

The Role of Self-Construal in Group-Buying Propensities for Chinese and Canadian Generation Z

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Abstract: Today, the use of group-buying platforms is expanding and diversifying, affecting both consumers and businesses. This paper seeks to contribute to the discussion of these platforms' global market segmentation by providing a cross-cultural understanding of the correlations between self-construal level, group-purchasing behaviour, and underlying group-purchase incentives among Generation Z. Data were collected from current Chinese and Canadian undergraduates at McGill University. The results reveal different relationships between self-construal, group-buying incentives, and group-buying propensity in both participant groups. For group purchases with friends (Study 1), the level of interdependent self-construal is associated with an increased likelihood for Chinese participants to share their purchase list. Nonetheless, in both participant groups, self-construal level is not associated with a propensity to accept purchase invitations. For group purchases with strangers (Study 2), the level of interdependent self-construal positively correlates with both participant groups' pursuit of group savings. Lower levels of self-construal also increase the level of pursuit of popular items among the Chinese participants. The findings shed light on the mentalities behind group-buying propensities in Generation Z, and they reinforce the need for culturally tailored managerial approaches for group-buying platforms.

Keywords: self-construal, group-buying incentives, group-buying models, interpersonal influence, Generation Z

1. Introduction

Internet-based platforms compete intensively in the Chinese market environment (Chang et al., 2019). Pingduoduo, an innovative e-commerce platform that combines group-buying and social networking with a customer-to-manufacturer (C2M) focus, has experienced significant growth (Li, 2021). Pinduoduo primarily sells inexpensive daily essentials and agricultural items, and it provides consumers with a wide range of products. Specifically, the price of the products falls as the shoppers' group size increases. By sharing Pinduoduo's links on social media, users can invite friends and family to join them in group shopping. In fact, 61% of Pinduoduo users are in their 30s or younger and have relatively low incomes. This paper will reference the group-buying model of Pingduoduo in view of the latter's success. Nonetheless, the products analysed will be inexpensive daily commodities rather than food, given that agricultural networks vary across countries (Si et al., 2020).

Although there is plenty of recent research on Pingduoduo, studies have focused almost exclusively on the Chinese macro environment, the business model, and marketing strategy (Chang et al., 2019; Zhao et al., 2019; Kuang et al., 2022). This raises the question of group-buying propensities within Generation Z. Generation Z was born between 1995 and 2010 and is the first generation to grow up in a globalized and culturally diverse world (McCrindle, 2014; Schwabel, 2014). In terms of personality traits, Generation Z has its own expectations, preferences, and perceptions (Kirchmayer, 2020). Consequently, the development of marketing strategies tailored to Generation Z, which will soon enter the workforce, is inevitable in the near future. In fact, group-buying platforms may target Generation Z to gain early customer loyalty (Thompson, 2014). This paper will, therefore, specifically address the Generation-Z population.

Individual perceptions, processes, and decision-making can be influenced by varying levels of self-construal (Holmvall & Bobocel, 2008; Johnson et al., 2006). Self-construal is a personality trait that influences how people comprehend, define, and construct themselves (Markus & Kitayama, 1991). Specifically, self-construal is divided into independent self-construal and interdependent self-construal according to individuals' views of themselves as independent individuals separated from others or as part of a social network. A higher level of (independent) self-construal corresponds to a higher degree to which the individual views himself as independent from the group (Liu, 2011). Hence, this paper will also investigate the role of self-construal in group-buying incentives and group-buying propensities, with a view to targeting potential consumer groups and providing managerial recommendations.

Furthermore, given the success of group-buying platforms in China, this raises the question of whether the model can be as popular in North America (Top Group Buying Startups, 2022). In contrast to the more individualistic norms prevalent in Western nations, collectivism and group norms are highly valued in most Asian countries (Hofstede, 1980). Previous research has shown that individualistic-collectivistic cultural orientations may exert a strong influence on the attitudes and subjective norms associated with collaborative learning (Arpaci, 2016), knowledge sharing (Arpaci & Baloğlu, 2016), and consumer behaviour (De Mooij & Hofstede, 2002). Therefore, this paper will examine the views on group purchasing of Chinese and Canadian participants, who hail (respectively) from collectivist and individualist national cultures (Hofstede, 1980).

