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Does brand equity matter in small retailers' horizontal strategic alliances?

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ABSTRACT

Drawing on brand equity literature and transaction cost economics, this study investigates the impact of member-retailers' strategic behaviors on the retail buying group's brand equity and how such behaviors are associated with their financial performance in the context of horizontal strategic alliances. The hypotheses were tested using survey data collected from 241 small- and medium-sized supermarket retailers joining retail buying groups in Japan. The study offers evidence that relationship-specific investment directly improves the buying group's brand equity as well as strengthens the brand equity's positive effect on financial performance. Additionally, while contract-based passive opportunism weakens the positive effect of the buying group's brand equity, response-based passive opportunism directly depreciates such brand equity. Our results generate implications for headquarter managers to design and govern retail buying groups.

1. Introduction

Brand equity, widely defined as added value for the brand, is a success factor for business-to-business (B2B) marketing (Aaker, 1991; Davis & Mentzer, 2008; Dwivedi et al., 2020; Lindgreen, Beverland, & Farrelly, 2010; Oh, Keller, Neslin, Reibstein, & Lehmann, 2020). Firms tend to stick to trading parties with high brand equity and recommend them to other firms (Davis & Mentzer, 2008; Oh et al., 2020); therefore, a strong brand equity is considered a key to their growth and profitability (Baldauf, Cravens, & Binder, 2003; Grashuis, 2018). However, managing brand equity in inter-firm relationships is demanding (Marquardt, 2013), which often embarrasses firm managers who wish to benefit from strong brand equity. Therefore, early investigators have paid considerable attention to investigating the antecedent factors influencing a firm's brand equity in the various B2B marketing contexts: organizational capabilities (Zhang, Jiang, Shabbir, & Du, 2015), B2B marketing efforts (Kim & Hyun, 2011), relational engagement (Dwivedi et al., 2020), brand relationship quality (Nyadzayo, Matanda, & Ewing, 2016), and human capital (Biedenbach, Hultén, & Tarnovskaya, 2019).

However, insights into brand equity are scarce for horizontal strategic alliances by small- and medium-sized retailers (SMRs). These alliances are understood as cooperative network or organizations where small, independent retailers with divergent and distinct goals are loosely and horizontally connected to improve each firm's competitive standing in the context of a firm's long-term plan (Ghisi, da Silveira, Kristensen, Hingley, & Lindgreen, 2008): for example, cross-border alliances (Cho & Jin, 2015), retail network via shop-in-shop (Picot-Coupey, Viviani, & Amadieu, 2018), or retail buying groups (Kennedy, 2016).

Interestingly, some horizontal strategic alliances effectively manage member retailers and build high brand equity, but others do not (Grashuis, 2018). For this reason, some SMRs enjoy greater relational benefits gained from the brand equity of a horizontal strategic alliance they have joined than those of other retailers in other alliances (Hernández-Espallardo & Navarro-Bailón, 2009). To shed light on the significance of brand equity, it is worthwhile to raise the following research questions: What strategic behaviors of member retailers affect the brand equity of SMRs' horizontal strategic alliances, and how are these linked to their financial performance?

To address these questions, this study focuses on a retail buying group (also known as voluntary chains) where SMRs collaborate voluntarily on joint activities in terms of purchase, logistics, and marketing campaigns for the enhanced mutual benefits (Kennedy, 2016; Kim, Miao, & Hu, 2022; Sandberg & Mena, 2015; Zentes & Swoboda, 2000). For example, the Zennisshoku Chain represents 1583 Japanese supermarket stores comprising independent smaller retailers with one or two stores. Through vigorous joint activities, according to Kim et al. (2022), SMRs who have joined the Zennisshoku Chain can achieve several benefits: a stable supply of well-known national brands, merchandise differentiation through private brand development coupled with supplier collaboration, cost advantages through

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centralized purchasing, efficient logistics implementation through advanced information technology (e.g., point-of-sales and electronic ordering systems), or support from headquarters for store operations and other marketing campaigns. As the extent and quality of such buying group benefits largely depend on member retailers' strategic integration, it is highly recommended that strategic behaviors or mindsets are progressively involved in the joint activities of the retail buying group.

Because being part of a retail buying group can serve as a strong weapon for SMRs to combat larger retailers through the merits of scale economies, while the group helps to achieve their members' goals and objectives ranging from survival to sustainable growth (Ghauri, Mazzarol, & Soutar, 2021; Ghisi et al., 2008; Zentes & Swoboda, 2000), increasing attention has been paid to them by policymakers as well as retail practitioners. In line with this reasoning, the brand equity of a retail buying group is considered a relational outcome built by the strategic behaviors (e.g., strategic integration) of multiple member retailers. However, despite the significant contributions of retail buying groups to the national economy (Geyskens, Gielens, & Wuyts, 2015), they receive limited practical guidance on how headquarter managers should manage the member-retailers' strategic behaviors in shaping their buying group's brand equity. Against this background, this study aims to investigate the impact of member-retailers' strategic behaviors on the buying group's brand equity and the association of such behaviors with their financial performance.

The contributions of this study are threefold. First, by applying a single firm's brand equity insights (Dwivedi et al., 2020; Hernández-Espallardo & Navarro-Bailón, 2009) to the transaction cost economics (TCE) context (Fernández-Barcala & González-Díaz, 2006), we offer a conceptual framework underscoring brand equity importance in horizontal strategic alliances. Specifically, we demonstrate two major concerns regarding member-retailers' strategic behaviors that are clearly unaddressed in retail buying groups: relationship-specific investment and opportunism. Thus, we provide theoretical guidance to headquarter managers of retail buying groups for managing member-retailers' strategic behaviors that improve financial performance through the buying group's brand equity.

Second, we examine the interaction of relationship-specific investment with the buying group's brand equity in addressing financial performance. While the early TCE context has mainly focused on the impact of relationship-specific investment on inter-firm relationships (Choi & Hara, 2018; Rokkan, Heide, & Wathne, 2003; Trada & Goyal, 2020), we examine the role of relationship-specific investment by multiple member retailers in understanding brand equity in retail buying groups. We find that relationship-specific investment increases financial performance by enhancing buying group's brand equity. Moreover, such investment strengthens the brand equity's positive effect on financial performance. These findings extend the TCE literature, thereby emphasizing the crucial role of relationship-specific asset in the context of an open voluntary alliance of SMRs.

Third, drawing on opportunism (i.e., active vs. passive) literature (Arıkan, 2020; Seggie, Griffith, & Jap, 2013; Wathne & Heide, 2000), we differentiate two prominent aspects of passive opportunism based on the types of problematic behaviors (i.e., formal contract or response): contract-based and response-based. We elucidate the link between the different types of passive opportunistic behaviors and relational outcome and firms' performance. We observe that contract-based (response-based) passive opportunism is more detrimental when it comes to the financial performance (relational outcome). Thus, we augment the TCE literature by demonstrating differential impacts of contract-based and response-based passive opportunism in the horizontal strategic alliance context.

