly focuses on Western contexts. Our findings reveal patterns that align with and diverge from Western-based studies, underscoring the need for culturally sensitive theoretical frameworks. For instance, while subjective norms significantly influenced attitudes ($\beta=0.325$) as in Western studies (Ajzen, 1991), the moderating effect of cultural values represents a distinctive feature of collectivistic societies with strong ancestral traditions.

5.2 Practical Implications

Our findings offer several actionable insights for healthcare policymakers and practitioners seeking to enhance organ donation rates in Vietnam and similar cultural contexts.

First, the strong influence of perceived severity suggests that communication campaigns should emphasize the critical nature of organ shortages and their consequences for patients and families. Educational initiatives could highlight the number of patients awaiting transplants and mortality rates due to organ shortages, thereby strengthening public awareness of the issue's gravity.

Second, the significant impact of perceived behavioral control indicates the importance of enhancing public knowledge about donation procedures and simplifying registration processes. Initiatives might include clear, step-by-step guides to registration, information about eligibility criteria, and addressing common misconceptions about organ donation.

Third, the positive influence of subjective norms points to the value of family-centered approaches. Rather than targeting individuals in isolation, campaigns could encourage family discussions about organ donation, perhaps developing materials to facilitate such conversations. Community leaders and respected figures could also be engaged as champions to shape social norms around donation.

Fourth, given the moderating effect of religious and cultural values, interventions should adopt culturally sensitive approaches. Rather than contradicting traditional beliefs, campaigns could explore ways to reconcile organ donation with ancestral respect. For instance, messaging could emphasize how donation represents an extension of Vietnamese values of compassion and helping others, potentially framing it as a modern expression of ancestral virtues.

Finally, collaboration with religious leaders could help address concerns about bodily integrity after death. Many religious traditions have official positions supporting organ donation as an act of charity, and highlighting these perspectives could help reduce perceived conflicts between donation and religious beliefs.

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6. LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

Despite its contributions, this study has several limitations that suggest directions for future research. First, our convenience sampling approach limits generalizability. Future studies should employ random sampling techniques across diverse regions of Vietnam to validate our findings.

Second, our cross-sectional design prevents causal inferences. Longitudinal studies tracking how attitudes and intentions translate into actual registration behaviors would provide stronger evidence for the relationships proposed in our model.

Third, while our measurement of religious and cultural values captured key aspects of Vietnamese traditions, more nuanced scales might better differentiate between specific religious beliefs, folk traditions, and ancestral worship practices. Future research could develop and validate culture-specific measures of beliefs related to bodily integrity and the afterlife.

Fourth, our study focused on the intention to register as an organ donor rather than actual registration behavior. Future research should examine registration intentions and behaviors, using experimental designs to test the effectiveness of interventions informed by the CCN framework.

Finally, comparative studies across different Asian cultures with varying degrees of ancestral worship and collectivism would help establish the boundaries and generalizability of the CCN framework. Such cross-cultural validation would strengthen the framework's theoretical foundation and practical applicability.

7. CONCLUSION

This study introduces the Cultural-Cognitive-Normative (CCN) framework as a novel theoretical approach to understanding organ donation intentions in culturally sensitive contexts. By integrating elements from established behavioral theories while explicitly accounting for cultural values, our model offers a more comprehensive explanation of the factors influencing donation decisions in Vietnam.

Our findings reveal that organ shortage severity perceived behavioral control, subjective norms, and perceived benefits primarily shape organ donation attitudes. At the same time, cultural and religious values significantly moderate the translation of attitudes into behavioral intentions.

The CCN framework advances organ donation theory by demonstrating how cultural values interact with cognitive and normative factors to shape health decisions. For practitioners, our findings suggest that effective interventions must address not only awareness and procedural knowledge but also cultural beliefs and family dynamics, with particular emphasis on communicating benefits as a foundation for attitude change. By adopting culturally sensitive approaches that respect traditional values while promoting organ donation as an expression of compassion, healthcare systems may bridge the gap between positive attitudes and actual donation behaviors, ultimately addressing the critical shortage of transplantable organs in Vietnam and beyond.

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