Overall, this paper utilizes two participant groups influenced primarily by Chinese or Canadian national cultures. Using the Pingduoduo model, the twin studies then analyse how self-construal level influences various psychological incentives around group purchase and group-purchase propensity, in scenarios of group-buying with friends or anonymous users.

2. Theoretical framework

A lower level of self-construal exemplifies collectivistic culture (Gudykunst et al., 1996; Singelis & Brown, 1995), while a higher level of (independent) self-construal is associated with greater individualism and independence from the group (Liu, 2011). A collectivistic society is characterized by a close-knit social structure (Hofstede, 1980). Correspondingly, collectivists are also more susceptible to group decisions and interpersonal influences (Schwartz, 1990).

2.1 Group-buying with friends

One of the defining characteristics of self-construal is interconnectedness with other individuals (Holland et al., 2004; Markus & Kitayama, 1991). That is, individuals with lower self-construal exhibit a greater connection between the self and others. Therefore, those with lower self-construal are more likely to be involved in heightened personal interactions and form relationships on a more personal level. As a result, they may exchange more personal information, such as purchasing histories and buying intentions. In addition, one role of information sharing is to build connection and rapport, and those with a high level of interdependent self-construal place a greater emphasis on relationships with others (Marshall & Bly, 2004; Triandis, 1995). Hence, people with lower self-construal may be more likely to share personal shopping information, in order to strengthen social bonds and improve interpersonal relationships.

Additionally, those with low self-construal are often preoccupied with fitting in and belonging with others; they regard the self and others as non-distinguishable in many situations, and they are more inclined to cooperate (Markus & Kitayama, 1991; Triandis 1995). Therefore, those with a lower level of self-construal may be more inclined to accept shopping invitations from friends in order to maintain good interpersonal relationships. People who have independent self-construal, on the other hand, tend to care more about their own emotions than what others think (Markus & Kitayama, 1991). As a result, individuals with higher self-construal may be less troubled by the implications for interpersonal relationships if they decline purchase invitations from friends.

Thus, Study 1 proposes:

- H1: People with lower self-construal are more likely to share their purchase information with friends.
- H2: People with lower self-construal are more likely to accept purchase invitations from friends.
- H3: Strengthening interpersonal relationships is one motive for sharing one's purchase information with friends.
- H4: Strengthening interpersonal relationships is one motive for accepting purchase invitations from friends.

2.2 Group-buying with strangers

Because low-self-construal individuals derive their identity from the social system rather than individual attributes, they may be less inclined to resist buying the same products as the majority (Gudykunst et al., 1996; Liu, 2011). Individuals with independent self-construal, on the other hand, pursue uniqueness and self-actualization, and they tend to act in a distinctive manner (Gudykunst et al., 1996). As a result, people with higher self-construal may be less likely to shop in groups for identical items. Moreover, the characteristics associated with interdependent self-construal exemplify those of collectivistic cultures, and majority influence manifests more strongly in collectivistic group minorities than in individualistic group minorities (Gudykunst et al., 1996; Singelis & Brown, 1995; Zhang et al., 2007). Therefore, individuals with lower self-construal may be more susceptible to majority influences in the form of item popularity on group-purchasing platforms, while also being less likely to avoid group purchases of non-unique, identical products. Prior research has demonstrated that consumers' preferences for scarce or novel products do not affect their susceptibility to majority influence (Lynn & Harris, 1997). This study will also explore the influence of self-construal on participants' responses to the uniqueness and popularity

of a product.

Low self-construal individuals also place a higher value on relationships and harmony with others (Triandis, 1995), and collectivist individuals seek group unity and cohesion (Hofstede, 1980). Hence, those with lower self-construal may be more likely to engage in collective purchasing in furtherance of their pursuit of cohesiveness and harmony.