The rest of the paper is organized as follows. In Section 2, we provide a brief explanation of background research through the lens of TCE. We propose a conceptual framework and develop hypotheses in Section 3. In Section 4, we present the research methodology and then report hypotheses testing and results in Section 5. Finally, we investigate the theoretical and practical implications, the study's limitations, and ideas for further research in Section 6.

2. Background research

TCE aims to explain governance structure and mechanism in inter-firm relationships (Gassenheimer, Baucus, & Baucus, 1996; Nunlee, 2005; Samaha, Palmatier, & Dant, 2011; Trada & Goyal, 2020; Williamson, 1975, 1985). Its primary assumption is that transaction parties may behave opportunistically whenever they are profitable and possible. This often leads to hold-up problems for investing firms that make relationship-specific investment. To avoid and minimize transaction costs and the risks involved, TCE requires that firms should govern exchange transactions by designing an efficient governance structure and mechanism, to benefit from higher performance consequences.

Two core concepts of TCE that researchers have mainly focused on in addressing performance consequences are relationship-specific investment and opportunism (see Table 1). First, relationship-specific investment refers to non-redeployable assets dedicated to a specific exchange relationship (Williamson, 1975, 1985). Interestingly, prior studies report controversial findings with respect to the effects of relationship-specific investment on performance consequences. While the original TCE perspective suggests that relationship-specific investment has negative effects on relationship performance (Trada & Goyal, 2020) through increased opportunism (Crosno, Manolis, & Dahlstrom, 2013), the literature on relationship marketing emphasizes the positive aspect of relationship-specific investment on channel performance (Choi & Hara, 2018), dyadic performance (Luo, Liu, & Xue, 2009), and firm performance (Huang & Huang, 2019). In this regard, Rokkan et al. (2003) demonstrated that relationship-specific investment has both bonding (i.e., positive) and expropriation (i.e., negative) effects.

Second, TCE views opportunism as self-interest seeking behavior with guile, which is not easily detectable in a transaction partner (Williamson, 1975, 1985). Opportunism can be classified into active and passive (Arıkan, 2020; Seggie et al., 2013; Wathne & Heide, 2000). Active opportunism, called opportunism as commission, occurs when a firm engages in prohibited behaviors or in forced renegotiation to extract concessions from the other in new circumstances. By contrast, passive opportunism, called opportunism as omission, occurs when a firm engages in shrinking behaviors or shows inflexibility to new circumstances. TCE suggests that opportunism is a relationship-destroying factor (Samaha et al., 2011), thereby resulting in lower performances in economic satisfaction (Høgevold, Svensson, & Roberts-Lombard, 2020), strategic alliance outcomes (Judge & Dooley, 2006), performance efficiency of strategic alliance (Musarra, Bowen, Robson, & Spyropoulou, 2021), or overall firm performance (Zhu, Su, & Shou, 2017).

While prior research extended our knowledge on opportunism by demonstrating extent of active or passive opportunism, Seggie et al. (2013) suggested their response strategies, and that both types of opportunistic behaviors are detrimental to relationship performance because of increased transaction costs. However, the effects of potential problematic behavioral types with respect to formal contracts and response strategies have rarely been investigated simultaneously. This study expects to stimulate further research on opportunism in TCE while classifying and testing the two salient features of opportunism: contract-based and response-based.

As summarized in Table 1, the early investigators focused on the impacts of relationship-specific investment and/or opportunism on either a relational outcome or firm performance. In this regard, Jap and Anderson (2003) advanced our knowledge on bilateral relationship-specific investment that increases the economic performance outcomes, although ex-post opportunism occurs. However, managerial guidance on brand equity's role in various types of strategic alliance relationships is limited despite effects of relationship-specific

Table 1
Empirical studies on the relationships between RSI/opportunism and performance outcomes.

Study	Study context	Independent variable (s)	Explanatory mechanism (s)		Outcome variable (s)	Key findings related to our study
			Mediator (s)	Moderator (s)		
Gassenheimer et al. (1996)	Survey of 162 U.S.-based franchisee-franchisor relationship in the fast food industry	Opportunism	N/T	Participative communication	System performance	Opportunism decreases franchise system performance.
Jap & Anderson (2003)	Survey of 321 U.S.-based buyer-supplier relationship in various industries[a]	Bilateral RSI	N/T	Ex-post opportunism	Exchange outcomes	Bilateral RSI enhances economic performance outcomes even though ex-post opportunism occurs.
Nunlee (2005)	Survey of U.S.-based contractor-subcontractor relationship in the homebuilding industry	Opportunism	N/T	N/T	Profits	Opportunism decreases net profits.
Judge & Dooley (2006)	Survey of 91 U.S.-based strategic alliance relationship in the healthcare industry	Opportunism	N/T	N/T	Strategic alliance outcomes	Opportunism decreases strategic alliance outcomes.
Luo et al. (2009)	Survey of 216 China-based distributor-manufacturer relationship in the household appliance industry	RSI	Opportunism; Conflict; Commitment; Knowledge sharing	N/T	Dyadic performance	RSI increases dyadic performance through reduced opportunism and conflict, and increased commitment and knowledge sharing.
Samaha et al. (2011)	Survey of 1060 U.S.-based seller-reseller relationship in various industries[b]	Opportunism	Cooperation; Flexibility	Perceived unfairness; Contract utilization	Channel member performance	While opportunism decreases channel member performance through reduced cooperation and flexibility, contract utilization (perceived unfairness) suppresses (aggravates) the negative effect of opportunism.
Seggie et al. (2013)	Survey of 193 Europe-based buyer-seller relationship in the apparel industry	Active opportunism; Passive opportunism	Transaction costs	N/T	Satisfaction with relationship performance	Response strategies for active and passive opportunism decrease satisfaction with relationship performance through increased transaction costs.
Zhu et al. (2017)	Survey of 187 China-based distributor-supplier relationship in the apparel industry	Opportunism	N/T	N/T	Firm performance	Opportunism decreases firm performance.
Choi & Hara (2018)	Survey of 375 Japan-based manufacturer-wholesaler relationship in various industries[c]	RSI	N/T	Exploitation capacity; Channel integration	Channel performance	Channel integration strengthens the positive impact of RSI on channel performance.
Huang & Huang (2019)	Survey of 84 Taiwan-based hub firm-satellite firm relationship in the central-satellite production system context	RSI	Supply chain integration	N/T	Firm performance	RSI increases both firm performance and supply chain integration.
Trada & Goyal (2020)	Survey of 239 India-based supplier-distributor relationship in the pharmaceutical industry	RSI	Opportunism	Instrumental communications; Social communications	Relationship performance	While instrumental and social communications weaken the positive effect of RSI on opportunism, social communications weaken the negative effect of opportunism on relationship performance.
Høgevold et al. (2020)	Survey of 213 Norway-based seller-customer business relationship in various industries	Opportunism	Conflict; Non-economic satisfaction	N/T	Economic satisfaction	Opportunism increases conflict while decreasing non-economic satisfaction that enhances economic satisfaction.
Musarra et al. (2021)	Survey of 361 U.K.-based strategic alliance relationship in various industries	Opportunism	N/T	Partner size; No end-point; Alliance activities context	Performance efficiency	Partner-based opportunism decreases performance efficiency. The positive moderating impact of no end-point is significant among upstream, but not downstream, alliance activities.
Our study	Survey of 241 Japan-based retail buying groups of a horizonal strategic alliance relationship in the supermarket industry	RSI; Contract-based passive opportunism; Response- based passive opportunism	Buying group's brand equity (BGBE)	RSI; Contract-based passive opportunism; Response- based passive opportunism	Financial performance	RSI directly improves BGBE while strengthening the positive effect of BGBE on financial performance. While contract-based passive opportunism weakens the positive effect of BGBE, response-based one directly decreases BGBE

Note: RSI = relationship-specific investment; N/T = Not tested.
[a] This includes a computer, photography equipment, chemical, and brewery industry.
[b] This includes appliances, automotive items, clothing, electronics, and computers, fitness and sports, home products and more.
[c] This includes chemical products, steel, metal, machines, paper, electronic equipment, food and more.

