



MASTERARBEIT | MASTER'S THESIS

Titel | Title

Impact and Key Drivers of Pay-What-You-Want Pricing in the
Food Service Industry

verfasst von | submitted by
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angestrebter akademischer Grad | in partial fulfilment of the requirements for the degree of
Master of Science (MSc)

Wien | Vienna, 2025

Studienkennzahl lt. Studienblatt | Degree
programme code as it appears on the
student record sheet:

UA 066 915

Studienrichtung lt. Studienblatt | Degree
programme as it appears on the student
record sheet:

Masterstudium Betriebswirtschaft

Betreut von | Supervisor:

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Abstract (English)

This thesis aims to identify what influences consumers to opt for a Pay-what-you-want restaurant, where consumers have the freedom to pay any amount, they wish including zero, and to determine which factors influence this decision. A discrete choice experiment (DCE) embedded in an online questionnaire, alongside a literature review, was conducted with 269 participants. The study utilized Random Effects and Mixed Logit Models to examine consumer preferences and heterogeneity in decision-making. Pricing autonomy emerged as a key motivator, enabling consumers to align payments with personal satisfaction and fairness. While social pressure affects perceptions, it has limited influence on real-time decisions. Ethical incentives, such as supporting social causes, elicited mixed reactions, motivating some while deterring others. The interplay between these factors highlights the importance of tailored strategies in PWYW models. These findings help businesses optimize PWYW models by balancing autonomy, social responsibility, and discretion for wider appeal. The study's small, non-representative sample and limited DCE attributes constrain generalizability. Future research should use diverse contexts, larger samples, and segment consumers to refine insights.

Abstract (Deutsch)

Ziel der Arbeit ist es herauszufinden, warum sich Menschen für ein Pay-what-you-want-Restaurant entscheiden – ein Restaurant, in dem sie selbst festlegen können, wie viel sie zahlen möchten, sogar gar nichts - und welche Aspekte diese Entscheidung beeinflussen. Auf Basis einer Literaturrecherche wurde ein Discrete-Choice-Experiment (DCE) mit 269 Teilnehmern durchgeführt, das in einen Online-Fragebogen eingebettet war. In der Studie wurden Random-Effects-Modelle und gemischte Logit-Modelle verwendet, um die Präferenzen der Verbraucher und die Heterogenität der Entscheidungsfindung zu untersuchen. Die Preisautonomie erwies sich dabei als Hauptmotivator, der den Konsumenten in ein solches Restaurant treibt. Sozialer Druck wirkt sich zwar auf die Wahrnehmung aus, hat aber nur begrenzten Einfluss auf die Entscheidung. Anreize, wie die Unterstützung wohltätiger Zwecke, lösten gemischte Reaktionen aus, die einige motivierten, während sie andere abschreckten. Das Zusammenspiel dieser Faktoren verdeutlicht, wie wichtig maßgeschneiderte Strategien in PWYW-Modellen sind. Die Ergebnisse können Unternehmen helfen, PWYW-Modelle durch ein Gleichgewicht von Autonomie, sozialer Verantwortung und Diskretion attraktiver zu gestalten. Die kleine Stichprobe und begrenzten DCE-Attribute der Studie begrenzen die Verallgemeinbarkeit. Zukünftige Forschung sollte größere Stichproben, verschiedene Kontexte und segmentierte Verbraucher einbeziehen.

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I. List of Abbreviations

CI	Confidence Interval
DCE	Discrete Choice Experiment
ERP	External Reference Price
IRP	Internal Reference Price
NYOP	Name-Your-Own-Price
OR	Odds Ratio
PWYW	Pay-What-You-Want
PY(O)P	Pick-Your-(Own)-Price
SET	Social Exchange Theory
WTP	Willingness to Pay

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1. Introduction

Consider entering a restaurant where no prices are listed, and the amount you pay is entirely at your discretion. Would this autonomy in determining the price enhance your likelihood of dining there, or might it evoke a sense of uncertainty?

Pricing strategies are a crucial component of any business, shaping not only profitability but also consumer behavior and market positioning. (Kim et al., 2009; Tellis, 1986) Among the many pricing models that companies adopt, one innovative approach stands out: Pay-What-You-Want (PWYW) pricing. (Kim et al., 2009) This unconventional strategy allows consumers to determine the price they pay for a product or service, challenging traditional fixed-pricing models and introducing a new level of consumer autonomy. (Gneezy et al., 2010; Kim et al., 2009; Schmidt et al., 2015)

The restaurant industry, in particular, offers a unique setting for the PWYW model due to its direct and personal interactions between businesses and consumers. (Gneezy et al., 2012; Kim et al., 2009; Schons et al., 2014) The dining experience involves more emotional and social dimensions compared to other sectors, making it an ideal environment to explore how PWYW pricing can impact customer behavior. Moreover, the competitive nature of the restaurant industry means that pricing strategies play a crucial role in determining profitability. (Becker, 1991; Santana & Morwitz, 2021) Understanding how the PWYW model functions within the restaurant industry is essential, but while prior research has mainly focused on factors that drive consumers to determine how much they pay, limited attention has been given to what initially attracts customers to PWYW restaurants. This gap is critical because understanding initial attraction is as important as understanding payment behavior. Therefore, the research gap lies in exploring the factors that enhance the attractiveness of PWYW establishments to customers. This includes understanding how different incentives and factors that influence actual payment behavior contribute to this initial attractiveness. The study examines these elements to understand what motivates customers to choose PWYW restaurants in the first place, beyond just their payment behavior.

1.1 Research Question

Addressing this gap is crucial for restaurant owners and marketers to effectively manage PWYW pricing strategies as it provides a more holistic view of PWYW, focusing on both attracting and retaining customers in a competitive market.

This thesis aims to enhance the understanding of PWYW dynamics and their implications for marketing strategies by examining the motivations behind consumer choices and the role of different incentives. Specifically, the research questions are:

What motivates consumers to choose a PWYW restaurant? and

How do incentives like supporting social causes influence these motivations?

This research aims to guide restaurants in optimizing their pricing strategies to balance customer engagement and profitability, aligning with consumer preferences while ensuring business viability.

1.2 Research Objective

This master's thesis explores the key factors influencing consumer decision-making within Pay-What-You-Want (PWYW) pricing models in the gastronomy sector. Through quantitative, experimental research, the study will investigate how different elements shape consumer's motivation to choose a PWYW restaurant. The insights gained from this research will provide valuable guidance for restaurant owners and marketers in designing PWYW pricing strategies that effectively engage customers while ensuring business sustainability.

1.3 Thesis Structure

The first introduction chapter gave an overview, the context of this study, and corresponding background information on the issue, which was drawn from existing literature examining the PWYW pricing strategy in restaurants.

The remainder of this paper is organized as follows. Within the second chapter, a theoretical framework is presented, and thus a specific lens for pricing strategies, participative pricing, and in particular the PWYW pricing strategy in the food service industry is developed. Thereby the focus lies on giving a framework and definitions about the key concepts and mechanisms involved in these pricing strategies. Building on the theoretical framework, chapter three explores the key drivers and impacts of PWYW as discussed in the literature, while examining the underlying economic theories. This forms the foundation for developing hypotheses and ultimately leads to the experimental design addressing the research questions. Chapter four outlines the research approach conducted, followed by a thorough analysis of the results in chapter five. In addition to interpreting the findings in relation to the research questions and hypotheses, chapter five also considers their broader implications for the restaurant industry.

Chapter six will conclude with a discussion of the theoretical and practical significance of the results, while the final chapter will highlight any limitations of the study and propose directions for future research to further understand PWYW dynamics and their application in the gastronomy sector.

2. Theoretical Background

The following section provides an overview of the theoretical foundation that is needed to answer the research question. Firstly, an overview of the foodservice industry is given followed by an overview of pricing in restaurants. Subsequently, pricing mechanisms and in particular participative pricing and the pay-what-you-want mechanism are defined. Furthermore, PWYW in the food service industry is discussed.

2.1 Background

2.1.1 Food Service Industry

The food service industry is a vital sector of the global economy, overarching various establishments that prepare and serve food and beverages. (Edwards, 2013) As a subset of the hospitality industry, it includes preparing, presenting, and serving food and drinks to customers. This sector is divided into the traditional restaurant industry and the rapidly expanding gastronomy system, encompassing cafés, bars, snack bars, discotheques, catering companies, and other catering services. This thesis only focuses on the traditional restaurant industry. (STATISTA, 2024a, 2024b)

Defined as the provision of food and beverages purchased outside the home but consumed either on-site or off-site, the food service industry plays a crucial role in daily life by offering convenience, nutrition, and social experiences. (Edwards & Causa, 2009)

The industry is continuously evolving to meet changing consumer preferences and technological advancements. (Singh et al., 2024) This evolution results in innovative dining experiences, enhanced food quality, and the adoption of sustainable practices. (Edwards, 2013; Edwards & Causa, 2009) Competition within the industry is intense, with businesses striving to differentiate themselves through unique offerings and exceptional service. (Zhang & Chang, 2021) To attract and retain customers, restaurants increasingly integrate technology, personalize dining experiences, and implement sustainable practices. (Heide et al., 2008) These strategies are crucial for meeting the demands of today's perceptive consumers and ensuring long-term success in a competitive market. (Malter et al., 2020)

2.1.2 Pricing in Restaurants

One attribute that helps restaurants differentiate themselves in the competitive market is pricing. From an economic perspective, pricing plays a crucial role in resource allocation and is widely recognized by economists and managers as a vital instrument for boosting revenue and securing the company's success. (Eliashberg & Jeuland, 1986; Riener & Traxler, 2012) As part of the marketing mix's '4Ps – product, price, place and promotion – strategic pricing practices are critical in competitive markets. (Dolan & Jeuland, 1981; Jawabreh et al., 2023; Stremersch & Tellis, 2002)

Restaurant pricing in particular is a complex interplay of economic, social, and cultural factors. Key considerations include competitive pricing, quality signaling, menu design, dynamic pricing strategies, and the overall customer experience. (Becker, 1991; Heide et al., 2008) Economic conditions and cultural norms further influence how prices are set and perceived. Understanding these factors can help restaurants optimize their pricing strategies to attract and retain customers while ensuring profitability. (Tyagi & Bolia, 2022)

Proactively targeting different customer groups with tailored pricing strategies can lead to substantial revenue increases, as various industry studies demonstrate. (Neubert, 2022)

One of the most recent, notable innovative strategies of pricing in the food service industry that can have a significant impact on a firm's revenue includes participative pricing. (Kim et al., 2009; Wang et al., 2021)

2.2 Participative Pricing

Participative pricing is a dynamic pricing strategy where consumers significantly influence the final price of a product or service, diverging from traditional fixed pricing models by incorporating psychological elements such as control and effort. (Chandran & Morwitz, 2005; Wang et al., 2021) In this model, "control" refers to the consumer's influence over the pricing process, and "effort" represents the mental or physical activity expended to achieve the desired pricing outcomes. (Eisenberger, 1992) This approach enhances consumer satisfaction by heightening psychological engagement and provides a deeper sense of ownership and input into the pricing decision. (Kim et al., 2009)

Participative pricing enhances psychological engagement by offering consumers substantial control over the payment process and allowing them to have a say in their price. (Wang et al., 2021) This involvement can lead to higher satisfaction, as it makes the transaction feel more

personalized and valued. (Chandran & Morwitz, 2005) Consumers appreciate their influence in the pricing, which can transform the purchase process into a more interactive and engaging experience. (Wang et al., 2021)

The approach introduces a flexible element to the marketing mix, impacting profitability and allowing businesses to implement tailored strategies for diverse customer segments. This flexibility optimizes market reach and revenue by adapting to the variable perceived values and financial capabilities of different consumers. (Chung, 2017; Stremersch & Tellis, 2002)