In addition, people who have interdependent self-construal are expected to "hold the group's beliefs and opinions and cooperate with others" (Triandis, 1995). In fact, they may emphasize group goals over individual goals (Jain et al., 2007). This is consistent with the characteristics of individuals with a high level of collectivism, who derive meaning from group identification to the extent that, if there is a conflict between their personal and group goals, they will prioritize the latter (Schwartz, 2006). The mutual goal promoted in the case of group purchasing is to save on price by shopping together. Therefore, participants with a higher level of interdependent self-construal may be more willing to participate in group purchases due to their preference for contributing to the saving goal of the group [Figure 1].

Thus, Study 2 proposes:

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H5:	People with	lower self-construal	are more likely to	andade in drolln	buyung
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H6: A higher level of influence associated with product popularity increases the likelihood of group purchases.

H7: A higher level of pursuit of purchase-item uniqueness decreases the likelihood of group purchases.

H8: A higher level of pursuit of a sense of harmony and cohesion increases the likelihood of group purchases.

H9. A higher preference for contributing to group saving increases the likelihood of group purchases.

H10: People with lower self-construal are more likely to be influenced by the popularity of products.

H11: People with lower self-construal are less likely to pursue purchase-item uniqueness.

H12: People with lower self-construal are more likely to pursue a sense of harmony and cohesion.

H13: People with lower self-construal have a higher preference for contributing to group saving.

Figure 1. Hypothesis outline based on the theoretical framework of Study 2

3. Methods

3.1 Participants

To reduce the influence of external factors, volunteers with similar educational and socio-economic backgrounds were chosen. Participants were McGillian undergraduate student volunteers from Canada (n=19) and China (n=16), who received online surveys via Chinese and Canadian social-media platforms (WeChat and Facebook, respectively). Approximately 2/3 of the participants were from the Desautels Faculty of Management at McGill, and around 92% were female. Given the total number of Canadian undergraduates (18,628) and Chinese undergraduates (2,400) at McGill, the sample represented approximately 0.102% and 0.667 % of total Canadian and Chinese undergraduates, as well as around 0.155% and 1.059 % of female Canadian and Chinese undergraduates at McGill, respectively (2021 quick facts - Student demographic survey; Surge in McGill enrolment). Although both participant groups had been exposed to North American culture because of their experiences in Canada, Generation Z in China has also been exposed to Western culture due to globalization (Xu, 2002).

3.2 Measurement and data analysis

The level of the participants' independent and interdependent self-construal was determined using five items from Gudykunst's self-construal scale (Gudykunst et al., 1996). Since this paper measured levels of interdependent self-construal, agreement (on a scale of 1–10) of items signifying low self-construal translated to a positive value, and vice versa. The sum of values determined participants' level of interdependent self-construal. To test H1-4 in Study 1, participants were asked to rate their propensity to engage in group-buying behaviours and the extent to which their decisions were motivated by the intention to strengthen friendship ties. The scenarios involved inexpensive personal items and commodities. To test H5-13 in Study 2, participants were asked to rate their attitude toward group purchases, their level of attraction to product popularity and uniqueness, their pursuit of group harmony and cohesion, and their preference for contributing to group savings. All rating scales ranged from 1 to 10.

The studies used a 95% confidence interval to illustrate the impact of sampling errors, and a two-sided hypothesis test, with a 5% significance level, to indicate the statistical significance of the coefficients. For a correlation to be statistically significant, the null hypothesis had to be rejected in favour of the alternative hypothesis shown in the theoretical framework section. The correlations in H1-4 from Study 1, in H5 and H10-13 from Study 2, were tested using linear regression. The correlations in H6-9 from Study 2 were tested using multiple regression to determine the combined effect of the factors on group-buying propensity.

4. Study 1

4.1 Data description

The Chinese participants demonstrated a lower level of self-construal than their Canadian counterparts [Figures 2 & 3]. Figure 2 also illustrates a negatively skewed distribution for the independent variable, the level of interdependent self-construal, among Chinese participants, which is supported by a larger median than the mean (15.5>13.94) [Table 1]. Overall, the self-construal level of both participant groups corresponded to a higher/lower level of collectivism in Chinese/Canadian society (Hofstede, 1980; Gudykunst et al., 1996; Singelis & Brown, 1995).