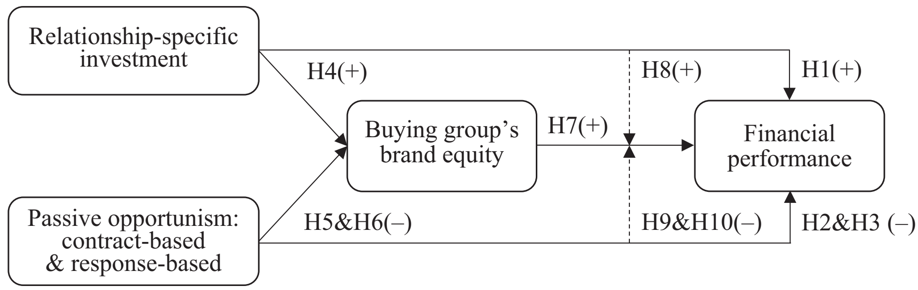

Fig. 1. Conceptual framework.
Note: H8~H10 (the dotted line) indicates hypotheses for moderating effects.

investment and opportunism being contingent on the nature of inter-firm relationships (Choi & Hara, 2018; Jap & Anderson, 2003; Musarra et al., 2021; Trada & Goyal, 2020). We posit that, because the degree of brand equity is basically determined by well-coordinated joint activities among multiple member retailers under the headquarters' support for retail buying groups, the buying group's brand equity can be regarded as a relational outcome. Accordingly, this study's investigation may facilitate possible theoretical developments of brand equity in horizontal strategic alliances from the TCE perspective (Fernández-Barcala & González-Díaz, 2006).

3. Conceptual framework and hypotheses development

Our study's central constructs are member-retailers' strategic behaviors of relationship-specific investment and opportunism in horizontal strategic alliances. As illustrated in Fig. 1, we utilize TCE to address how such strategic behaviors lead to performance consequences. Specifically, we propose a conceptual framework that examines member-retailers' relationship-specific investment and contract-based and response-based passive opportunism affecting buying group's brand equity in addressing their financial performance.

We conceptualize relationship-specific investment and passive opportunism as both independent and moderating variables due to the following reasons. First, based on the TCE literature (see Table 1), we can postulate that a firm' strategic approach to relationship-specific investment and passive opportunism may significantly change firm performance when dividing or utilizing the established relational outcome while also directly and indirectly determining both a relational outcome and firm performance. Second, B2B brand literature emphasizes the significance of firms' strategic mindsets in inter-firm relationships. While some studies underline the antecedent role of firms' relational engagement (Dwivedi et al., 2020), relationship quality (Marquardt, 2013), and human capital (Biedenbach et al., 2019) in building industrial brand equity, others elaborate on moderating effect of firms' strategic integration on economic satisfaction when the buying group's retailer equity is evident (Hernández-Espallardo & Navarro-Bailón, 2009).

We focus on passive opportunism because in dedicated, cooperative relationships that SMRs join voluntarily for mutual benefits, active opportunism may not be a major issue (Crosno et al., 2013). However, given that the retail buying group is a loosely tied, allied group with varying objectives and membership goals, member retailers are more likely to engage in passive opportunism, such as free-riding behaviors (Rokkan & Buvik, 2003; Rokkan & Haugland, 2002).

3.1. *Direct effect of relationship-specific investment on financial performance*

This study contends that relationship-specific investment is positively associated with financial performance. Relationship-specific investment refers to a member retailer's investment in non-redeployable, tangible, or intangible assets specialized in a retail buying group relationship. According to TCE, relationship-specific investment in learning, personnel, and reciprocal relationships can signal to invested members that an investing member is willing to maintain cooperative relationships (Choi & Hara, 2018; Jap & Anderson, 2003), leading to enhanced strategic integration (Huang & Huang, 2019). Under such circumstances, we anticipate that the ill effects of relationship-specific investment (e.g., Trada & Goyal, 2020) will be significantly alleviated. Rather, such dedicated investment will facilitate vigorous joint activities based on knowledge or information exchange among member retailers while curbing opportunism and conflict (Luo et al., 2009). In this way, member retailers can increase their buying group benefits, enabling them to improve financial performance in terms of sales, profit/profit rate, and market share, which is largely consistent with the findings of prior TCE research (Huang & Huang, 2019; Jap & Anderson, 2003) and Ghauri et al. (2021) in the co-operatives context. Consequently, we propose the following hypothesis:

H1. Relationship-specific investment increases financial performance.

3.2. *Direct effect of passive opportunism on financial performance*

This study postulates that contract-based and response-based passive opportunism are negatively associated with financial performance. We define contract-based passive opportunism as other member-retailers' self-interest seeking behaviors that evade overall obligations previously agreed upon or expected in formal contracts with the retail buying group, whereas response-based passive opportunism refers to such behaviors that evade adequate responses to inquiries in the retail buying group. According to TCE literature, member retailers with both types of passive opportunism will increase conflicts (Høgevold et al., 2020) and transaction costs (Seggie et al., 2013) while lowering cooperation, flexibility, or responsiveness to environmental changes (Samaha et al., 2011). Therefore, we anticipate that when member retailers perceive prioritization and unfavorable behaviors including free-riding by other members for joint activities in strategic alliances (Judge & Dooley, 2006; Rokkan & Buvik, 2003), they will lower the level of strategic integration with the joined retail buying group. This will deteriorate member-retailers' buying group benefits that would otherwise lead to better financial performance, which is largely consistent with the findings of some prior research on TCE (Judge & Dooley, 2006; Nunlee, 2005; Zhu et al., 2017). Consequently, we propose the following hypotheses:

H2. Contract-based passive opportunism decreases financial performance.

H3. Response-based passive opportunism decreases financial performance.

3.3. *Direct effect of relationship-specific investment on buying group's brand equity*

In building B2B brand equity, healthy relationships with business partners cannot be underestimated. Specifically, while Marquardt (2013) has demonstrated the role of relationship quality coupled with trust, commitment, and satisfaction as a strategic resource, Dwivedi et al. (2020) highlight relational engagement built by legal bonds, knowledge exchange, and co-production with business partners. Additionally, specialized human capital that fosters relational trust is essential (Biedenbach et al., 2019).