Participative pricing mechanisms vary widely and include both formal, structured methods as well as informal, unstructured ones. These mechanisms allow buyers and sellers to engage in the price-determination process. (Chandran & Morwitz, 2005) As illustrated in Figure 1, participative pricing mechanisms range from market-driven mechanisms like classic auctions, where multiple buyers compete with their (increasing) bids to buy a product from a seller, and negotiations, in which the buyer and the seller haggle over the price for the product, to more defined, buyer-centric systems like Name Your Own Price (NYOP) and Pick your Own Price (PY(O)P). (Di Domenico et al., 2022; Kim et al., 2009; Wang et al., 2021) Each method offers thereby unique features and roles within various market contexts. (Wang et al., 2021) The internet has facilitated the adoption of these dynamic pricing models by providing direct connections between companies and consumers, enhancing the ability to implement and manage these systems effectively. (Kim et al., 2009)

		Buyers' perspective	Sellers' perspective
Horizontal (Buyer centric mechanisms)	NYOP	Mid Level of control (setting the price only if bid above sellers' threshold)	Certainty of covering the costs (if considering costs when defining the threshold)
	PWYW	High level of Control (setting whatever price)	Uncertainty of covering variable costs (as must accept any price proposed by the buyer)
	PYP	Mid level of control (choosing a price out of a set)	Certainty of covering costs (if considering costs when defining the price choice set)
Vertical (Market-driven mechanisms)	Auction	Buyer competes with others, potential high control depending on willingness to pay	Seller achieves potentially higher prices through competitive bidding
	Reverse Auction	Buyer initiates the price and seeks seller acceptance	Seller competes with others, potentially driving prices down

Figure 1: Participative pricing strategies, own illustration based on (Di Domenico et al., 2022)

The pricing strategy represents a significant shift toward more interactive and consumer-influenced pricing models. By challenging traditional pricing structures and offering a platform for personalized pricing strategies, companies can better meet diverse consumer needs, enhance

customer relationships, and increase profitability and market presence. (Chandran & Morwitz, 2005; Spann et al., 2018; Wang et al., 2021)

2.3 Pay-What-You-Want

The most extreme form of participative pricing based on the degree of consumer participation is the "Pay What You Want" (PWYW) model. (Narwal et al., 2022) It is an innovative pricing mechanism that grants consumers unparalleled autonomy in setting prices. The model allows buyers to select any price they wish to pay for a product or service, including the option to pay nothing. (Y. Chen et al., 2017; Kim et al., 2009) In this system, the seller has no right to reject the the price chosen by the buyer, effectively placing the entire responsibility of price determination on the consumer.(Roy & Das, 2022) This level of autonomy in PWYW is unmatched in other participative pricing formats, making it a unique tool for customer engagement and market expansion. (Y. Chen et al., 2017; Kc et al., 2023; Kim et al., 2009; Santana & Morwitz, 2021)

Apart from this, the PWYW model is also particularly notable for being a form of price discrimination, where different consumers pay different prices for the same product based on their personal valuation and willingness to pay. (Isaac et al., 2015) This contrasts sharply with more traditional pricing schemes like fixed pricing or time-based fees, providing a unique opportunity for consumers to reflect on what the product or service is worth to them personally. (Schmidt et al., 2015; Yao et al., 2023) The model not only engages customers more deeply but also meets their needs effectively, making services more accessible and catering to a broader audience. (Rai & Narwal, 2022) Moreover, it can act as a powerful promotional tool, helping businesses penetrate new markets or expand their presence.(Wagner et al., 2022)

Historically, one of the most famous applications of PWYW was by the British rock band Radiohead in October 2007, when they released their album online and allowed fans to set their own price for the download—a radical move that garnered significant attention and discussion regarding participative pricing strategies. (Bourreau et al., 2015)

Despite this, PWYW has found application across a diverse range of domains, including digital products, music, museums, cinemas, bakeries, and restaurants. (Schmidt et al., 2015) These settings, often characterized by direct interactions between service providers and consumers,

serve as ideal environments to explore and understand the dynamics of PWYW. (Kim et al., 2009)

Online and offline businesses are increasingly adopting the PWYW mechanism to establish goodwill and trust among consumers. (Kim et al., 2009; Yao et al., 2023) By allowing organic price discrimination without explicit segmentation, PWYW can draw in more customers and boost revenues.(Dreves, 2013; Van Vaerenbergh et al., 2023) It also encourages word-of-mouth recommendations, enhances customer satisfaction, and builds loyalty by conveying a sense of fairness and autonomy over pricing.(Dreves, 2013; Kim, Natter, et al., 2014)

Research into why customers choose to pay certain amounts under PWYW has provided insights into its effectiveness. Studies have been conducted in various settings, such as concerts, online shopping, and the restaurant industry, revealing how this pricing strategy can be optimized across different types of transactions. (Roy et al., 2016a) These investigations help businesses understand the factors that motivate consumers to pay voluntarily, allowing them to refine their approaches to maximize the benefits of PWYW pricing. (Y. Chen et al., 2017; Roy, 2015) However, despite its potential, research, and practical implementation of the model remain quite sparse, particularly in the food service industry.

2.4 Pay-What-You-Want in the Food Service Industry

The food service industry, which includes a wide array of establishments such as traditional restaurants, cafes, and bars, experiences varied benefits as well as hindrances from adopting the PWYW model. (Edwards & Causa, 2009)While some restaurants have permanently integrated this pricing strategy into their operations, others have employed it temporarily, often for promotional purposes as illustrated in Figure 2. (Kim et al., 2009; Riener & Traxler, 2012) The adaptability of PWYW allows it to be tailored to different types of food service venues, each with its unique customer interactions and economic dynamics. (Narwal & Rai, 2022)

By allowing customers to pay based on their personal valuation of the meal, PWYW introduces a direct involvement in the pricing process, which can significantly enhance diner satisfaction and foster a deeper connection between the diner and the establishment. (Gneezy et al., 2012; Kim et al., 2009; Riener & Traxler, 2012)

	Successful	Unsuccessful
Permanent	Wiener Deewan, Vienna	Lentil as Anything, Melbourne
	Kish, Frankfurt	One World Everybody Eats, Salt Lake City
	Weinerei, Berlin	Café Liebling, Munich
	City Café Bakery, Ohio	Panera Bakery, USA
Promotional	Little Bay, London	Wittenberger Hof – Best Western Hotel, Wittenberg
	Unterm Apfelbaum, Fulda	
	Ristorante Etrusca, Cologne	
	Terrabite, Seattle	
	The Santorini Grill, New York	

Figure 2: Overview of Restaurants that applied /apply PWYW; own illustration, based on (Kim et al., 2009; Schons et al., 2014)

As illustrated in Figure 2, although the PWYW model has found a distinctive place in the food service industry, particularly within traditional restaurants due to its alignment to the subjective nature of culinary experiences, where the value of a meal can vary greatly from one customer to another, its adoption remains sparse. (Kim et al., 2009; Lynn et al., 2013)

This underscores the importance of researching this topic, as the success of restaurants like Wiener Deewan, which has expanded to three locations using the same principle, contrasts with the lack of success experienced by others. (Kim et al., 2009)

3. Research Model and Framework

Various academic articles explore pricing strategies, including the implementation of PWYW in restaurants. This chapter reviews the key economic theories developed in academic history to better understand the PWYW model. It also provides an overview of the leading authors and findings in the PWYW pricing literature within the restaurant industry, summarizing the primary drivers and impacts identified in this research. Finally, the research hypotheses that form the core of the study's methodology are developed in this chapter.

3.1 Economic Theories

3.1.1 Classic Economic Theories

The existing literature on the PWYW model in restaurants highlights several key factors influencing customer payments and motivations, offering insights into why this strategy can

succeed despite contradicting traditional economic theories. Understanding these factors also sheds light on why consumers might choose a PWYW restaurant in the first place.

The literature emphasizes that consumers might be attracted to PWYW restaurants because of their unique experience and sense of control over their spending. Being able to choose how much to pay can be appealing, as it lets them decide what they think is fair based on their own satisfaction and financial situation. (Kim, Kaufmann, et al., 2014) By allowing customers to set their own price, PWYW restaurants can give people a feeling of autonomy and empowerment, which are important for making them feel good about their choice and encouraging them to come back. (Schons et al., 2014)

This consumer behavior markedly deviates from the expectations set by traditional economic theories, such as Neoclassical Economic Theory, which predominantly emphasizes behavior driven by the goal of maximizing profit. (Kaufman, 2007) According to this theory, consumers are assumed to pay the lowest possible price, potentially even zero in a PWYW setting to maximize their utility. The theory suggests that the PWYW would fail because it disrupts the balance of supply and demand and lacks a clear signal of value, leading to prices that may not reflect the true market value of the product, in restaurant contexts, the meal. (Gneezy et al., 2010; Mas-Colell et al., 1995 pp49,139; Varian, 1992, pp34,93)

Rational consumers, according to Neoclassical Economic Theory, might also feel uncomfortable setting a price without a clear reference point and would typically prefer fixed pricing. As a result, they are unlikely to choose a PWYW restaurant. (Gneezy et al., 2012)

The literature challenges this assumption, as studies of PWYW in the food service industry have found that prices typically remain above zero and that non-economic factors, rather than purely rational behavior, influence consumer decisions. Consequently, Neoclassical Economic Theory does not adequately explain consumer behavior in PWYW settings, and rational behavior is not a primary driver in these contexts. (Kim et al., 2009; Schmidt et al., 2015)

In contrast, Value Capture Theory, which emerged after Neoclassical Economic Theory, provides a more nuanced framework for the success of PWYW restaurants by considering both economic and non-economic factors. (Kim et al., 2009; Schons et al., 2014) This theory examines how firms strategically manage their interactions and relationships within markets

to capture value. (Gans & Ryall, 2017) It extends beyond the traditional focus on pure profit maximization by acknowledging the importance of cooperation, negotiation, and strategic positioning in determining the value each participant can capture. Furthermore, it recognizes that value capture is not limited to direct economic transactions but also includes elements such as trust, reputation, and social norms, which can significantly influence consumer decisions in PWYW settings. (Bowman & Ambrosini, 2000; Gans & Ryall, 2017)

Thus, while Neoclassical Economic Theory is limited in explaining why consumers would choose to pay anything at all in a PWYW setting, Value Capture Theory incorporates approaches that consider social, ethical, and psychological motivations. (Gans & Ryall, 2017) For instance, the theory acknowledges that consumers may be motivated to pay more than zero due to fairness, altruism, social norms, and the desire to maintain a positive relationship with the seller. These non-economic factors significantly influence customer behavior under the PWYW model, suggesting that traditional economic assumptions of purely rational, self-interested behavior are not fully applicable. (Bowman & Ambrosini, 2000; Gans & Ryall, 2017)

In a PWYW model, utility is derived from the physical value of the product and psychological and emotional factors. (Chung, 2017) Unlike traditional pricing models where equilibrium is determined by market forces, in a PWYW setting, it is shaped by individual valuations, which can include altruistic or social considerations (Kim et al., 2009; Wagner et al., 2022). For example, due to personal obligation and fairness, strong relations between buyers and sellers can lead to higher payments. (Kim, Kaufmann, et al., 2014) Additionally, altruism, social desirability, and price consciousness significantly influence consumers' willingness to pay, shaping their purchase intentions and attitudes toward the seller. (Roy, 2015)

However, the unpredictability and reduced profit margins associated with PWYW can challenge traditional business strategies that focus on maximizing bargaining power and profitability. (Kim et al., 2009) Consumers aiming to capture as much value as possible might pay lower prices, potentially making the PWYW model less sustainable. (Gneezy et al., 2012) Yet, when social considerations are involved, consumers might pay fair prices, aligning more with behavioral economic principles. (Regner & Barria, 2009)

Research further suggests that non-economic factors such as perceived fairness, customer satisfaction, and social norms significantly influence payment decisions in PWYW settings.