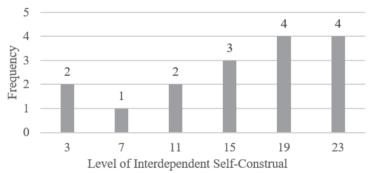


Figure 2. Distribution histogram of interdependent self-construal level for Chinese participants

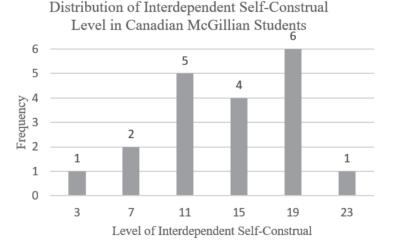


Figure 3. Distribution histogram of interdependent self-construal level for Canadian participants

Table 1. Measures of the position of interdependent self-construal levels for Chinese and Canadian participants

	Median	Mean
Chinese	15.5	13.9375
Canadian	13	12.8947

4.2 Results

The results supported the initial hypothesis H1 for Chinese participants (r=0.20, p<0.05); that is, an increase in the level of interdependent self-construal increases the likelihood of Chinese participants sharing purchasing information with their friends [Table 2]. For the Chinese participants, moreover, the study rejected the null hypothesis for H3 (r=0.69, p<0.05) and H4 (r=0.85, p<0.05). Therefore, an intention to strengthen friendship bonds increases the likelihood that these individuals will share purchase information with, and accept purchase invitations from, their friends. For Canadian participants, the results also supported H4 (r=0.76, p<0.05), i.e., the proposition that an intention to strengthen friendships influences the likelihood of sharing purchase information with a friend.

Responses from Chinese Participants							
		Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
HY1	Level of Interdependent Self-Construal	0.19779165	0.06244395	3.16750692	0.00684908	0.06386269	0.3317206
HY2	Level of Interdependent Self-Construal	0.05943351	0.08190729	0.72561932	0.48002703	-0.1162401	0.23510717
HY3	Level of Interdependent Self-Construal	0.69007634	0.26910845	2.56430574	0.02248451	0.11289612	1.26725655
HY4	Level of Interdependent Self-Construal	0.85433071	0.30096874	2.83860282	0.01314199	0.20881697	1.49984445
Response	Responses from Canadian Participants						
		Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
HY1	Level of Interdependent Self-Construal	0.07960445	0.10659674	0.7467813	0.4653992	-0.145295	0.30450391
HY2	Level of Interdependent Self-Construal	0.11545117	0.10444107	1.10541929	0.28437741	-0.1049002	0.33580257
HY3	Level of Motivation to Strengthen Friendship	0.18382353	0.18642486	0.9860462	0.33793754	-0.2094986	0.57714561
HY4	Level of Motivation to Strengthen Friendship	0.76331361	0.18891353	4.04054503	0.00084925	0.36474091	1.16188631

Table 2. Linear-regression coefficients and	d characteristics for H1-4
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5. Study 2

For H5, the research rejected the null hypothesis in favour of the alternative hypothesis among Canadian participants (r=0.26, P<0.05), but not among Chinese participants (r=0.09, p>0.05) [Table 3]. Therefore, the level of interdependent self-construal positively correlates with the purchasing propensity of Canadian participants, which may be due to the cumulative influence of variables in H6-13, as described in the subsequent multiple-regression analysis.

H6 is accepted for the Chinese participants (r=0.60, p<0.05). Thus, consideration of the popularity of an item does enhance the Chinese participants' tendency to engage in group purchases. H13 is also supported in both participant groups (Chinese: r=0.18, p<0.05; Canadian: r=0.32, p<0.05). Consequently, a higher level of interdependent self-construal results in a greater intention towards group saving among both participant groups.

In both groups of participants, the standard errors and the 95% confidence intervals were, on average, smaller and narrower in the multiple-regression analyses of H10-13 than in H6-9. The lower standard errors reflected fewer sampling errors and were consistent with the logic underlying the prediction. In other words, the level of interdependent self-construal exerted a direct influence on the dependent variables related to group purchase in H10-13, whereas the factors contributing to group-buying propensity in H6-10 were more complex, and these may be affected more by external contexts.

