



A Study on Customer Trust and Repurchase Behavior in the Metabolism-Regulating Functional Food Industry

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Abstract. As overweight and obesity increase, metabolism-regulating functional foods have become an important solution for weight management and metabolic health. However, consumers' skepticism regarding efficacy and safety hinders the development of customer trust and repurchase behavior. Drawing on embedded market theory, this study examines how social bonding and perceived value shape customer trust in the metabolism-regulating functional food industry. Perceived value is conceptualized through three dimensions: functional value, personalized guidance, and public word-of-mouth. Customer trust is treated as the mechanism through which these factors may translate into repurchase behavior. In addition, consumer health literacy is incorporated as a boundary condition affecting the proposed relationships. The study is expected to extend research on consumer trust in functional food consumption and offer practical insights for firms seeking to retain customers.

Keywords: Metabolism-Regulating Functional Food, Customer Trust, Repurchase Behavior, Social Bonding, Perceived Value.

1 Introduction

The increasing prevalence of overweight and obesity has become a major global public health challenge. As a complementary solution for weight management and metabolic health, metabolism-regulating functional food has expanded rapidly. However, many consumers still question whether these products are effective and safe, which makes it difficult for firms to build trust and encourage repeat purchases.

Studies have examined antecedents of customer trust, including product quality, information transparency, social interaction, and relationship bonds ^[1]. However, several gaps remain. First, existing studies have not provided an integrated explanation for trust formation in the metabolism-regulating functional food industry. Second, the mediating role of customer trust between its antecedents and repurchase behavior has not been validated. Third, the boundary condition affecting these relationships, particularly consumer health literacy, remains unclear.

In response, this study builds a theoretical model grounded in embedded market theory. Social bonding and perceived value are proposed as antecedents of customer trust,

with perceived value including functional value, personalized guidance, and public word-of-mouth. Customer trust is expected to mediate their effects on repurchase behavior, while consumer health literacy is incorporated as a boundary condition.

2 Literature Review

2.1 Metabolism-Regulating Functional Food

Functional food generally refers to food products that offer physiological benefits beyond basic nutrition [2]. Metabolism-regulating functional food is an important subcategory designed to improve metabolic functions, including energy metabolism, lipid metabolism, and glucose metabolism. Such products may help reduce cholesterol, support weight management, improve gut health, or prevent metabolic diseases. Despite its growth, the industry still struggles with misleading advertising and persistent consumer doubts about efficacy and safety.

2.2 Customer Trust

Customer trust refers to consumers' perceptions of the credibility and benevolence of a product or service provider [3]. This is especially relevant to functional food consumption, where consumers often find it difficult to judge product quality, effectiveness, and safety before purchase. Prior studies have shown that product quality, functional performance, transparent communication, emotional support, and relational interaction can contribute to trust formation [4]. Customer trust has also been found to positively influence purchase intention, repurchase behavior, satisfaction, loyalty, and word-of-mouth advocacy [5].

2.3 Key Antecedents of Customer Trust

Considering the characteristics of the metabolism-regulating functional food industry, this study focuses on four antecedents of customer trust. Social bonding refers to interpersonal connections developed through interaction, care, and mutual understanding between consumers and service providers [6]. Strong social bonds can reduce uncertainty and promote trust [1]. Functional value reflects consumers' evaluations of product effectiveness, quality, and performance [7], which can enhance trust and purchase intention [2]. Personalized guidance refers to customized support based on consumers' individual health needs and preferences [8]. Public word-of-mouth refers to informal interpersonal communication about products and brands. Recommendations from family, friends, and social networks are often viewed as credible and can influence consumer decisions [9].

2.4 Consumer Health Literacy and Price Level

Consumer health literacy refers to an individual's ability to obtain, understand, and apply health-related information ^[10]. Consumers with higher health literacy tend to rely more on objective product information and are less influenced by external cues when forming trust judgments ^[11]. Price level may also affect consumer decisions, as consumers usually compare the perceived benefits of a product with its monetary cost ^[12]. Therefore, this study includes price level as a control variable to reduce potential bias in examining repurchase behavior.

2.5 Research Gaps

Although research on functional food and customer trust has grown, several issues remain insufficiently addressed. Existing studies lack an integrated framework explaining customer trust formation in the metabolism-regulating functional food industry. The mediating role of customer trust between social bonding, functional value, personalized guidance, public word-of-mouth, and repurchase behavior has not been sufficiently validated. In addition, the moderating effect of consumer health literacy remains unclear. This study therefore examines how customer trust is formed and how it may lead to repurchase behavior in this context.