For instance, customers who value fairness or who are concerned about their self-image tend to pay more, especially when their actions are not observed. (Gneezy et al., 2012; Kim et al., 2009) Social norms and temporary emotional states also play a role, as demonstrated in studies of PWYW restaurants in Vienna, where payment amounts were influenced by these external factors. (Riener & Traxler, 2012)

These dynamics highlight the difference between market-based and social-market relationships. In a PWYW model, while the transaction is still an economic exchange, it is heavily guided by social norms and psychological factors rather than purely market-driven forces. (Heyman & Ariely, 2004; Kim et al., 2009) This shift suggests that pricing decisions in PWYW settings involve more than just economic considerations; elements like reciprocity and fairness that align more closely with behavioral economics than with classical economic theories are incorporated. (Kunter, 2015; Schmidt et al., 2015)

Given this, it becomes essential to explore how behavioral economic theories attempt to explain the nuanced motivations driving consumer behavior in PWYW restaurants, offering deeper insights into the psychological and social factors that shape these decisions.

3.1.2 Behavioral Economic Theories

Behavioral economic theories offer crucial insights into consumer behavior in Pay-What-You-Want (PWYW) restaurant environments, going beyond the limitations of traditional economic models. Unlike classical economic theories, which assume that consumers are rational and primarily driven by self-interest and profit maximization, behavioral economics delves into the influence of social, psychological, and emotional factors on decision-making. Several key theories in this field help explain why consumers might choose PWYW restaurants and how their behavior in these contexts deviates from purely rational, economically driven decisions.

One prominent theory is the Social Exchange Theory (SET), developed by George Homans in 1958. (Homans, 1958) It provides a framework for understanding how individuals engage in social behavior by weighing the costs and benefits of their actions in social interactions. (Delamater, 2006 p. 61-88) SET suggests that in a PWYW model, consumers might pay more than the minimum to adhere to social norms, foster trust, or maintain positive social relationships. These motivations indicate that customers are influenced not only by economic factors but also by the desire to demonstrate fairness, reciprocate trust, and build reputational value. (Gneezy et al., 2012; Kim et al., 2009)

In terms of influencing a consumer's decision to opt for a PWYW restaurant, SET implies that consumers might be drawn to PWYW restaurants because they feel more involved in a social exchange rather than just a financial transaction. Being trusted to choose their own price can make them feel empowered and more connected to the restaurant. Social factors like fairness, generosity, and maintaining a positive reputation can also play a role, as customers may want to support the business and build trust. This sense of connection and responsibility can make PWYW models particularly appealing to consumers. (Gneezy et al., 2010; Kim et al., 2009)

However, not all consumers respond positively. Some may be deterred by the pressure of determining what to pay. The uncertainty around setting a fair price might create discomfort, as they worry about being judged or paying too much or too little. The clarity of fixed pricing can be more appealing for these individuals, as it removes the social and psychological burden of decision-making in a PWYW setting. Thus, while some are motivated by the opportunity to engage in a trust-based, reciprocal relationship, others may avoid PWYW restaurants due to the potential stress and pressure associated with price-setting. (Gneezy et al., 2012; Riener & Traxler, 2012)

Another relevant framework is the Theory of Prosocial Behavior, which suggests that individuals are motivated by an internal desire to assist others, even when their actions do not result in immediate rewards or may require some level of personal sacrifice. (Hupka & Eisenberg, 1987) Applied to PWYW scenarios, this theory helps to explain why some consumers choose to pay more than zero, especially when their payment supports social causes. Altruism, trust, and concern for social reputation often drive this behavior, as customers feel a moral obligation or responsibility to give back and show appreciation for the trust placed in them by the business. (Kim et al., 2009)

Schmidt et al. (2015) in their PWYW study further explored these motivations in PWYW settings by identifying three key factors that influence why consumers may choose to pay more than the minimum required, so why they choose to pay at all. First, outcome-based theories suggest that consumers care about the well-being of others and may pay more to support businesses, especially smaller or community-focused ventures. Second, intention-based reciprocity indicates that consumers tend to reciprocate the seller's trust, paying what they perceive as a fair or generous amount. Lastly, reputational concerns suggest that some consumers pay more to appear generous or fair-minded, particularly when their payment is visible to others.

Together, these categories within the broader Theory of Prosocial Behavior highlight how economic decisions in PWYW models are influenced not just by self-interest but by a blend of altruism, reciprocity, and reputation management.

However, not everyone is comfortable with these motivations. Some may feel pressured by social expectations or unsure about how much to pay, which can create stress. These individuals might prefer fixed pricing, where there's no ambiguity or fear of judgment. (Gneezy et al., 2012) Therefore, while prosocial behavior can draw many consumers to PWYW restaurants, the associated pressures may deter others from participating. (Riener & Traxler, 2012)

Equity Theory further supports the idea that consumers assess fairness in their payment decisions by comparing their input-output ratio to that of others. (Davlembayeva et al., 2021) In PWYW environments, this might manifest as consumers paying more to ensure fairness, especially when they are aware of what others have paid. (Chung, 2017) Social Preference Theory complements this by highlighting that individuals are not solely concerned with maximizing their own utility but also take into account the impact of their actions on others, including considerations of fairness and reciprocity in pricing decisions.

Additionally, Transaction Utility Theory, developed by Richard Thaler in 1983, sheds light on how consumers derive satisfaction not only from the product or service they receive but also from the perceived fairness and quality of the financial terms of the transaction. In a PWYW setting, this theory suggests that consumers' decisions are influenced by their perception of getting a good deal, which can increase their willingness to pay more than they might in a fixed-price context.

Together, these behavioral economic theories provide a comprehensive framework for understanding the complex motivations behind consumer choices in PWYW restaurants. They reveal that decisions in these settings are shaped by a mix of social, psychological, and economic factors, offering deeper insights into why consumers often behave in ways that traditional economic theories cannot fully explain.

3.2 Key Drivers and Impacts of PWYW in the restaurant industry

Building on these theoretical foundations, the PWYW model in restaurants presents a distinct pricing strategy that leverages these non-economic drivers. Social norms, psychological motivations, and perceptions of fairness are particularly influential in shaping consumer payment behavior, making the model's success largely dependent on factors beyond pure market-driven considerations.

One of the primary drivers in PWYW restaurant settings is social norms' influence. Customers often feel a sense of obligation to pay fairly, especially when their actions are visible to others. This effect, known as the "spotlight effect," causes individuals to pay more to avoid negative social judgment. (Roy et al., 2021) Visibility in public settings tends to elevate payment amounts, as customers strive to maintain a positive social image, particularly in offline environments where anonymity is reduced. (Batt et al., 2018; Gneezy et al., 2012; Kim, Kaufmann, et al., 2014)

Fairness and reciprocity also shape consumer decisions. Diners are motivated to pay amounts they perceive as fair based on the quality of the service and their overall experience. This behavior aligns with the "fairness equilibrium," where individuals reciprocate good service with equitable payments. (Kim et al., 2010; Rabin, 1993; Roy et al., 2016a)

Additionally, internal reference prices, formed through previous experiences or perceptions of value, guide payment choices. Interaction with restaurant staff or suggested prices can further influence the final payment. (Riener & Traxler, 2012; Roy, 2015; Roy et al., 2016a; Sharma et al., 2020)

Psychological motivations, including altruism and self-signaling, play key roles in encouraging higher payments. Altruistic consumers, eager to support local businesses or social causes, often pay more than necessary, viewing their payments as a means of contributing to a broader good. When a charitable cause is associated with the restaurant, consumers' willingness to pay tends to increase. (Batt et al., 2018; Kim et al., 2009; Kim, Kaufmann, et al., 2014; Roy, 2015) Moreover, self-signaling theory suggests that individuals use payments as a way to affirm their moral identity, particularly in public or social settings. (Gneezy et al., 2012)

Environmental factors, such as weather, also subtly impact payment behavior. Research shows that on sunny days, consumers in a positive mood are more likely to pay higher amounts. However, this generosity may sometimes shift spending priorities, such as a higher focus on drinks rather than food. (Batt et al., 2018; Riener & Traxler, 2012; Sharma et al., 2020)

While the PWYW model has these strengths, it also introduces certain challenges. The freedom to set one's own price can create discomfort for some consumers, particularly those who feel pressure to determine an appropriate payment. This cognitive burden may deter price-conscious individuals, although the presence of social norms often mitigates extremely low payments. (Gneezy et al., 2010; Kim et al., 2009; Schons et al., 2014)

These dynamics of freedom, pressure, and social expectations are crucial for understanding consumer behavior in PWYW settings- They illustrate the balance between the empowerment that consumers could feel from choosing their own price and discomfort that may arise from social and internal expectations. Nevertheless, the existing research focuses only on behavior within PWYW restaurants—after consumers have already made their choice.

The decision-making process before consumers select a restaurant is mainly unexplored. Understanding how PWYW pricing impacts this choice could offer new insights into consumer motivations. This gap in research is significant, as the decision to dine at a PWYW restaurant is a crucial part of the experience.

3.3 Development of Hypotheses

Building on the findings from previous studies and theories, the following hypotheses were developed to extend the existing research.

Research indicates that perceived freedom in setting prices plays a significant role in attracting consumers to PWYW models. (Kim, Kaufmann, et al., 2014) This freedom allows consumers to feel a greater sense of autonomy, enhancing their overall satisfaction with the pricing model. Such autonomy not only improves their transaction experience by reducing the typical discomfort associated with payment but also elevates their overall dining satisfaction. (Kim et al., 2009; Wagner et al., 2022) Consequently, the first hypothesis emerged:

Hypotheses 1: The perceived freedom to set their own prices positively influences consumers' motivation to opt for a PWYW restaurant.

However, the autonomy associated with PWYW can also introduce perceived pressure, where the obligation to determine a fair price can lead to social discomfort and cognitive stress. (Chao et al., 2015) This complexity may deter some consumers due to the potential social discomfort and the effort required to decide on a suitable payment amount. (Mendoza-Abarca & Mellema, 2016; Rathore et al., 2022)

Thus, a sub-hypothesis addresses this issue:

Hypotheses 1a: The perceived pressure of deciding what to pay negatively influences consumers' motivation to opt for a PWYW restaurant.

Adding charitable incentives to a PWYW model significantly impacts consumer payment behaviors. When consumers are aware that a portion of their payment supports a social cause, they are likely to increase their payment, driven by the psychological benefit of contributing to a charitable endeavor. (Gneezy et al., 2010) This effect is potentiated in environments where the restaurant's mission aligns with consumer values, enhancing their willingness to support financially. (Borg et al., 2020; Park et al., 2017; Wagner et al., 2022) This observation led to the second hypothesis:

Hypotheses 2: Support for a social cause as an incentive positively influences consumers' motivation to opt for a PWYW restaurant.

While support for social causes generally increases consumer motivation for PWYW, the positive effect can be moderated by the perceived pressure to decide on an appropriate payment amount. In settings where the decision is visible to others, the pressure to conform to social norms or to appear altruistic may influence the degree of motivation positively or negatively, depending on the individual's sensitivity to social judgment. (Isaac et al., 2015; Kim et al., 2009; Roy et al., 2016b) This leads to an additional nuanced hypothesis:

Hypotheses 2a: While support for a social cause generally increases motivation for PWYW, perceived pressure to decide on the payment amount moderates this motivation, potentially reducing it.

These hypotheses provide a structured approach to exploring the dynamics of consumer behavior in PWYW restaurant settings, addressing how perceived freedom, social pressure, and altruistic motivations influence consumer choices.

4. Empirical Analysis

Following the theoretical development and establishment of the research model framework, the second part of this thesis will focus on empirical analysis. This section aims to address the research questions and test the hypotheses. It will begin by detailing the research approach employed and its development process. After, a thorough description of how the experiment was conducted will offer a clear and comprehensive overview of the empirical analysis.

4.1 Research Approach – Discrete Choice Experiment

A quantitative, experimental research approach was employed to address the research questions of what motivates consumers to choose a PWYW restaurant, and how different incentives such as supporting a social cause influence these motivations.