Building these insights into our research, we focus on positive effects of relationship-specific investment, thus enabling member retailers to expect enhanced buying group's brand equity. We define buying group's brand equity as the extent to which a member retailer perceives a set of brand assets and liabilities that add value to the brand of a retail buying group. According to TCE, relationship-specific investment can lead to bonding effects from other members (Rokkan et al., 2003) because member retailers with such dedicated investment can show their credible commitment to their partners in an ongoing relationship (Huang & Huang, 2019; Jap & Anderson, 2003; Luo et al., 2009). Thus, early investigators highlight that relationship-specific investment is positively related to relational outcomes such as channel performance (Choi & Hara, 2018) or dyadic performance (Luo et al., 2009).

In the retail buying group context, as Ghauri et al. (2021) highlighted, relationship-specific investment plays a crucial role of providing the external resources through the cooperative allied group to challenge the environmental uncertainty faced by member retailers. Accordingly, we anticipate that such investments will lead investing members to create close and strong relationships with other members while promoting joint activities for value creation underpinned by combined resources and expanded joint capabilities (Hernández-Espallardo, 2006; Wang, Shi, Lin, & Yang, 2020; Zhang et al., 2015), thereby enhancing competitive positions (Ghauri et al., 2021; Sandberg & Mena, 2015). In this way, the retail buying group can improve its image, quality, and even personality, which also increases the recognition of potential member retailers (Calderwood & Freathy, 2014; Kim & Hyun, 2011; Nyadzayo et al., 2016). In cases where buying group benefits are significantly attractive, member retailers with relationship-specific investment will strengthen their commitment or even loyalty to their retail buying groups while responding adequately to desires, requirements, or obligations. Consequently, we propose the following hypothesis:

H4. Relationship-specific investment increases buying group's brand equity.

3.4. Direct effect of passive opportunism on buying group's brand equity

This study contends that contract-based and response-based passive opportunism are negatively associated with the buying group's brand equity. TCE research indicates that passive opportunism is perceived as dishonest, inadequate, and insincere behaviors by business partners (Arıkan, 2020; Crosno et al., 2013; Seggie et al., 2013; Wathne & Heide, 2000). Although even passive opportunism can be evident, such behaviors will incur investing parties' transaction costs to protect their dedicated investments, often leading to the hold-up problem. In the end, such self-interest seeking behaviors with guile will result in a relationship-destroying factor (Samaha et al., 2011), thereby damaging relational outcomes (Luo et al., 2009; Musarra et al., 2021).

In the retail buying group context, member retailers with contract-based passive opportunism may evade duties or obligations, shirk responsibilities, or withhold effort based on their formal contracts in joint activities with retail buying groups (Hernández-Espallardo, 2006). Accordingly, we anticipate that such opportunistic behaviors curb expanded joint capabilities underpinned by strategic integration for their innovative joint activities (Rokkan & Buvik, 2003; Rokkan & Haugland, 2002). In this situation, contract-based passive opportunism will harm the quality of joint activities and image or personality of a retail buying group, thereby destroying its overall brand equity. By contrast, member retailers with response-based passive opportunism may respond slowly to inquiries from retail buying groups (or member retailers) or adjust inadequately to joint activities with retail buying groups (Seggie et al., 2013). Accordingly, we anticipate that these behaviors prevent a retail buying group from quickly and flexibly adapting to environments through strategic integration (Kennedy, 2016; Sandberg & Mena, 2015), thereby damaging overall brand equity. Consequently, we propose the following hypotheses:

H5. Contract-based passive opportunism decreases buying group's brand equity.

H6. Response-based passive opportunism decreases buying group's brand equity.

3.5. Direct effect of buying group's brand equity on firm performance

As Oh et al. (2020) summarized, brand equity contributes to firms significantly in terms of customer mindset, product-market outcome, or financial market outcomes. Firms with high brand equity can enable trading partners to commit or be loyal to a continuous relationship with them while paying price premium and recommending them to others (Davis & Mentzer, 2008; Fernández-Barcala & González-Díaz, 2006; Kim & Hyun, 2011; Lindgreen et al., 2010), thus improving the financial performance of farmer cooperatives (Grashuis, 2018) or organizations in the value chain (Baldauf et al., 2003).

By applying these insights to our research context, this study postulates that buying group's brand equity is positively associated with financial performance. The rationale behind this is as follows. First, member retailers actively participating in a retail buying group with strong brand equity can gain better buying group benefits than other SMRs can. In this case, member retailers can highly exploit attractive merchandise, price, and services, or headquarters' supportive efforts for store operations for better business performance (Kim et al., 2022) or financial outcomes (Burkink, 2002; Reijnders & Verhallen, 1996). Additionally, as Hernández-Espallardo & Navarro-Bailón (2009) demonstrated, such member retailers can improve retailer equity by strategically integrating with retail buying groups, resulting in economic satisfaction. Consequently, we propose the following hypothesis:

H7. Buying group's brand equity increases financial performance.

3.6. Moderating effect of relationship-specific investment

This study posits that relationship-specific investment enables member retailers to gain better financial performance in cases where the buying group's brand equity is high. The rationale behind this is as follows. According to Hernández-Espallardo and Navarro-Bailón (2009), retailer equity that is enhanced by their buying groups can be regarded as a relationship-based competitive advantage. This view largely corresponds to the B2B brand literature that underscores a quality of a good and healthy relationships to maximize the brand equity and its benefits (Baldauf et al., 2003; Dwivedi et al., 2020; Grashuis, 2018). In this context, prior studies examining TCE or inter-firm relationships highlight that relationship-specific investment compels firms to gain knowledge about their partner firms (Luo et al., 2009). These situations can lead to investing firms' improved absorptive capacity (Prajogo, Chowdhury, Nair, & Cheng, 2020) or exploitation capacity (Choi & Hara, 2018) for a better firm performance.

We apply these insights to our research context. Specifically, we anticipate that reciprocal relationships requiring cooperative interactions among member retailers will be reinforced under the circumstances where relationship-specific investment is high (Ghauri et al., 2021; Huang & Huang, 2019). The member retailers with such dedicated investment can then improve their absorptive or exploitation capacity through a relatively easy access to combined resources, expanded joint capabilities, and other members' knowledge (Burkink, 2002; Hernández-Espallardo, 2006; Lindblom, 2008). Accordingly, such improved absorptive or exploitation capacity through relationship-specific investment will help member retailers to gain a deeper understanding of exploiting the benefits of buying group' brand equity. Thus, member retailers can enhance customer loyalty to their stores while increasing recognition, image, quality, and even personality of their own companies, thereby enjoying improved store performance in terms of sales, profit/profit rate, and market share. Consequently, we propose the following hypothesis:

H8. Relationship-specific investment strengthens the positive relationship between buying group's brand equity and financial performance.

3.7. Moderating effect of passive opportunism

This study contends that member retailers cannot take advantage of the buying group's brand equity completely to achieve better financial performance in cases where contract-based and response-based passive opportunism are evident. The rationale behind this is as follows. In essence, TCE views that all conflicting and unfair behaviors for self-interest incur transaction costs (Seggie et al., 2013) while also deterring relationship-specific investment (Trada & Goyal, 2020). This situation reduces non-economic and economic satisfaction through decreased relational outcomes (Høgevold et al., 2020; Samaha et al., 2011). This perspective of TCE is in conformity with B2B brand literature that emphasizes the necessity of safeguards from the harmful effects of opportunism (Hernández-Espallardo & Navarro-Bailón, 2009) to optimize a relational resource in the development of stronger brand equity (Biedenbach et al., 2019; Marquardt, 2013).