3 Research Design

3.1 Theoretical Foundation

This study is grounded in embedded market theory, which argues that economic transactions are embedded within social relationships rather than being driven solely by rational cost–benefit calculations ^[13]. In the context of metabolism-regulating functional food, consumers often face uncertainty regarding product efficacy and safety. As a result, consumers' purchase decisions may depend not only on economic evaluations but also on their interactions with service providers, health consultants, and people in their social networks.

Building on this view, this study treats customer trust as an outcome of both social and economic embeddedness. Social bonding represents the social dimension, whereas perceived value represents the economic dimension. In this study, perceived value is further divided into functional value, personalized guidance, and public word-of-mouth. In this model, customer trust explains how these antecedents may lead to repurchase behavior.

3.2 Research Hypotheses

Embedded market theory suggests that consumer decisions are shaped by both social relationships and economic evaluations ^[13]. In the metabolism-regulating functional food industry, consumers often face uncertainty regarding product efficacy and safety. Social bonding, functional value, personalized guidance, and public word-of-mouth can

reduce such uncertainty by enhancing perceptions of credibility, benevolence, and product effectiveness, thereby strengthening customer trust ^[1] Once trust is established, consumers are likely to perceive lower risk and feel more confident about future consumption, which increases their willingness to repurchase ^[4]. Consistent with relationship marketing theory, customer trust is expected to mediate the effects of these antecedents on repurchase behavior ^[14]. Furthermore, consumer health literacy may moderate these relationships, as consumers with higher health literacy tend to rely more on objective information and less on social cues when forming trust judgments ^[10].

Accordingly, the following hypotheses are proposed:

H1a: Social bonding positively influences customer trust.

H1b: Functional value positively influences customer trust.

H1c: Personalized guidance positively influences customer trust.

H1d: Public word-of-mouth positively influences customer trust.

H2: Customer trust positively influences repurchase behavior.

H3a: Customer trust mediates the relationship between social bonding and repurchase behavior.

H3b: Customer trust mediates the relationship between functional value and repurchase behavior.

H3c: Customer trust mediates the relationship between personalized guidance and repurchase behavior.

H3d: Customer trust mediates the relationship between public word-of-mouth and repurchase behavior.

H4a: Consumer health literacy negatively moderates the indirect effect of social bonding on repurchase behavior through customer trust.

H4b: Consumer health literacy positively moderates the indirect effect of functional value on repurchase behavior through customer trust.

H4c: Consumer health literacy positively moderates the indirect effect of personalized guidance on repurchase behavior through customer trust.

H4d: Consumer health literacy negatively moderates the indirect effect of public word-of-mouth on repurchase behavior through customer trust.

3.3 Measurement of Variables

A structured questionnaire is used to measure the main constructs in the proposed model. Social bonding is measured using five items ^[15]. Functional value is measured using six items ^[7]. Personalized guidance is assessed using five items ^[8]. Public word-of-mouth is measured using three items ^[9]. Customer trust is assessed using seven items ^[3]. Repurchase behavior is measured using three items ^[5]. Consumer health literacy is measured using seven items ^[10], while price level, as a control variable, is measured using three items ^[12]. All constructs are assessed using five-point Likert scales.

3.4 Sampling Design

The target population of this study consists of consumers who have purchased and consumed metabolism-regulating functional food products within the past year and completed at least one full consumption cycle. The study plans to collect about 400 valid responses to support the empirical analysis.

4 Conclusion

This study develops a framework for understanding how customer trust is formed and how it may encourage repurchase behavior in the metabolism-regulating functional food industry. Drawing on Embedded Market Theory, the model examines how social bonding, functional value, personalized guidance, and public word-of-mouth influence customer trust, which subsequently drives repurchase behavior. In addition, consumer health literacy is incorporated as a moderating factor to explore potential boundary conditions. By focusing on this underexplored context, the study may extend current understanding of customer trust and consumer behavior in functional food markets. The findings may also provide practical insights for firms seeking to strengthen customer trust and improve customer retention.

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Disclosure of Interests

The authors have no competing interests to declare that are relevant to the content of this article.

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