The discrete choice experiment (DCE) was used for this purpose. This approach allows researchers to evaluate how individuals value specific product or service attributes by presenting them with a series of choice scenarios. (Auspurg & Liebe, 2011) Each scenario offers multiple alternatives with varying levels of attributes, and respondents are asked to choose their preferred option from each set. (Abihiro et al., 2014; Shang & Chandra, 2023) The method provides insight into consumer preferences without observational data, arguing that individuals make trade-offs when deciding by choosing an alternative that offers the greatest utility or benefit. (Auspurg & Liebe, 2011; Hanley et al., 1998)

Understanding the preferences of potential consumers in PWYW restaurants can be valuable for the restaurant industry. Relevant attributes for the DCE were identified through a literature review and the study's hypotheses, ensuring the experiment was tailored to the research setting and effectively captured key factors influencing consumer decisions. The study aims to pinpoint the attributes most valued by consumers in PWYW restaurants using a DCE. These findings can guide restaurant owners in developing strategies to attract and retain customers, ultimately enhancing business performance.

4.1.1 Development of a Discrete Choice Experiment

The design of a DCE requires a careful selection of attributes and their corresponding levels. (Mariel et al., 2021 pp7-36)

In this study, the development of the attributes and levels was guided by a combination of existing literature in the context of PWYW pricing models and the researcher's own conceptualization of relevant factors. Especially this research identified three key attributes: Perceived Freedom to Set Prices/Pricing Model, Perceived Pressure, and Support for a Social Cause. Each attribute has two levels.

The first attribute, Perceived Freedom to Set Prices/Pricing Model, tests how much the level of price autonomy influences consumer preference for the PWYW model, directly corresponding to Hypothesis 1 (H1). This attribute has two levels: medium, which indicates moderate freedom with loose guidelines, and high, which represents the PWYW model. The aim is to determine if and how the degree of freedom increases the attractiveness of the PWYW model. This attribute was inspired by studies that examined that while higher freedom may enhance appeal, it could also potentially increase the pressure or anxiety associated with deciding how much to pay. (Kim et al., 2009; Kim, Kaufmann, et al., 2014; Wagner et al., 2022) The decision to use two levels per attribute allows for the investigation of linear relationships, simplifying the analysis by focusing on how a moderate level of autonomy compares directly to the full PWYW model.

The second attribute, Perceived Pressure, measures the impact of social and environmental contexts on the pressure felt during the payment process and was also derived from previous research on social factors affecting PWYW. (Kim et al., 2009; Wagner et al., 2022) This attribute is relevant for testing Hypotheses 1a (H1a) and 2a (H2a). The goal is to assess how different levels of perceived pressure influence consumer behavior in the PWYW context. For simplicity, the levels are set at no pressure (payment without observation) and high pressure (payment in a crowded setting), allowing clear delineation of the influence of a pressure-free environment versus a high-pressure one.

The third attribute, Support for a Social Cause, gauges the influence of charitable contributions on consumer choice, crucial for testing Hypothesis 2 (H2) and modifying the effects in Hypothesis 2a (H2a). This attribute also has two levels: no support, where there is no contribution to a social cause and the revenue goes straight to the restaurant, and support for a social cause, where half of the revenue goes to a well-known and well-liked charity organization. This approach is based on Gneezy's 2012 study, which explored variations of the pay-what-you-want (PWYW) model, comparing it to traditional pricing. One version of

the PWYW model involved donating half of the revenue to a charity that aids critically ill children, potentially increasing the appeal of the PWYW option. This setup allows for a clear comparison to evaluate how charitable contributions influence consumer choices.

The creation of these attributes and levels followed a rigorous process, combining insights from key literature with the researcher's judgement to ensure that the scenarios were realistic and relevant to the participants. The benefits of using two levels per attribute include simplicity, as fewer levels reduce the complexity of the experiment, making it easier to design and analyze. (Abihiro et al., 2014; Shang & Chandra, 2023) Additionally, it allows for investigating linear relationships, helping to determine if changes in the attributes have a consistent, predictable effect on consumer choices. (Christopher & Machado, 2019; Shang & Chandra, 2023) By defining these attributes and levels, the DCE can effectively capture and analyze how different factors influence consumer preferences in the context of PWYW restaurants.

This structured approach enables the researchers to draw meaningful conclusions about the motivations and behaviors of consumers when they are given the freedom to set their own prices, experience varying levels of social pressure, and have the option to support a social cause.

After defining the attributes and levels, choice sets were created, asking the participants of the survey to imagine two restaurants offering the same good service and food but slightly different payment options. Each choice set presented the participants with a scenario involving two restaurants that differed based on the previously defined attributes and levels. (Abihiro et al., 2014) To construct the choice sets, an orthogonal design was employed to ensure that the effects of each attribute on voting decisions could be estimated independently. This design allows all possible attribute combinations to vary independently, enabling respondents to evaluate any combination effectively. (Holmes et al., 2017) Additionally, in the dichotomous DCE created, this method ensures efficient and unbiased estimation of attribute effects by maintaining the independence of attribute combinations. (Mariel et al., 2021, pp 37-49)

Figure 3 shows an exemplary decision set that was listed in the questionnaire. In total, the complete design comprises $2^3 = 8$ conceivable scenarios for three attributes, each with a dichotomous characteristic, and thus four choice sets. An overview of all choice sets can be found in Appendix B.

Attributes	Restaurant A	Restaurant B
Pricing Model - Freedom to set price	You can pay whatever you want.	Loose Guidelines by the Restaurant are given what you should pay, but you can still decide what to pay.
Payment Observation	You are paying secretly, nobody is watching.	You are paying in a crowded setting, where everybody can see what you are paying.
Revenue Distribution	All the revenue goes to the Restaurant.	Half of the revenue goes to a well-known and well-liked charity organization.

Restaurant A Restaurant B

Figure 3: Exemplary choice set, own illustration

4.1.2 Operationalization of Variables

In this study, the operationalization of variables is crucial for testing the proposed hypotheses through the DCE. The dependent variable and the independent variables were defined and measured as follows:

The dependent variable for all hypotheses is consumers' motivation to opt for a PWYW restaurant, reflected by participants' choices between two hypothetical restaurant options presented in each choice set. Since each participant was asked to choose their preferred restaurant in multiple scenarios, the dependent variable was operationalized as a binary outcome: 1 if the participant chose the restaurant and 0 if not.

The independent variables represent key attributes of the PWYW context identified in the study: *Perceived Freedom to Set Prices/Pricing Model*, *Perceived Pressure*, and *Support for a Social Cause*. Each independent variable was operationalized by defining distinct levels, as described in Chapter 4.1.1, and measured as binary numeric variables based on the following coding, which applies only when the variables are converted into numeric form for analysis:

- **Perceived Freedom to Set Prices/Pricing Model:** 1 for high freedom (PWYW model) and 0 for medium freedom (loose guidelines with suggested prices).
- **Perceived Pressure:** 1 for high pressure (public payment observation) and 0 for low pressure (payment without observation).
- **Support for a Social Cause:** 1 for charity support (a portion of the revenue donated to a well-known charity) and 0 for no charity support (all revenue goes to the restaurant).

By defining and operationalizing the dependent and independent variables in this way, the DCE was designed to systematically capture how variations in pricing freedom, perceived pressure, and charitable contributions influence consumers' choices in the PWYW context, enabling the effective testing of the hypotheses through the estimation models.

4.2 Online Questionnaire

The DCE was conducted using an online questionnaire distributed via the platform *ScoSci*, comprising a total of 11 questions including the choice sets, each carefully designed to gather comprehensive data for analyzing consumer preferences and behaviors. Initially, participants were asked to provide demographic information such as gender, age, and employment status. Understanding the sample's demographic distribution was crucial for identifying any potential demographic influences on consumer preferences and behaviors in the PWYW context. Following the demographic questions, participants were asked about their dining behavior, including the frequency of dining out, main considerations when choosing a restaurant, and prior experience with PWYW restaurants. These questions were essential for establishing a baseline understanding of participants' dining habits and preferences and their familiarity and comfort with the PWYW model.

Participants were then presented with four different choice sets, each including two hypothetical restaurants with varying attributes and levels as defined earlier (perceived freedom to set prices, perceived pressure, and support for a social cause), and then were asked to choose their preferred restaurant in each scenario. The purpose of these choice sets was to simulate real-life decision-making processes and to collect data on how different factors influence consumer preferences in a controlled manner. After completing the choice sets, participants were asked to identify the primary driver behind their choices. This question aimed to capture the key factors that influenced their decision-making, providing deeper insights into consumer motivations and the relative importance of each attribute. The choice and sequence of these questions were strategic and methodical. The demographic questions ensured a diverse and representative sample, while questions about dining behavior provided context and allowed for segmentation analysis. The choice sets were designed to isolate each attribute's and level's effects on consumer preferences, ensuring that the data collected was robust and informative. Finally, asking participants to identify the primary driver of their choices helped validate the findings and offered a qualitative perspective on the quantitative data.

By using this structured approach, the researchers were able to gather detailed and meaningful data on consumer preferences and behaviors in the context of PWYW restaurants. This information is invaluable for understanding the factors that drive consumer decisions and for providing actionable recommendations to restaurant owners looking to implement or optimize the PWYW model.

4.2.1 Pretest

A pre-test was conducted to ensure the questionnaire was comprehensible and effective in testing our hypotheses and research questions. This involved distributing the questionnaire to a diverse group of family members and friends, representing various genders and age groups. Participants were asked to carefully read through the questionnaire, complete it, and provide feedback regarding its clarity and overall understandability.

The only criterion for selection was that participants needed to have a solid understanding of English. This approach allowed to gather a wide range of insights and perspectives on the questionnaire's content and structure. Based on the feedback, revisions and adaptations were made to enhance its clarity and effectiveness. Furthermore, the results from the pilot test participants were examined to ensure that all data could be accurately collected during the larger data collection phase. This thorough vetting process was crucial in refining our approach and ensuring the reliability of our research instrument. By addressing potential issues early on, the aim was to maximize the quality of the data collected in the subsequent stages of the study.

4.2.2 Data Collection

The data was collected between May 25th, 2024, and June 28th, 2024. The only requirement for participation was that the respondents needed to understand the questionnaire in English, with no additional restrictions on the target group. Participants were recruited through convenience sampling by sharing the online survey link within the study director's personal and professional circles, including family, friends, colleagues, and students. Additionally, the survey was promoted via *SurveyCircle*, a platform that operates on the principle of mutual support. On this platform, researchers assist one another by participating in each other's studies, thereby enhancing recruitment for their research.

These recruitment strategies led to the formation of a non-random sample, also known as a convenience sample. While this sampling method imposes limitations on external validity—meaning the findings cannot be easily generalized to the broader population—it offers clear advantages, particularly in terms of cost-effective and efficient data collection. (Golzar et al., 2022)

5. Data Analysis

The questionnaire was clicked on 944 times during the survey period. A total of 304 participants were successfully recruited for the study. Before the analysis was carried out, the data set was

first cleansed. This involved removing respondents who had not completed the questionnaire in full. This reduced the number of participants to 269. According to *ScoSi*, only 186 data sets were completed, but as this information is since people clicked through to the ‘Thank you for participating’ page, the data sets where the questionnaire was completed to the last page were considered.

5.1 Descriptive Analysis

The final sample comprised 269 participants, with a demographic profile that is young, predominantly female, and mainly composed of students and full-time employees. A detailed breakdown of the demographics is available in Appendix A.

In terms of dining behavior, most participants reported moderate habits, with 55% dining out occasionally (1-3 times per month) and 23.4% dining out rarely (less than once a month). Only 16% dine out frequently, or multiple times per week. Younger respondents, particularly those aged 18-34, tend to dine out more often, while older participants (45+) and males are more likely to dine out rarely. Females, however, showed a higher tendency to dine out occasionally or often.

When asked about prior experience with PWYW restaurants, the majority of participants (81.4%, or 219 individuals) reported that they had not dined in such a setting, while only 18.2% (49 participants) indicated that they had. One participant did not respond to this question.