We apply these insights to our research context. Specifically, we anticipate that when contract-based and response-based passive opportunism are a major issue, the retail buying group headquarters would increase the transaction costs of monitoring, bargaining, adapting, or coordinating such member retailers (Rokkan & Buvik, 2003; Rokkan & Haugland, 2002; Seggie et al., 2013), prompting other member retailers to safeguard or reduce their investments. Additionally, such opportunistic behaviors will hinder member-retailers' efforts or new creative experiments to capitalize on the advantages of buying group's brand equity due to increased unpredictability but decreased strategic integration (Ghisi et al., 2008; Hernández-Espallardo, 2006; Musarra et al., 2021). Under this circumstance, member retailers will suffer from the low brand equity of their firm and decreased benefits from the buying group's brand equity. Consequently, we propose the following hypotheses:

H9. Contract-based passive opportunism weakens the positive relationship between buying group's brand equity and financial performance.

H10. Response-based passive opportunism weakens the positive relationship between buying group's brand equity and financial performance.

4. Research methodology

4.1. Research context

This study investigates SMRs joining retail buying groups in Japanese supermarket industry. We have three reasons as follows. First, in the dynamic, hostile market environment surrounding SMRs that lack the competitive resources to combat larger retailers, especially because supermarket retailers carry a wider variety of merchandise compared with other retailer types (Kim et al., 2022), the pivotal role of such supermarket retailers' horizontal strategic alliances has become more complex and challenging.

Second, based on findings from interviews with Japanese retail buying groups, managers at headquarters strongly anticipate member-retailers' progressive involvement with relationship-specific investment into joint activities, and are also highly concerned that some members often engage in so-called passive opportunism, such as free-riding behaviors or inadequate responses. Under these circumstances, although a few have recognized the significance of buying group's brand equity, managers at headquarters are puzzled over how to build and manage their buying group's brand equity.

Third, despite its strategic importance in practice, surprisingly, insights on management issues in our study, such as brand equity (Hernández-Espallardo & Navarro-Bailón, 2009) or free-riding (Rokkan & Haugland, 2002), are largely limited to retail buying groups in Western countries. Accordingly, we anticipate that choosing Japanese retail buying groups as a survey target will stimulate further discussions on brand equity by encouraging cross-cultural analysis in the context of horizontal strategic alliances.

4.2. Data collection

In the data collection procedure through a questionnaire survey, we identified eight different retail buying groups in the Japanese supermarket industry. CGC Japan and Zennisshoku Chain are the two largest retail buying groups covering the country-wide supermarket retailer sector. Relatively medium-sized retailers with multiple stores tend to join CGC Japan. In February 2021, the total sales volumes of CGC Japan from its 207 member retailers and their 4156 stores amounted to approximately ¥ 4752 billion (US$ 44.7 billion), being the third largest among retail chains after Aeon Group and Seven & i Holdings. While the Zennisshoku Chain represents smaller retailers with one or two stores, 1583 supermarket stores joined the chain in August 2020. Additionally, a few retail buying groups with smaller membership cover a specific geographical market area. While Nihon Selco with 40 members (439 stores) covered retailers in the Kanto and Hokuriku districts in June 2020, AKR Kyoueikai with 40 members (45 stores) represented Osaka, Hyogo, and Kyoto in the Kansai district in February 2021.

This study conducted a questionnaire survey of 1573 member retailers belonging to eight different retail buying groups in Japan. While member-retailers' lists were available from the websites of each retail buying group, some headquarters, such as CGC Japan and AKR Kyoueikai, also offered direct assistance in identifying potential respondents. Regarding selection of the key informants, collecting survey data from multiple managerial positions is advised to avoid single informant bias (Ullah, Akhtar, & Zaefarian, 2018). However, to adequately answer this study's questionnaire, the key informant should be the person who has knowledge on both business strategies and operations of own firm and policy and activities of the joined retail buying group. It should be noted that retailers who joined retail buying groups such as Zennisshoku Chain are small, independent firms, including small family grocers. In this vein, the president (i.e., CEO) is the person who has enough knowledge of overall business strategies and operations from purchase to sales and attends regular or informal meetings held by the joint retail buying group. For this reason, we sent the survey questionnaires to the president of each retailer, treating them as the most relevant key informant.

To facilitate active participation, this study provided a pre-notification by telephone to prospective respondents before they received an actual questionnaire. We explained the purpose of our research and the deadline for the return. After a pre-notification, a questionnaire survey of 1573 member retailers was distributed and collected over 1-month period without additional reminder during data collection. We received 241 usable responses (i.e., sample size = 241) within the deadline, which yielded a response rate of 15.3%. Accordingly, this study did not check non-response bias due to the difficulty of clearly identifying early versus late respondents. Additionally, this response rate is respectable, compared to those of previous studies in retail buying group context, for example, Lindblom (2008) at 19.3% or Stoel (2002) at 16%.

Of the 241 usable responses, 173 retailers (71.8%) owned one or two stores. The median number of stores a retailer owned was one, and the average number was 3.86. Fully 163 retailers (67.6%) belonged to Zennisshoku Chain members, with 26 retailers (10.8%) joining CGC Japan. The average value of purchasing ratio through the retail buying group's headquarters and relationship length was 47.8% (median = 50.0) and 14.9 years (median = 12.0), respectively.

4.3. Measurement

As summarized in Table 2, all five constructs are multi-item and reflective, using a five-point scale (1 = "strongly disagree" and 5 = "strongly agree"). Specifically, first, following Hernández-Espallardo and Navarro-Bailón (2009), we measured the buying group's brand equity using five items. Second, relationship-specific investment was measured using four items adopted from Crosno et al. (2013). Third, we measured contract-based (Crosno et al., 2013) and response-based passive opportunism (Seggie et al., 2013) using three items. Fourth, referring to Burkink (2002), we assessed financial performance using three items of subjective measures in terms of sales, profit/profit rate, and market share over the past 3 years.

With respect to the issue of subjective measures, a few studies (e.g., Geyskens et al., 2015; Reijnders & Verhallen, 1996) recommended objective measures to assess financial outcomes. However, given that the object of our study analysis is small independent retailers, small businesses' reluctance to divulge financial metrics is well-known (Campbell, Line, Runyan, & Swinney, 2010). Considering a high level of concordance of findings between objective and subjective measures, Campbell et al. (2010) also suggested that using subjective measures for small businesses is often more effective in enhancing response rates. This is the reason why we chose subjective measures, largely corresponding to other studies investigating retail buying groups (Hernández-Espallardo, 2006; Lindblom, 2008).

Finally, to account for observed heterogeneity among member retailers, this study employs five control variables. Specifically, we control for the number of stores a member retailer has, the relationship length of the membership, the ratio of purchases made by them through the retail buying group, goal incongruity among member retailers, and market uncertainty surrounding a member firm during the past 3 years.