The factors influencing participants' restaurant choices show clear preferences, with food quality being the top consideration (89.2%), followed by cost (72.5%) and atmosphere (69.9%). Location was also relevant for some (44.6%), though it ranked lower than the primary factors. Service (24.9%) and novelty (17.5%) were of lower priority, while ethical practices (2.6%) were considered by very few participants. A small proportion (3.7%) mentioned additional factors, including cuisine type, vegan options, travel time, special occasions, food variety, reviews, portion sizes, and allergy needs (see Appendix A for details).

In summary, participants prioritize food quality, cost, and atmosphere when selecting a restaurant, with service, novelty, location, and ethical considerations being less influential. Most respondents (65.1%) selected two to three factors, indicating that they considered a moderate range of aspects in their decisions. With a total of 874 responses, participants selected an average of about three factors each, reflecting a balanced approach to restaurant choice based on multiple considerations.

In the last question where the participants were asked what the primary driver of their choice was in the choice sets, the answers were the following. More than half of the respondents, 50.6% (136) in total chose Payment Observation as their most relevant factors, followed by social cause, chosen by 25.3% (68) respondents, and Pricing Model with 20.8% (56) in total. A small group, 3.3% (9 participants) opted for “Other” and cited diverse reasons, including a preference for personally selecting the social cause they support, avoiding social pressure, a focus on price orientation, and concerns about the restaurant workers’ profit.

5.2 Analysis of the DCE

To analyze the Discrete Choice Experiment (DCE), the responses from the choice sets in the online questionnaires were extracted into a panel data structure using *Python*. This ensured that each decision made within the choice set was properly captured. $N=2,152$, representing 269 participants, each facing four Choice Sets with two alternatives. Thus, the total number of decisions ($269*4*2$) equals 2,152 data rows. Unique participant IDs were used to identify and track each of the 269 individuals.

Since each participant made multiple choices across different scenarios, the data contains repeated measures, which required the use of models that account for both individual-specific effects and within-participant correlation. To test the hypotheses and estimate the influence of the attributes on consumers’ choice two primary models were used the random effects logit model and the mixed logit model.

Before estimating the models, potential multicollinearity among the independent variables was assessed by calculating Variance Inflation Factor (VIF) values. (O’Brien, 2007) All VIF values were 1.000, with corresponding tolerance values of 1.000, indicating no multicollinearity issues. Additionally, the condition index was 11.933, well below the commonly accepted threshold of 15, confirming that multicollinearity is not a concern. To further validate this, pairwise correlations between the independent variables were analyzed using Pearson’s correlation coefficient. (Schober et al., 2018) All correlations were 0.000, confirming the absence of any linear relationship among the predictors. Together, these results ensure the reliability of the regression model estimates.

5.2.1 Panel Data Structure

Table 1 shows an excerpt from the extracted data matrix. The *id* column identifies the individual respondents, while *choice_set* indicates the respective choice set. The *chosen* column, a binary variable, shows which attribute was selected within each choice set. The columns

pricing_model, *payment_observation* and *revenue_distribution* display the respective attribute values, which were converted into binary numeric variables for analysis purposes, following the coding scheme outlined in chapter 4.1.2. This panel data structure allows tracking of decisions made by each participant across different choice sets.

id	choice_ set	chosen	pricing_ model	payment_ observation	revenue_ distribution
1	CS12_56	0	PWYW	Crowded	No charity
1	CS12_56	1	Loose Guidelines	Secretly	Charity
1	CS13_78	0	Loose Guidelines	Secretly	No charity
1	CS13_78	1	PWYW	Crowded	Charity
2	CS10_12	0	PWYW	Secretly	No charity
2	CS10_12	1	Loose Guidelines	Crowded	Charity
2	CS11_34	1	Loose Guidelines	Crowded	No charity

Table 1: Excerpt from the data matrix

5.2.2 Random Effects Logit Model

A Random Effects Logit Model was first conducted to estimate the model, given that the choices were discrete, and the data contained repeated measures. This model was selected because it accounts for both within-participant correlation and unobserved individual-specific effects, making it suitable for discrete choice data where participants make multiple decisions across different scenarios. Specifically, it provides insight into how the predefined attributes influence the restaurant choice in the DCE and accounts for individual-specific random effects (like random intercepts or slopes). (Streibelt & Bethge, 2009) This aligns with the created Choice Sets, where the participants were able to choose between two restaurants (Restaurant A and Restaurant B). A mixed-effects logistic regression was used to account for individual-level variability (random effects) and repeated measures (multiple choices by the same participant). (Blozis & Craft, 2023; Z. Chen & Kuo, 2001) The random effect in the model was applied with ID, representing individual participants to control for repeated measures (choices) within each participant. The dependent variable indicated whether a restaurant was selected (1=chosen, 0=not chosen), making it well-suited for a logit model, which is commonly used for binary outcomes. (Louviere et al., 2000) The fixed effects (independent variables) in the model were: *Pricing Model*, *Payment Observation*, and *Revenue Distribution*. Additionally, interaction terms were included to explore whether the combined effects of these variables impacted the decisions to choose a restaurant. Specifically, an interaction between Pricing Model and

Revenue Distribution was tested to investigate whether the presence of a charitable incentive modifies the effect of pricing freedom on restaurant choice.

The utility function used in the random effect model is expressed as follows:

$$U_{ij} = \beta_0 + \beta_1(\text{Pricing Model})_{ijt} + \beta_2(\text{Payment Observation})_{ijt} \\ + \beta_3(\text{Revenue Distribution})_{ijt} \\ + \beta_4(\text{Pricing Model} \times \text{Revenue Distribution})_{ijt} + \mu_i + \varepsilon_{ijt}$$

It represents the total utility derived by participants for restaurant in the choice scenarios with the following components. The intercept term β_0 captures the baseline utility that is independent of the specific attributes. The coefficients β_1, β_2 & β_3 measure the influence of the fixed effects—Pricing Model, Payment Observation, Revenue Distribution, and the interaction β_4 between Pricing Model and Revenue Distribution—on the utility. The interaction term allows for an exploration of how these factors jointly affect the utility. The random effect μ_i accounts for participant-specific unobserved preferences, enabling the model to capture heterogeneity among individuals. Finally, the error term ε_{ijt} represents random noise or unmeasured influences on the choice.

To calculate the probability of a participant choosing a specific restaurant, the following formula was applied, where Σ_k indexes all restaurants available in the choice set t:

$$P_{ijt} = \frac{\exp(U_{ijt})}{\Sigma_k \exp(U_{ijt})}$$

The numerator is the exponentiated utility of one restaurant, while the denominator is the sum of exponentiated utilities for all restaurants in the same choice set. This ensures that the probabilities for all options in each choice set sum to 1. The exponentiation ensures that the resulting probabilities are non-negative and fall within the range of 0 to 1.

This formulation leverages the properties of the logit model, where the probability of selecting a particular restaurant is proportional to the exponentiated utility of that restaurant relative to the utilities of all other options. The Model assumes that error terms are independently and identically distributed, and the independence of irrelevant alternatives assumption holds, meaning that the relative odds of choosing between two alternatives remain constant, regardless of the presence or absence of other alternatives. These assumptions are critical for ensuring that the model produces consistent and unbiased estimates. (Li et al., 2011)

To estimate the parameters, Maximum Likelihood Estimation (MLE) was used, a method particularly suitable for logit models as it finds the parameter values that maximize the likelihood of observing the participants' choices. This ensures that the coefficients closely reflect the underlying decision-making process. (Z. Chen & Kuo, 2001; Li et al., 2011; McFadden & Train, 2000) The Random Effects Logit Model was chosen because it accounts for repeated measures, where each participant made multiple choices across different scenarios, and incorporates unobserved heterogeneity by including participant-specific random effects. (Li et al., 2011; Streibelt & Bethge, 2009) Several fit metrics were considered to assess model performance, including McFadden's R^2 , which indicates how well the model explains variance in the data. Unlike traditional R^2 , McFadden's R^2 values between 0.2 and 0.4 are considered good for discrete choice models; in this analysis, it was 0.430, indicating a strong fit. Additionally, the log-likelihood value of -10,417.54 reflects how well the model fits the observed data, with higher (less negative) values indicating better fit. The Bayesian Information Criterion was also used to balance model fit and complexity, with lower values indicating a better model. (Li et al., 2011; McFadden & Train, 2000; Streibelt & Bethge, 2009)

By modeling the choices in this manner, the Random Effects Logit Model captures both the fixed effects of the predefined attributes and the random effects associated with individual participants.

Hypotheses	β	p-Value	OR	95% CI
H1: Pricing Model (PWYW vs. Loose Guidelines)	3.114	<0.001	22.503	(17.650;28.691)
H1a: Payment Observation (Private vs. Public)	0.0075	0.503	1.078	(0.790;1.472)
H2: Revenue Distribution (Charity vs. No Charity)	-1.418	<0.001	0.242	(0.174;0.336)
H2a: Interaction (Social Cause x Payment Observation)	2779e-15	1.000	1.000	(0.644;1.553)

Table 2: Estimation Random-Effects Logit model with main effects¹

¹Remarks: Random-Effects Logit Modell, Sample Size: n=2152, Bayesian Information Criteria: 10432.881, Log-Likelihood: -2LL=10417.538, Pseudo- R^2 (Mc-Fadden's R^2): 0.430

The results showed that the pricing model has a very strong and significant effect on the likelihood of a restaurant being chosen. For every one-unit increase in the predictor variable (e.g., switching from a "Loose Guidelines" pricing model to a "PWYW" model) the log-odds

of the outcome (e.g., the restaurant being chosen) increases by 3.114 ($\beta=3.114$). The p-value ($p<0.001$) indicates that the effect of the predictor variable (pricing model) on the outcome (restaurant choice) is statistically significant, showing that the probability of observing such a strong relationship between the pricing model and restaurant choice due to chance is less than 0.1% and the null hypothesis that there is no effect of the pricing model on restaurant choice can therefore be rejected. The odds ratio (OR) is the exponentiated value of the β coefficient:

$$OR = e^{\beta} = e^{3.114} = 22.503$$

It shows that the odds of choosing a restaurant are 22.503 higher when the restaurant uses a PWYW pricing model compared to a restaurant with “Loose Guidelines” pricing. The 95% Confidence Interval (CI) of (17.650 28.691) for the OR provides additional insight into the precision and reliability of the odds ratio estimate. It shows that, with 95% confidence, the true odds ratio for choosing a PWYW restaurant is between 17.650 and 28.691, meaning that the odds of choosing a restaurant are at least 17.650 and at most 28.69 times higher than choosing a restaurant with a “Loose Guidelines” model. The confidence interval supports the finding that the pricing model has a strong and statistically significant effect on restaurant choice. The results, therefore, demonstrate a consistent and highly reliable impact of the PWYW pricing model on consumers’ decision to choose a restaurant, strongly supporting Hypotheses 1.

Coming to the payment observation. The effect of payment observation (whether payment is made privately or publicly) was found to be not statistically significant. The β coefficient is 0.075, meaning the log-odds of choosing a restaurant increase only marginally when the payment is made publicly as opposed to privately. However, the p-value (0.503) is much greater than the typical significance level (0.05), suggesting that the observed effect is not significant, and fails to reject the null hypothesis. The odds ratio ($OR = 1.078$) suggests that the odds of choosing a restaurant are only slightly higher (by 7.8%) when the payment is public rather than private, but this increase is not statistically meaningful. The 95% Confidence Interval (CI) of (0.790 1.472) spans 1, further confirming the non-significance of this predictor, as the interval includes the value 1, indicating no effect.

Thus, the findings do not support Hypothesis 1a, as payment visibility does not significantly influence consumer decisions when choosing a restaurant under a PWYW model.

The revenue distribution variable, representing whether the restaurant donates a portion of its revenue to charity, has a significant and negative effect on the likelihood of a restaurant being chosen. The β coefficient is -1.418, which implies that the log-odds of choosing a

restaurant decrease when the restaurant does not support a social cause. The p-value (<0.001) confirms that this effect is statistically significant, meaning the difference in restaurant choice between charity and non-charity restaurants is not due to random variation, and we can reject the null hypothesis. The odds ratio (OR = 0.242) further quantifies this effect. When a restaurant does not support a charitable cause, the odds of choosing that restaurant are only 24.2% of the odds of choosing a restaurant that donates a portion of its revenue to charity. In other words, consumers are far less likely to choose a restaurant without a charity component. The 95% Confidence Interval (CI = 0.174, 0.336) does not include 1, reinforcing the conclusion that supporting a social cause has a statistically significant positive effect on restaurant choice. The results strongly support Hypothesis 2, indicating that consumers are much more motivated to choose restaurants that contribute to social causes.

To test Hypotheses 2a, an interaction term between the revenue distribution and the payment observation variable was created. This interaction aimed to examine whether the effect of supporting a social cause (through revenue distribution) on a restaurant choice would be moderated by the payment observation. The results showed that the interaction between these two variables was not statistically significant. The β coefficient for the interaction term was essentially zero ($\beta = 2.779e-15$), and the p-value (1.000) confirmed that there was no evidence of a moderating effect of payment observation on the relationship between revenue distribution and restaurant choice. In practical terms, the odds ratio (OR = 1.000) indicates that the odds of choosing a restaurant that supports a social cause are unchanged whether the payment is made publicly or privately. The 95% confidence interval (CI = 0.644, 1.553) spans the value 1, which further reinforces the conclusion that there is no significant interaction effect between these two factors.

These findings suggest that consumers' motivation to choose a restaurant based on its support for a social cause operates independently of the visibility of the payment decision. In other words, whether the payment is made in a public or private setting does not diminish or enhance the motivational impact of contributing to a charitable cause.

This result is particularly interesting as it contradicts Hypothesis 2a, which posited that social pressure from public payment observation might reduce the positive influence of supporting a social cause. Contrary to this hypothesis, the data indicate that social cause alignment remains a strong motivator for restaurant choice, regardless of how the payment is observed. This may suggest that consumers place greater importance on the cause itself rather than being influenced by external social pressures when making payment decisions.

Evaluation of the Hypotheses		
H1	The perceived freedom to set their own prices positively influences consumers' motivation to opt for a PWYW restaurant.	✓
H1a	The perceived pressure of deciding what to pay negatively influences consumers' motivation to opt for a PWYW restaurant.	✗
H2	Support for a social cause as an incentive positively influences consumers' motivation to opt for a PWYW restaurant.	✓
H2a	While support for a social cause generally increases motivation for PWYW, perceived pressure to decide on the payment amount moderates this motivation, potentially reducing it.	✗

Table 3: Evaluation of the Hypotheses; Random Effects Logit Model

5.2.3 Mixed Logit Model

To extend the analysis, a Mixed Logit Model was conducted. Unlike the Random Effects Logit Model, which accounts for random variations in preferences through intercepts or slopes, the Mixed Logit Model allows attribute coefficients to vary across individuals. (Blozis & Craft, 2023; Hensher & Greene, 2003; McFadden & Train, 2000) This approach assumes that preferences for attributes like pricing and payment methods are not fixed but instead fluctuate according to a probability distribution (e.g., normal distribution), enabling a more accurate capture of consumer heterogeneity. (Hensher & Greene, 2003)

The Mixed Logit Model is particularly advantageous in the Discrete Choice Experiment (DCE), where participants make multiple choices across sets. It accommodates the panel structure by considering repeated choices and correlations within individuals, providing a more robust understanding of how consumers weigh attributes like pricing freedom and social pressure differently. This model thus enhances consumer behavior predictions and offers a more nuanced foundation for strategy optimization. (McFadden & Train, 2000)

Building on the Random Effects Logit Model, the Mixed Logit Model further explores whether individuals' sensitivities to charitable incentives or pricing autonomy vary. (Z. Chen & Kuo, 2001; McFadden & Train, 2000) This added complexity reveals how motivations, such as autonomy and social causes, interact with perceived pressure in a Pay-What-You-Want context, providing deeper insights into consumer choices.

The Mixed Logit Model assumes that the error terms are independently and identically distributed and that the coefficients of selected attributes —Pricing Model and Revenue

Distribution—follow a continuous distribution across individuals. In this analysis, a normal distribution was specified for these random coefficients to allow for both positive and negative sensitivities. By contrast, Payment Observation was included as a fixed effect, given the relatively uniform impact observed in the Random Effects Logit Model.

The parameters of the Mixed Logit Model were estimated using Maximum Simulated Likelihood Estimation (MSLE), an extension of Maximum Likelihood Estimation (MLE) that incorporates simulation to handle the integrals involved in computing choice probabilities for random coefficients. This approach ensures that the estimated coefficients reflect both the mean effect of each attribute and the variation in preferences across individuals. (Hensher & Greene, 2003; McFadden & Train, 2000)

To implement the Mixed Logit Model the following utility function was defined, incorporating random parameters. For individual *i* choosing alternative *j* in choice set *t*, the utility function is expressed as:

$$U_{ijt} = \beta_1(PricingModel)_{ijt} + \beta_2(PaymentObservation)_{ijt} + \beta_3(RevenueDistribution)_{ijt} + \beta_4(Interaction)_{ijt} + \varepsilon_{ijt}$$

In this model, random effects are applied to variables where individual preferences are likely to vary. Based on the results of the Random Effect Logit Model, the pricing model and revenue distribution are chosen as random parameters, as individuals may have differing sensitivities to these attributes. On the other hand, payment observation is modeled without random effects, as previous findings indicated a more uniform effect across individuals.

The results of the Mixed Logit Model revealed a log-likelihood value of -442.41, demonstrating a substantially better fit (less negative) compared to the Random Effects Logit Model, which has a log-likelihood of -10,417.54. This suggests that the Mixed Logit Model is much more effective at capturing variations in individual preferences, making it a more suitable choice for accurately understanding and predicting consumer behavior in this context.

The Prob<chi² value is 0.000, furthermore indicating that the model significantly improves the fit over a model with no predictors.

Hypotheses	β (Mean)	Std. Error	z-value	p-value	95% CI
H1: Pricing Model (PWYW vs. Loose Guidelines)	3.184	0.424	7.50	<0.001	(2.36;4.02)

H1a: Payment Observation (Private vs. Public)	0.0758	0.114	0.67	0.505	(-0.14;0.30)
H2: Revenue Distribution (Charity vs. No Charity)	-1.302	0.238	-5.47	<0.001	(-1.70; -0.84)
H2a: Interaction (Social Cause x Payment Observation)	-0.133	0.0293	-4.54	<0.001	(-0.19; -0.076)

Table 4: Estimation Mixed Logit model (Mean) with main effects¹

¹Remarks: Mixed Logit Model, Sample Size: n=2152, log-likelihood -2LL=-442.413;-735.315, prob>chi² =0.000

Hypotheses	β (SD)	Std. Error	z-value	p-value	95% CI
H1: Pricing Model (PWYW vs. Loose Guidelines)	2.347	0.386	6.09	<0.001	(1.58;3.11)
H1a: Payment Observation (Private vs. Public)	-0.152	0.647	-0.24	0.814	(-1.42;1.12)
H2: Revenue Distribution (Charity vs. No Charity)	1.884	0.346	5.45	<0.001	(1.20;2.57)
H2a: Interaction (Social Cause x Payment Observation)	0.0001699	0.0469	0.00	0.997	(-0.0917;0.092)

Table 5: Estimation Mixed Logit model (SD) with main effects¹

¹Remarks: Mixed Logit Model, Sample Size: n=2152, log-likelihood -2LL= -442.413;-735.315, prob>chi² =0.000

The purpose of applying the Mixed Logit Model was twofold: (1) to test the hypotheses regarding the effects of Pricing Model, Payment Observation, and Revenue Distribution on consumer choices, and (2) to capture heterogeneity in preferences by allowing coefficients to vary across individuals. Positive coefficients indicate that an attribute increases the likelihood of choosing a restaurant, while negative coefficients indicate a decrease.

The mean coefficient for the pricing model attribute is positive (3.814) and highly significant (<0.001), indicating that, on average, the PWYW model does indeed enhance motivation. This suggests that consumers value the autonomy and control that comes with setting their own prices, which makes them more likely to choose a PWYW restaurant over one with loosely defined price guidelines.

Furthermore, the significant standard deviation (2.347) for this attribute suggests notable variability in how consumers respond to this freedom. While the majority view PWYW positively, there is considerable variation—some individuals are more motivated by this freedom than others. This heterogeneity points to different consumer segments, where some may find the freedom to set prices particularly empowering, while others may be indifferent or even uncertain about it.

The mean coefficient for payment observation is positive (0.0758) but not statistically significant (0.505), indicating that payment observation – whether in a public or private context – does not have a meaningful effect on consumers’ choices. Additionally, the non-significant standard deviation (0.814) implies that there is no substantial variation in individual responses to payment observation. This suggests that, in general, consumers in this sample are largely unaffected by whether their payment decisions are observed or made in private. The anticipated pressure associated with public payment observation does not seem to deter them from choosing a PWYW restaurant.

The mean coefficient for the revenue distribution is negative (-1.302) and highly significant (<0.001), suggesting that associating the PWYW model with a charity component reduces motivation to choose this option. Rather than perceiving the charity aspect as a positive incentive, consumers seem to view it as a deterrent on average.

The significant standard deviation for this attribute (1.884) indicates that while the average effect is negative, there is a meaningful degree of variability in individual responses. This suggests that although many consumers are demotivated by the charity component, there is a subset of individuals who may still find it appealing or be motivated by it. This variation could reflect differing consumer attitudes toward charitable giving in commercial settings – some might feel additional pressure or responsibility when charity is involved, while others could be motivated by the opportunity to support a good cause.

For testing Hypotheses 2a, an interaction term between revenue distribution and payment observation was added to the model to assess whether the effect of a charity incentive is moderated by the public or private nature of the payment context. Adding the interaction term led to a notable change in the model’s log-likelihood, shifting from -442.413 (without the interaction) to -735.315. This increase in negative log-likelihood suggests that the interaction term introduces complexity to the model, capturing nuances in how the charity component and payment observation jointly influence motivation, though it may reduce the model’s overall fit.

Despite this drop in fit, the mean coefficient for the interaction term is -0.133, highly significant ($p < 0.001$), which indicates that public payment observation moderates the charity component's influence by reducing motivation. This negative interaction suggests that when both charity and public observation are present, consumers may feel additional social pressure or discomfort, further diminishing their motivation to participate in a PWYW setting. The very small and non-significant standard deviation (0.0001699, $p = 0.997$) for the interaction term implies that this moderating effect of public payment observation on charity motivation is consistent across the sample. Most consumers respond similarly to the combined effect of charity and public observation, indicating that the discomfort or pressure is widely felt when both factors are present.

Evaluation of the Hypotheses		
H1	The perceived freedom to set their own prices positively influences consumers' motivation to opt for a PWYW restaurant.	✓
H1a	The perceived pressure of deciding what to pay negatively influences consumers' motivation to opt for a PWYW restaurant.	✗
H2	Support for a social cause as an incentive positively influences consumers' motivation to opt for a PWYW restaurant.	✗
H2a	While support for a social cause generally increases motivation for PWYW, perceived pressure to decide on the payment amount moderates this motivation, potentially reducing it.	✓

Table 6: Evaluation of the Hypotheses; Mixed Logit Model

5.3 Quality Standards

5.3.1 Internal Validity

The study's internal validity is strong, supported by a comprehensive questionnaire design that includes a well-structured Discrete Choice Experiment and additional questions on demographics, dining behavior, and motivations, with responses from 269 participants. Together, these components provide a robust foundation for exploring consumer decision-making within a PWYW context. The DCE is particularly effective in isolating the effects of specific attributes—such as pricing model, revenue distribution, and payment observation—on consumer choices, helping to identify causal relationships more clearly. By randomizing the elements within the choice sets, the study minimizes bias and confounding, while accurate

measurement of key variables ensures that observed effects reliably reflect consumer preferences. To ensure internal validity, potential multicollinearity among the independent variables was tested and confirmed not to be an issue, as all VIF and tolerance values were 1.000, and the condition index was well below the threshold of concern. Additionally, pairwise correlations showed no significant linear relationships among the predictors. These statistical checks validate the independence of the variables and further strengthen the study's internal validity by minimizing the risk of biased estimates.