Table 2
Constructs and measurement assessment (n = 241).

Constructs and scale items	Estimate[a]	AVE	CR
Buying group's brand equity (Hernández-Espallardo & Navarro-Bailón, 2009)		0.57	0.88
More retailers have come to know the existence of my buying group	0.79		
Image of my buying group has increased	0.94		
Good quality of the buying group is perceived	0.86		
The buying group provides the stores with a personality	0.61		
Member retailers' loyalty to the buying group has increased	0.48		
Relationship-specific investment (Crosno et al., 2013)		0.56	0.81
I have invested a lot of time to learn about my buying group practices	0.79		
I have made substantial investments in personnel dedicated to my buying group	0.82		
If my relationship with buying group ended, I would be wasting a lot of knowledge regarding my buying group's method of operations	0.53		
I have invested a lot in building up reciprocal relationship with my buying group	0.82		
Contract-based passive opportunism (Crosno et al., 2013)		0.84	0.95
Member retailers evade obligations expected based on their formal contract	0.92		
Member retailers withhold effort expected based on their formal contract	0.91		
Member retailers shirk responsibilities expected based on their formal contract	0.91		
Response-based passive opportunism (Seggie et al., 2013)		0.75	0.91
Member retailers are slow to respond to our inquiries	0.84		
Member retailers' responses to our inquiries are inadequate	0.92		
Member retailers fail to provide proper notification	0.84		
Financial performance (Burkink, 2002)		0.80	0.91
Sales volume has increased	0.95		
Profit and profit rate have increased	0.90		
Market share in my local area has been increased	0.82		

Notes: [a]standardized factor loading; AVE = average variance extracted; CR = composite reliability.

4.4. Common method bias

This study checked the issue of common method bias. Following Lindell and Whitney (2001), we performed a marker variable test by assuming a theoretically unrelated item (i.e., for store management, having products of premium quality is important) as a covariate ($|r| < 0.11$, $p > 0.05$). The results showed that there were no statistically significant differences between the observed and adjusted correlations, indicating no major problem of common method bias in our data.

5. Hypotheses testing and results

5.1. Measurement assessment

To assess the validity of the construct, we performed confirmatory factor analysis using structural equation modeling while checking the sensitivity to normal distribution and sample size (Niemand & Mai, 2018). Our results reveal values of skewness ranging from −0.36 to 0.46, while kurtosis values range from −0.78 to 0.13, below the threshold of ±1.96. In this respect, given that the rule of thumb considering requisite sample size of $n > 200$ (Iacobucci, 2010) and 10 to 20 cases (or observations) per indicator variable (Mitchell, 1993) is widely accepted, our sample size of 241 in analyzing the study model seemed satisfactory. Overall, the data for the measurement model indicated a satisfactory fit ($\chi^2(124) = 209.78$, $p < 0.05$, CMIN/DF = 1.69, RMSEA = 0.05, GFI = 0.91, CFI = 0.97, IFI = 0.97).

First, to check convergent validity, the average variance extracted (AVE) and composite reliability (CR) were examined (Fornell & Larcker, 1981). As shown in Table 2, both AVE (0.56–0.84) and CR values (0.81–0.95) were satisfactory. Accordingly, these findings suggest good convergent validity, implying internal consistency in the data. Second, with respect to discriminant validity, this study compared the AVE values for each pair of constructs with the shared variance (r^2) between them (Fornell & Larcker, 1981). As shown in the results of square roots of AVE in Table 3, this study found no shared variance (0.01–0.27) greater than the AVE (0.56–0.84), suggesting satisfactory discriminant validity in our data.

5.2. Results of main effects

This study tested the hypotheses regarding main effects (H1 ~ H7) with an ordinary least squares (OLS) estimation of multiple linear regression model. As described in Table 4, it was found in model 3 that the impacts of three antecedent variables of relationship-specific investment (H1; $\beta = 0.09$, $p > 0.10$), contract-based passive opportunism (H2; $\beta = -0.03$, $p > 0.10$), and response-based passive opportunism (H3; $\beta = -0.09$, $p > 0.10$) on financial performance are not statistically significant. These findings are contrary to our prediction, thus rejecting H1, H2, and H3.

Next, regarding the relationships between the three antecedent variables and buying group's brand equity, our results revealed that whereas relationship-specific investment (H4; $\beta = 0.49$, $p < 0.01$) increases brand equity, response-based passive opportunism (H6; $\beta = -0.14$, $p < 0.05$) decreases such brand equity. These findings correspond with our prediction. Thus, H4 and H6 are accepted; yet, contrary to our

Table 3
Descriptive statistics and correlation matrix ($n = 241$).

	1	2	3	4	5	6	7	8	9	10
1. Buying group's brand equity	*0.75*									
2. Relationship-specific investment	0.52*	*0.75*								
3. Contract-based passive opportunism	−0.25*	−0.18*	*0.92*							
4. Response-based passive opportunism	−0.24*	−0.11	0.52*	*0.87*						
5. Financial performance	0.28*	0.17*	−0.18*	−0.19*	*0.89*					
6. Number of stores	0.11	−0.05	0.03	0.04	0.25*	N.A.				
7. Relationship length	0.27*	0.30*	−0.10	−0.09	0.05	0.07	N.A.			
8. Purchase ratio	0.08	0.09	0.00	0.06	−0.08	−0.24*	0.08	N.A.		
9. Goal incongruity	−0.39*	−0.34*	0.27*	0.25*	−0.28*	0.04	−0.24*	−0.02	N.A.	
10. market uncertainty	−0.03	0.09	0.09	0.02	−0.25*	−0.07	0.05	0.01	0.00	N.A.
Mean	3.39	2.90	2.33	2.25	2.91	3.86	14.86	47.80	2.35	3.36
SD	0.72	0.86	0.85	0.86	1.00	8.51	10.99	21.14	1.02	1.20

Note: SD = standard deviation; N.A. = not applicable; The italic numbers in the diagonal row are square roots of the average variance extracted (AVE).
[*] $p < 0.05$.

Table 4
Regression analysis results ($n = 241$).

Dependent variables	BGBE[a]	Financial performance			
		Model 1	Model 2	Model 3	Model 4
Intercept	2.64***	4.29***	4.21***	4.13***	4.02***
Main effects					
Buying group's brand equity			0.19***	0.13*	0.13*
Relationship-specific investment	0.49***			0.09	0.09
Contract-based passive opportunism	–0.08			–0.03	0.01
Response-based passive opportunism	–0.14**			–0.09	–0.13*
Two-way interactions effects					
Buying group's brand equity × Relationship-specific investment					0.10*
Buying group's brand equity × Contract-based passive opportunism					–0.19***
Buying group's brand equity × Response-based passive opportunism					–0.02
Control variables					
Number of stores		0.24***	0.22***	0.24***	0.20***
Relationship length		–0.07	–0.10*	–0.12*	–0.14**
Purchase ratio		–0.02	–0.04	–0.03	0.00
Goal incongruity		–0.30***	–0.24***	–0.20***	–0.22***
Market uncertainty		–0.23***	–0.22***	–0.23***	–0.21***
R^2	0.30***	0.20***	0.23***	0.25***	0.31***
$\triangle R^2$			0.03	0.02	0.06
F-change			8.82***	1.64	6.26***

Note: [a]Buying group's brand equity; Table reports standardized coefficients; VIF values with both BGBE model (1.04–1.41) and financial performance model (1.51–1.65) presented no major problem of multicollinearity.
[*] $p < 0.1$.
[**] $p < 0.05$.
[***] $p < 0.01$.

prediction, contract-based passive opportunism (H5; $\beta = -0.08$, $p > 0.10$) was not statistically significant, rejecting H5. Lastly, consistent with our prediction, our result in model 2 suggested that buying group's brand equity improves financial performance (H7; $\beta = 0.19$, $p < 0.01$). Therefore, H7 is accepted.