Using both Random Effects and Mixed Logit models further supports causal inference by accounting for individual-level variability and unobserved heterogeneity. The Mixed Logit Model, in particular, allows for random variation in preferences, providing a more nuanced understanding of how each attribute impacts consumer choices. The general questions on demographics, dining behavior, and motivations add further depth to the questionnaire's internal validity. By including demographic variables like age, gender, and employment status, along with dining behavior, the study enhances construct validity. These questions offer an essential context for interpreting DCE responses, allowing for segmentation analyses that ensure consumer motivations are understood within relevant demographic and behavioral frameworks. Since these questions are largely factual and descriptive, they reduce the risk of misinterpretation and increase response consistency, thereby minimizing response bias.

However, the motivation-related questions – particularly those involving support for social causes – may still be prone to social desirability bias, with participants potentially overstating their altruistic tendencies based on perceived expectations. This could affect internal validity in measuring genuine motivations. While the overall internal validity is robust, there are some limitations. If certain relevant factors—such as personal values around altruism or prior experience with social causes—were not included, this could introduce omitted variable bias. Additionally, if participants misunderstand complex concepts related to PWYW models or respond inconsistently to hypothetical scenarios, noise may be introduced, reducing the precision of the findings.

5.3.2 External Validity

In contrast, the external validity of this study is limited by its convenience sampling method, which involved recruiting participants through personal networks and *SurveyCircle*, leading to a non-random sample. Although the only requirement for participation was English

comprehension, this approach likely introduced demographic and behavioral biases, making it difficult to generalize findings to the broader population.

In addition, while the discrete choice experiment aimed to present realistic attributes (like pricing models and charitable components), these hypothetical scenarios may not fully capture the complexity of real-life choices. Cultural or regional differences, particularly concerning pay-what-you-want pricing and charity incentives, could further limit the applicability of results to other markets or settings. Furthermore, the platform and timing of data collection introduce further limitations. *SurveyCircle's* mutual support model may skew the sample toward individuals more familiar with academic surveys, potentially making them more cooperative or altruistic than typical consumers. The study's data collection period, conducted from May 25th to June 28th, 2024, adds a time-bound constraint that limits generalizability. Consumer preferences and motivations may vary seasonally or over time due to external factors such as social trends, economic conditions, or cultural events, which a single data collection period cannot capture. Consequently, while this sampling approach was efficient, the findings may not extend broadly to diverse consumer populations or real-world contexts.

5.3.3 Reliability

The reliability of the data is supported by the structured design of the DCE, which consistently presented attributes like pricing models and charitable components, allowing for clear comparisons. Randomization within the choice sets also helps reduce bias, enhancing the stability of responses. Additionally, the use of Random Effects and Mixed Logit models further supports reliability by accounting for individual differences and capturing preference variation. However, using convenience sampling through personal networks and *SurveyCircle* may affect the reliability if participants vary significantly in background or engagement levels. This non-random sampling could introduce variability, potentially affecting the consistency of responses. Overall, while the DCE design promotes reliability, convenience sampling may introduce some inconsistencies in the data, as participants' engagement and perceived social expectations vary.

6. Discussion and Conclusion

This thesis sets out to answer two key questions: What motivates consumers to choose a PWYW restaurant and how do incentives like supporting social causes influence these motivations? Through the development of the hypotheses, the online survey with a DCE included and the application of both the Random Effects Logit Model and the Mixed Logit Model, insights

emerged regarding how autonomy, social pressure, and generous incentives shape consumer decisions in PWYW contexts.

This chapter discusses the questionnaire results and tries to answer this thesis's research questions. Implications for practice are then elaborated, highlighting strategies for managers to optimize the PWYW model before a conclusion is drawn to offer a final assessment of the research findings and their significance.

6.1 Evaluation of the Questionnaire

The answers to the questionnaire showed that PWYW dining in general remains relatively unfamiliar and underutilized by most participants, underscoring that this pricing model is still a niche experience. This unfamiliarity could mean that consumers rely more heavily on certain observable cues, such as social and ethical factors, when evaluating these settings.

However, an interesting discrepancy emerged between self-reported motivations and actual decision-making patterns. Participants in the final survey question emphasized social factors and altruistic incentives as the primary drivers of their choices, while autonomy in pricing appeared to be of less importance. In contrast, the choice set analysis revealed that autonomy played a significant role in real-time decision-making, even though participants did not consciously prioritize it in their post-survey reflections. This discrepancy underscores that perceived motivations and actual choices can differ in PWYW contexts. Pricing autonomy, while not explicitly recognized as a key motivator by participants, consistently influenced their decisions. Autonomy provides a sense of control and allows consumers to align their payments with personal satisfaction and perceived fairness. (Kim et al., 2009; Wagner et al., 2022) This intrinsic appeal, subtle in its influence, might be difficult for consumers to articulate but plays a critical role during the decision-making process. These findings align with Hypothesis 1, which suggested that the freedom to set prices would positively influence consumers' motivation to choose a PWYW restaurant. Both models, the random effects logit model and the mixed logit model supported this hypothesis, indicating that autonomy indeed motivates consumers, aligning with theories that emphasize the role of control and personal value alignment.

Social pressure, particularly in public payment settings, offered another layer of complexity. Hypothesis 1a proposed that perceived social pressure in public payment settings would influence consumer motivation in PWYW contexts. Responses to the final survey question supported this hypothesis, as participants identified social visibility as a key motivator, indicating they felt influenced by the potential of observed payment. This finding aligns with

prior research, which suggests that the obligation to determine a fair price can evoke social discomfort and cognitive stress. (Chao et al., 2015) However, the choice set analysis told a different story: neither model found public payment visibility to be a statistically significant driver of real-time decisions. This suggests that while participants anticipated feeling influenced by social dynamics, these factors did not consistently affect their actual choices. It can be said that social pressure influences attitudes more than behavior, particularly in dining environments where anticipated social judgment may feel less immediate than consumers predict.

To address the second research question regarding the influence of supporting a social cause, Hypothesis 2 posited that contributing to a social cause would positively influence consumer motivation in PWYW settings. The results, however, present a mixed picture, offering a nuanced understanding of consumer attitudes toward social causes in this context.

The Random Effects Logit Model supported Hypothesis 2, showing that, on average, consumers are more motivated to choose restaurants that contribute to social causes. This suggests that many participants are more motivated to select restaurants contributing to social causes. This indicates that many participants view the charitable component as an enhancement to their dining experience, seeing it as an opportunity to combine personal enjoyment with socially responsible action. Additionally, when participants were asked to identify the primary driver behind their choices in the DCE choice sets, supporting a social cause emerged as the second most important factor influencing their decisions.

This finding highlights the strong appeal of charitable contributions within PWYW settings, suggesting that many consumers view social responsibility as an important factor when choosing dining options. This aligns with previous research indicating that consumers are more likely to increase their payment when they know that a portion of it supports a social cause. (Gneezy et al., 2010)

In contrast, the Mixed Logit Model provided a different perspective, rejecting Hypothesis 2 by suggesting that, on average, consumers may see a charitable component as a deterrent in PWYW settings. Rather than viewing the social cause as a positive incentive, some consumers might interpret it as an implicit obligation to pay more, or they feel uncomfortable with the potential pressure to act charitably in a casual dining context. This finding highlights a degree of preference heterogeneity among consumers. While a subset of individuals find the charitable aspect appealing and motivating, others perceive it negatively, possibly due to discomfort with blending charitable giving and leisure.

The divergence between these models reflects the complexity of consumer motivations in PWYW contexts. While the Random Effects Logit Model indicates a general tendency for social causes to positively influence consumer choices, the Mixed Logit Model highlights that this response is not universal. Attitudes toward charitable components in PWYW contexts vary widely, influenced by personal values, situational comfort, and individual preferences. While supporting a social cause can enhance appeal for a significant subset of consumers, it does not universally motivate all consumers in PWYW settings.

Hypothesis 2a proposed that the motivation to support a social cause might be influenced by perceived social pressure, particularly in public payment contexts. The Random Effects Logit Model indicated that social cause alignment remains a strong motivator for restaurant choice, regardless of whether the payment is observed publicly or privately. This suggests that, for many consumers, the importance of supporting a social cause outweighs any external social pressures associated with payment observation, rejecting the hypothesis. The Mixed Logit Model offered a more nuanced perspective, providing partial support for the hypothesis. It revealed that the positive influence of charitable incentives diminishes in public settings, suggesting that the combination of charity and payment visibility creates discomfort for many consumers. While the charitable aspect appeals to some, the added pressure of being observed during payment can reduce overall motivation. In public contexts, heightened feelings of obligation or discomfort emerge, consistent with previous literature stating that in visible decision-making settings, the pressure to conform to social norms or appear altruistic can either enhance or diminish motivation, depending on an individual's sensitivity to social judgment. (Isaac et al., 2015; Kim et al., 2009; Roy et al., 2016b) The data further supports this interpretation, as the two most frequently chosen motivators in the choice sets were payment observation and supporting a social cause. This highlights the dual importance of these factors in influencing consumer decisions while also emphasizing the potential tension they create when combined.

In conclusion, the findings reveal a complex motivational landscape in PWYW contexts. Pricing autonomy consistently drives consumer decisions, though its subtle influence may go unrecognized in self-reported motivations. Social factors and charitable incentives play significant roles, but their impact varies widely among individuals, shaped by personal values, situational comfort, and the interaction of multiple dynamics. Businesses aiming to implement PWYW models should consider these insights, balancing autonomy and ethical appeals while

carefully managing the social dynamics of payment visibility to maximize consumer engagement and satisfaction. Future research should further explore these discrepancies between perceived and actual motivations, as well as the heterogeneity of consumer responses, to refine PWYW strategies and enhance their applicability across diverse settings.

6.2 Assessment of the Results

This thesis aimed to explore what motivates consumers to choose PWYW restaurants and how incentives like supporting social causes influence these motivations. By addressing these research questions, the findings provide valuable insights into the complex dynamics shaping consumer decisions in PWYW contexts.

One of the core motivators identified is pricing autonomy, which gives consumers the freedom to decide how much to pay. This sense of control allows customers to align their payments with personal satisfaction and perceptions of fairness, fostering a positive dining experience. Interestingly, while autonomy played a significant role in actual decision-making, participants did not always explicitly recognize it as a key motivator when reflecting on their choices. This suggests that autonomy's appeal operates subtly, influencing behavior in real time without necessarily being consciously prioritized.

Social dynamics, particularly the visibility of payments, emerged as another important factor in consumer motivation. While participants reported feeling influenced by the potential for public payment observation, their actual choices did not consistently reflect this anticipated pressure. Social visibility seems to shape perceptions more than behavior, with consumers ultimately prioritizing factors like autonomy and ethical incentives over concerns about public judgment in their decision-making process. The study also highlighted the role of supporting social causes as a significant, though nuanced, motivator. Many participants found charitable contributions appealing, viewing them as an opportunity to enhance their dining experience by aligning personal enjoyment with socially responsible action. Supporting a social cause was often cited as an important factor in decision-making, especially for socially conscious consumers. However, this incentive did not resonate with everyone. For some individuals, the charitable component introduced discomfort or a sense of obligation, particularly in casual dining settings, underscoring the diverse preferences and sensitivities among consumers.

The interplay between supporting social causes and public payment settings further complicated motivations. While many consumers appreciated the opportunity to contribute to a cause, the

added pressure of public visibility sometimes diminished this appeal by amplifying feelings of obligation or discomfort. This highlights the importance of carefully designing charitable initiatives to balance their appeal with potential sensitivities to social pressure.

6.3 Implications for businesses in the food service industry

The findings from this thesis provide valuable insights for food service businesses exploring or utilizing the PWYW pricing models. They highlight key motivators behind consumer behavior, such as pricing autonomy, social dynamics, and ethical considerations, and underscore the importance of carefully designing PWYW initiatives to appeal to a diverse range of customers.

One of the most significant motivators in PWYW settings is pricing autonomy, which allows customers to align their payments with personal satisfaction and perceptions of fairness. This sense of control creates a positive dining experience and fosters engagement. While autonomy's influence is often subtle and not always explicitly recognized by customers, it consistently shapes their decisions. Businesses can leverage this by clearly communicating the flexibility and fairness of PWYW pricing, reassuring customers that they have full control over what they pay without judgment or pressure.

Charitable initiatives can further enhance the appeal of PWYW restaurants, especially for socially conscious diners who value the opportunity to combine personal enjoyment with socially responsible action. However, these initiatives must be implemented thoughtfully, as not all customers respond positively to them. While some consumers find the ability to support a cause meaningful, others may feel discomfort or a sense of obligation, particularly in casual dining settings. To address this, businesses should offer charitable components as optional and private features.

Reducing social pressure in public payment settings is also crucial. Social dynamics, such as payment visibility, add complexity to consumer decision-making. While public payment observation might influence consumer perceptions, it does not consistently affect real-time choices. However, public payment contexts can amplify feelings of obligation or discomfort for some diners. Businesses can mitigate these effects by prioritizing privacy in the payment process. Offering discreet payment options, such as mobile payments, can help create a judgment-free environment, allowing customers to feel more at ease. To address the wide range of consumer preferences in PWYW settings, businesses should avoid a one-size-fits-all approach. Some diners are eager to support social causes, while others prefer to make their

decisions privately, free from external dynamics. By framing charitable contributions as voluntary and discreet, businesses can respect these individual differences. This ensures that socially conscious customers feel empowered to contribute while allowing others to enjoy a relaxed, pressure-free experience.

Successfully implementing a PWYW model requires striking a balance between autonomy, social responsibility, and discretion. Highlighting the freedom to choose, providing private and optional ways to support social causes, and reducing social pressure in payment settings can create a more inclusive and appealing dining experience. These strategies can not only attract a broad audience but may also foster greater customer satisfaction and loyalty. By embracing these insights, food service businesses can optimize their PWYW models, making them more effective and sustainable. A thoughtful approach that emphasizes fairness, respects individual preferences, and minimizes potential discomfort will ensure that these models resonate with a wide range of consumers, encouraging repeat visits and building long-term loyalty.

6.4 Conclusion

In conclusion, this research highlights the nuanced and multifaceted motivations shaping consumer behavior in PWYW contexts. Consumers are motivated by a blend of autonomy, social factors, and ethical considerations, though the impact of these drivers varies widely among individuals. Pricing autonomy consistently emerged as a critical and foundational motivator, subtly shaping consumer decisions even when not explicitly acknowledged. This sense of control allows customers to align payments with personal satisfaction and perceptions of fairness, creating a positive dining experience and fostering engagement. Social and ethical incentives, while significant, proved to be polarizing. For some, these factors strongly enhance motivation—such as the appeal of contributing to social causes—while for others, they may introduce discomfort or feelings of obligation, particularly in casual or public settings. Social pressure, particularly payment visibility, influences perceptions more than behavior, as consumers anticipate being judged but ultimately prioritize autonomy and ethical appeals over concerns about public observation. Similarly, ethical considerations like supporting social causes resonate with socially conscious consumers but may deter others who are less comfortable with the intersection of leisure and charitable giving.

To maximize appeal, businesses implementing PWYW models should design their approaches to balance these dynamics. Offering private and optional charitable contributions, emphasizing

autonomy, and minimizing social pressure can create an inclusive and appealing environment that resonates with a diverse range of consumers.

7. Limitations and Future Research

While this study provides valuable insights, several limitations must be considered. First, the research focuses exclusively on restaurants, limiting the generalizability of the findings to other industries or contexts where PWYW models might be implemented. Consumer behavior in non-restaurant settings may differ significantly. Future research should explore the applicability of PWYW in other sectors, such as retail, entertainment, or services, to provide a broader understanding of this pricing model and its versatility across industries. Second, the study is based on a relatively small and non-representative dataset, which may not capture the full range of consumer behaviors and motivations in PWYW settings. The use of convenience sampling, relying on networks such as family, friends, and *SurveyCircle*, introduces potential biases and reduces external validity. A larger, more diverse sample would strengthen the robustness and representativeness of the findings, providing more reliable insights into how different consumer groups respond to PWYW models. Third, although the data collected includes valuable information on various consumer groups—such as demographics, age, gender, employment status, and dining behavior—the study primarily focused on DCE responses. This approach missed an opportunity to analyze differences between consumer groups. Future research could employ segmentation techniques to investigate variations in behavior and preferences among demographic or psychographic groups. For instance, exploring differences in comfort levels with PWYW pricing or attitudes toward charitable giving could yield actionable insights for businesses. Additionally, the DCE used in this study considered only two variations of predefined attributes, potentially restricting the depth of analysis. Including additional variations in future studies could offer more nuanced insights into how different factors influence consumer decisions, revealing subtler dynamics within PWYW contexts. Moreover, while the study focused on broad consumer motivations, it did not account for individual characteristics, such as personality traits, past experiences with PWYW, or cultural attitudes. Understanding how these factors shape consumer behavior could help businesses refine their PWYW offerings. For example, segmentation based on personality traits or prior charitable behavior could inform tailored strategies, such as introducing optional charity add-ons for altruistically inclined consumers while minimizing perceived pressure for others.

Future research could also include real-life experiments to compare consumer behavior in hypothetical scenarios with actual purchasing decisions. Such studies would help determine

whether theoretical models and stated preferences align with real-world actions, providing more accurate insights into consumer decision-making processes. For instance, observing actual consumer payments in PWYW scenarios could reveal whether altruistic intentions or social norms play a greater role in shaping contributions. Addressing these limitations in future research would provide a more comprehensive understanding of the PWYW model. By exploring a broader range of industries, utilizing larger and more diverse samples, analyzing differences between consumer groups, incorporating a wider variety of experimental attributes, and conducting real-life experiments, researchers can uncover richer insights. These advancements would enable businesses to design and implement PWYW strategies more effectively, optimizing the model's success across diverse contexts and consumer segments.

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Appendix

Appendix A: Survey Results

	Data Set completed	Interviews total	Valid Cases
Total	186	304	269
Last Page edited	Data set completed	Interviews total	Cumulative
14	186	189	189
13	0	81	269
12	0	2	272
Total	186	304	

Table 7: Responses Statistics

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	62	23.0%	23.0%	23.0%
Female	206	76.6%	76.6%	99.6%
Other	1	0.4%	0.4%	100%
Total	269	100%	100%	100%

Table 8: Respondents Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
>18	6	2.2%	2.2%	2.2%
18-24	111	41.3%	41.3%	43.5%
25-34	130	48.3%	48.3%	91.8%
35-44	8	3.0%	3.0%	94.8%
45-54	5	1.9%	1.9%	96.7%
<55	9	3.3%	3.3%	100%
Total	269	100%	100%	100%

Table 9: Respondents Age

	Frequency	Percent	Valid Percent	Cumulative Percent
Student	154	57.2%	57.2%	57.2%
Employed Full-Time	65	24.2%	24.2%	81.4%
Employed Part-Time	38	14.1%	14.1%	95.5%
Self-Employed	1	0.4%	0.4%	95.9%
Unemployed	2	0.7%	0.7%	96.6%

Retired	2	0.7%	0.7%	97.3%
Other	7	2.6%	2.6%	100%
Total	269	100%	100%	100%

Table 10: Respondents Employment Status

	Frequency	Percent	Valid Percent	Cumulative Percent
Rarely (less than once a month)	63	23.4%	23.4%	23.4%
Occasionally (1–3 times a month)	148	55.0%	55.0%	78.4%
Often (once a week)	43	16.0%	16.0%	94.4%
Very often (multiple times a week)	15	5.6%	5.6%	100%
Total	269	100%	100%	100%

Table 11: Respondents Dining Out Frequency

	Frequency	Percent	Valid Percent
Food Quality	240	89.2%	89.2%
Cost	195	72.5%	72.5%
Atmosphere	188	69.9%	69.9%
Service	67	24.9%	24.9%
Novelty	47	17.5%	17.5%
Location	120	44.6%	44.6%
Ethical Practices	7	2.6%	2.6%
Other	80	3.7%	3.7%
Total	944		

Table 12: Respondents Restaurant Choice Considerations

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	49	18.2%	18.3%	18.3%
No	219	81.4%	81.7%	100%
Total	268	99.6%	100%	
No Answer	1	0.4%		

Table 13: Respondents PWYW Experience

	Frequency	Percent	Valid Percent	Cumulative Percent
Choice Set 1				
Restaurant A	193	71.7%	71.7%	

Restaurant B	76	28.3%	28.3%	100%
Choice Set 2				
Restaurant A	21	7.8%	7.8%	
Restaurant B	248	92.2%	92.2%	100%
Choice Set 3				
Restaurant A	193	71.7%	71.7%	
Restaurant B	76	28.3%	28.3%	100%
Choice Set 4				
Restaurant A	19	7.0%	7.0%	
Restaurant B	250	93.0%	93.0%	100%
Total	269			100%

Table 14: Responses Choice Sets

	Frequency	Percent	Valid Percent	Cumulative Percent
Pricing Model/Freedom to set price	56	20.8%	20.8%	20.8%
Payment Observation (who was able to see what was paid)	136	50.6%	50.6%	71.4%
Support for social cause	68	25.3%	25.3%	96.7%
Other	9	3.3%	3.3%	100%
Total	269	100%	100%	100%

Table 15: Responses Why Choice Set

Appendix B: Choice Sets

Attributes	Restaurant A	Restaurant B
Pricing Model - Freedom to set price	You can pay whatever you want.	Loose Guidelines by the Restaurant are given what you should pay, but you can still decide what to pay.
Payment Observation	You are paying secretly, nobody is watching.	You are paying in a crowded setting, where everybody can see what you are paying.
Revenue Distribution	All the revenue goes to the Restaurant.	Half of the revenue goes to a well-known and well-liked charity organization.

Restaurant A Restaurant B

Figure 4: Choice Set 1

Attributes	Restaurant A	Restaurant B
Pricing Model - Freedom to set price	Loose Guidelines by the Restaurant are given what you should pay, but you can still decide what to pay.	You can pay whatever you want.
Payment Observation	You are paying in a crowded setting, where everybody can see what you are paying.	You are paying secretly, nobody is watching.
Revenue Distribution	All the revenue goes to the Restaurant.	Half of the revenue goes to a well-known and well-liked charity organization.

Restaurant A
 Restaurant B

Figure 5: Choice Set 2

Attributes	Restaurant A	Restaurant B
Pricing Model - Freedom to set price	You can pay whatever you want.	Loose Guidelines by the Restaurant are given what you should pay, but you can still decide what to pay.
Payment Observation	You are paying in a crowded setting, where everybody can see what you are paying.	You are paying secretly, nobody is watching.
Revenue Distribution	All the revenue goes to the Restaurant.	Half of the revenue goes to a well-known and well-liked charity organization.

Restaurant A
 Restaurant B

Figure 6: Choice Set 3

Attributes	Restaurant A	Restaurant B
Pricing Model - Freedom to set price	Loose Guidelines by the Restaurant are given what you should pay, but you can still decide what to pay.	You can pay whatever you want.
Payment Observation	You are paying secretly, nobody is watching.	You are paying in a crowded setting, where everybody can see what you are paying.
Revenue Distribution	All the revenue goes to the Restaurant.	Half of the revenue goes to a well-known and well-liked charity organization.

Restaurant A
 Restaurant B

Figure 7: Choice Set 4