5.3. Results of moderating effects

To test three moderating hypotheses (H8 ~ H10), following Aiken and West (1991), this study employed a hierarchical multiple regression model with a stepwise approach. We mean-centered all predictor variables before creating interaction terms to alleviate concerns of potential multicollinearity (Aiken & West, 1991). Variance inflation factors (VIF) values range from 1.51 (response-based passive opportunism) to 1.65 (buying group's brand equity), suggesting no major problem of multicollinearity in our data. This study also proceeded with a post hoc analysis to tease out the interaction effects using simple slope analysis. Specifically, it tested the simple effect of buying group's brand equity on financial performance, conditional on high (i.e., mean + 1SD) and low (i.e., mean–1SD) levels of each moderating variable.

As summarized in Table 4, this study found that relationship-specific investment strengthens the positive relationship between buying group's brand equity and financial performance (H8; $\beta = 0.10$, $p < 0.10$). Additionally, our results of simple slope analysis demonstrated that the effect of buying group's brand equity on financial performance is stronger ($b = 0.31$, $p < 0.05$) when relationship-specific investment is high, but weaker ($b = 0.05$, $p > 0.10$) when such investment is low (Fig. 2). Thus, H8 is accepted.

The study also found that contract-based passive opportunism weakens the positive effect of buying group's brand equity on financial performance (H9; $\beta = -0.19$, $p < 0.01$), while the effect of response-based passive opportunism on such a relationship is not significant (H10; $\beta = -0.02$, $p > 0.10$). Additionally, the simple slope analysis results revealed that the effect of buying group's brand equity on financial performance is weaker ($b = -0.07$, $p > 0.10$) when contract-based passive opportunism is high, but stronger ($b = 0.43$, $p < 0.01$) when contract-based passive opportunism is low (Fig. 3). However, our results, shown in Fig. 4, do not support the hypothesis that the effect of buying group's brand equity on financial performance is weaker ($b = 0.15$, $p > 0.10$) when response-based passive opportunism is high, but stronger ($b = 0.21$, $p < 0.10$) when response-based passive opportunism is low. Consequently, H9 is accepted, but H10 is rejected.

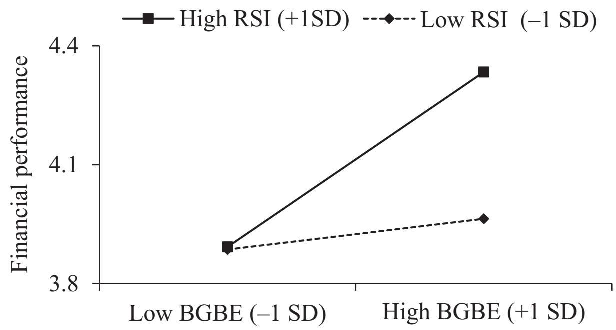

Fig. 2. Interaction effect of relationship-specific investment.

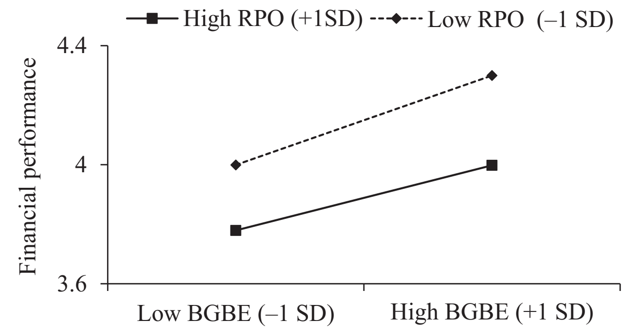

Fig. 4. Interaction effect of response-based passive opportunism.

6. Discussion and implications

In today's competitive and dynamic retail market situations, improving the buying group's brand equity is a success factor for ensuring better performance of member retailers, but indicates a real challenge in retail buying groups. Headquarter managers intending to maximize the benefits of such brand equity need to find out how to better manage their member-retailers' strategic behaviors. To address this knowledge gap, this study examines how relationship-specific investment and passive opportunism are linked to the buying group's brand equity and financial performance. Our study's findings generate important implications for headquarter managers to design and govern retail buying groups.

6.1. Theoretical implications

This study makes three key contributions to the literature. First, this study presents a conceptual framework of pivotal roles a buying group's brand equity plays in understanding SMRs' horizontal strategic alliances. Previous investigations of inter-firm relations have offered initial insights into the antecedents (Dwivedi et al., 2020; Zhang et al., 2015) and consequences (Baldauf et al., 2003) of individual firms' brand equity. Building on these initial insights, Hernández-Espallardo and Navarro-Bailón (2009) demonstrated the way member-retailers' brand equity improves their economic satisfaction with the buying group membership. Further, we attempt to integrate insights on brand equity with TCE in predicting retail buying groups. Specifically, this study conceptualizes the buying group's brand equity from the horizontal strategic alliance perspective while examining member-retailers' strategic approach to relationship-specific investment and passive opportunism. Considering that the theoretical developments of brand equity in horizontal strategic alliances is limited, this study advances the TCE literature in that a buying group's brand equity can be considered a relational outcome created by joint activities among member retailers in addressing firm performance.

Second, this study offers evidence regarding the crucial role of member-retailers' relationship-specific investment in retail buying groups. TCE context largely stimulates SMRs to view the impact of relationship-specific investment as either expropriation or bonding effects (Choi & Hara, 2018; Rokkan et al., 2003; Trada & Goyal, 2020). In this vein, traditional TCE assumes that negative (e.g., expropriation) aspects of relationship-specific investment are more likely to occur, especially in vertical, dyadic inter-firm relationships (Trada & Goyal, 2020). In contrast, our results suggest that relationship-specific investment directly improves the buying group's brand equity and strengthens the brand equity's positive effect on financial performance. This study supports positive (e.g., bonding) aspects of such dedicated investment in retail buying groups, which largely corresponds to the findings of prior studies such as Choi and Hara (2018) and Luo et al. (2009). Considering our study's research context of horizontal strategic alliances, this study highlights insights on the effects of relationship-specific investment on relational outcomes that are likely to depend on arrangement (e.g., vertical vs. horizontal), number of parties involved (e.g., dyadic vs. multiple), or relational ties (e.g., strong vs. weak) of inter-firm or network organization types.

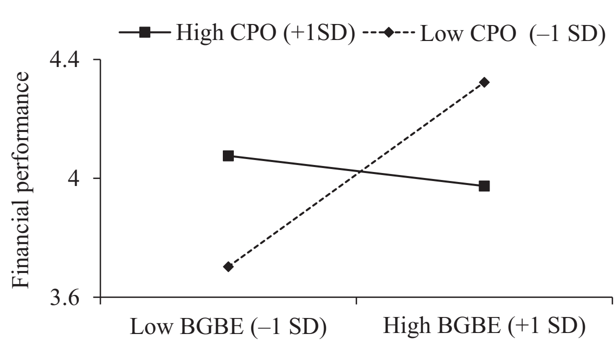

Fig. 3. Interaction effect of contract-based passive opportunism.

Third, this study augments our knowledge of the differential impacts of contract-based and response-based passive opportunism. Previous studies investigating opportunism have provided valuable insights into active and passive opportunism (Arıkan, 2020; Seggie et al., 2013; Wathne & Heide, 2000). TCE literature suggests that regardless of active vs. passive, opportunism is a relationship-destroying factor, thus resulting in lower satisfaction with performances (Musarra et al., 2021). Building on these insights, this study classifies and tests the effects of potential problematic behavioral types with respect to formal contracts and response strategies.

Our study offers complex insights into the literature on opportunism. Contract-based passive opportunism becomes more problematic when it comes to an individual member's firm performance rather than a relational outcome of the buying group's brand equity. In this regard, as the rationale behind the rejected result in H5, we assume that when passive opportunism regarding formal contracts is problematic in creating the relational outcome, as stated by Samaha et al. (2011), there could be scope to constantly amend or improve the contents of formal contracts to appropriately respond to such behaviors to some degree. On the contrary, response-based passive opportunism has a more detrimental effect on the relational outcome of the buying group's brand equity rather than firm performance of a member retailer. In this regard, as the rationale behind the rejected result in H10, in cases where response-based passive opportunism is problematic, as Arıkan (2020) implies, we assume that member retailers may believe that such behaviors do not have a considerable and direct influence on their financial achievements when dividing or utilizing the established relational outcome of brand equity.

Essentially, given that judgments toward opportunistic behaviors are in the eye of beholders (Arıkan, 2020), this study is the first to uniquely explain whether and how contract-based and response-based passive opportunism are linked to both buying group's brand equity and financial performance. We also anticipate that our study's findings stimulate future research on opportunism in various types of inter-firm relationships by further elaborating opportunism in terms of formal contracts vs. response strategies.

6.2. Managerial implications

The study offers two major implications for headquarter managers in retail buying groups to pursue mutual benefits and assistance networks. First, managers are required to understand the role of the buying group's brand equity more deeply. Findings from our interviews with Japanese retail buying groups revealed that although a few have started to recognize the significance of brand power, others still appear to prioritize direct contributions to member-retailers' benefits or advantages to improve firm performance in terms of the merits of economies of scale.

Interestingly, our results highlight the importance of the buying group's brand equity in efforts to enhance financial performance. We strongly advise that managers should constantly improve such brand equity while emphasizing the pivotal role of buying group's brand equity to their member retailers. By employing both qualitative and quantitative methods, managers need to measure and evaluate their brand equity on a regular basis (Calderwood & Freathy, 2014). Additionally, they should also share these results with stakeholders in terms of member retailers, potential SMRs, suppliers, and so on, through official homepages. It is important to remember that because buying group's brand equity is a relational outcome, joint efforts by member retailers are key to better brand equity via finding a better way of solving the problem with new ideas or experiments.

Second, managers should pay more attention to strategically managing member retailers' behaviors to achieve better relational outcomes and/or individual member's firm performance. Our interviews revealed that a cooperative mindset by drawing a social contract is realistically more important than a strict formal contract. As each member retailer is an independent owner, strict control and enforcement with punishments or sanctions based on formal contracts often become the reason member retailers withdraw from their buying groups, which may undermine the merits of economies of scale. For these reasons, managers tend to neglect passive opportunism to some degree, while highly anticipating member-retailers' dedicated investments underpinned by strategic integration. In particular, they appear to be more tolerant of response-based opportunistic behaviors because they believe that such behaviors do not significantly aggravate relational outcomes and/or member-retailers' performance consequences.

However, our findings highlight that while relationship-specific investment is essential for both improved buying group's brand equity and financial performance, contract-based and response-based passive opportunism are indeed detrimental. Accordingly, managers would do well to respond more smartly to member-retailers' passive opportunism while also facilitating dedicated investments. Specifically, managers should continuously amend or improve the contents of formal contracts when members' unexpected behaviors become great problems, especially distribution by relational outcomes or results. At the same time, to mitigate problematic behaviors regarding member-retailers' responses, as some prior studies (Stoel, 2002; Trada & Goyal, 2020) advised, managers should improve relational ties or qualities with those member retailers by devising communication efforts in terms of quality, quantity, frequency, or means.

6.3. Limitations and further research

The study presents three major limitations that deserve future research. First, to better ensure generalization of this study's findings (Ullah et al., 2018), as discussed in Section 4.2, the challenge remains in terms of non-response and single informant bias. It would be desirable to mitigate non-response bias by identifying early versus late response in the procedure of questionnaire survey. To alleviate single informant bias, collecting data from multiple managerial positions who have adequate knowledge on our research context is also recommended. Second, the challenge of improving scale items should also be addressed. The standardized coefficient of one scale item (i.e., member retailers' loyalty to the buying group has increased) in Table 2 was marginally below the threshold of 0.5. To increase the accuracy of the findings, future research could elaborate on scale items by reflecting real practices in retail buying groups.

Third, as explained in Section 4.3, we measured financial performance with a subjective measure. To gain a better understanding of firm performance, the challenge of data collection is to produce more objective financial measures from small businesses who tend not to divulge such information (Campbell et al., 2010). It would also be worthwhile to compare the level of concordance of findings between objective and subjective measures. To this end, in addition to courteous pre-notification, future researchers could consider offering attractive incentives (e.g., the survey result report) to ensure prospective respondents are interested, while seeking close cooperation from headquarters of retail buying groups.

Two more avenues for research are suggested. To emphasize the role of brand equity in understanding the relationships between member-retailers' strategic behaviors and firm performance, this study neglected to consider the relationships between relationship-specific investment and passive opportunism. Further research could examine the effects of these investments on contract-based and response-based passive opportunism. Additionally, it would be worthwhile to further analyze whether and how these two types of problematic behaviors in terms of active and passive opportunism moderate the impact of such investments on the relationships in retail buying groups, for example, business vs. political ties (Wang et al., 2020), or upstream vs. downstream alliance activities (Musarra et al., 2021) or group identification (Stoel, 2002).

Second, this study recommends further investigation of the level of buying group's brand equity from varying perspectives. Besides the standpoint of member retailers in our study, it is worth simultaneously examining the levels and roles of buying group's brand equity from potential SMRs, major suppliers, other retail buying groups as competitors, or consumers. In doing so, SMRs could better understand how important brand equity is and which retail buying group they should consider joining. Additionally, as Ghisi et al. (2008) summarized, studies to empirically compare these findings with those of various types of horizontal strategic alliances would be fruitful.

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