Table 3. Linear-regression coefficients and	characteristics for H5-13
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Responses from Chinese Participants Multiple-Regression Results							
HYP6	Level of Pursuit for Popularity	0.60077273	0.19041993	3.15498875	0.00916038	0.1816613	1.01988417
HYP7	Level of Pursuit for Uniqueness	-0.0892342	0.17018249	-0.5243441	0.61044236	-0.4638033	0.28533494
HYP8	Level of Pursuit for Cohesion	0.33137625	0.18784425	1.76410109	0.10542946	-0.0820662	0.74481867
HYP9	Level of Pursuit for Group Saving	-0.135646	0.11530433	-1.1764172	0.26425928	-0.3894291	0.11813713
Linear-Regression Results							
HYP5	Level of Interdependent Self-Construal	0.09265482	0.04896488	1.89227119	0.07931918	-0.0123644	0.19767404
HYP10	Level of Interdependent Self-Construal	0.1193471	0.06299628	1.89451019	0.07900175	-0.0157665	0.25446068

HYP11	Level of Interdependent Self-Construal	-0.0655785	0.08157164	-0.8039374	0.43487216	-0.2405323	0.10937527
HYP12	Level of Interdependent Self-Construal	0.09083053	0.0538023	1.68822783	0.11350804	-0.0245639	0.20622498
HYP13	Level of Interdependent Self-Construal	0.18262122	0.0710785	2.56928918	0.02226798	0.030173	0.33506944
Responses	s from Canadian Participants						
Multiple-I	Regression Results						
		Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
HYP6	Level of Pursuit for Popularity	0.31233932	0.26483712	1.17936381	0.25790758	-0.2556798	0.88035845
HYP7	Level of Pursuit for Uniqueness	-0.3551054	0.29648783	-1.1977065	0.25091649	-0.9910085	0.28079775
HYP8	Level of Pursuit for Cohesion	0.33070669	0.25750382	1.2842788	0.21989059	-0.2215841	0.88299745
HYP9	Level of Pursuit for Group Saving	0.17330238	0.29696772	0.58357314	0.56879068	-0.46363	0.81023479
Linear-Re	Linear-Regression Results						
HYP5	Level of Interdependent Self-Construal	0.25747837	0.09964937	2.58384334	0.0193143	0.04723657	0.46772017
HYP10	Level of Interdependent Self-Construal	0.07181706	0.08870946	0.80957607	0.42937047	-0.1153435	0.25897766
HYP11	Level of Interdependent Self-Construal	-0.1690977	0.10501406	-1.6102382	0.12575635	-0.390658	0.05246265
HYP12	Level of Interdependent Self-Construal	-0.0023486	0.09548658	-0.0245959	0.9806637	-0.2038076	0.19911049
HYP13	Level of Interdependent Self-Construal	0.32311496	0.08032588	4.02255116	0.000883	0.15364217	0.49258775

6. Discussion and implications

6.1 Study 1

The results from Study 1 indicated that a greater interdependent self-construal level among Chinese participants correlates with a greater likelihood of sharing purchase information, but not with the acceptance of purchase invitations. Furthermore, the goal of strengthening relationships with friends motivated Chinese participants to share shopping information and accept purchase invitations. Meanwhile, among the Canadian participants, self-construal predicted neither the sharing of purchasing information (p=0.47), nor the acceptance of purchase invitations from friends (p=0.28), with the latter relationship being more significant (0.28 < 0.47). Nevertheless, the motivation to strengthen relationships was a factor in the Canadians' acceptance of shopping invitations from their friends.

The responses from both participant groups evince two similarities. First, a higher level of interdependent self-construal was associated with a stronger propensity for sharing purchase information, rather than accepting purchase requests. Second, both sets of participants accepted group-buying invitations in an effort to strengthen their friendships. The first similarity can be attributed to a preference for individualistic judgment, leading to anti-conformity purchasing motives in both participant groups (Berkup, 2014). This is because the participant groups preferred purchasing conformity in the sense that their friends follow their purchasing decisions, rather than the participants themselves being influenced by their friends' buying choices. The second similarity implies that, despite the fact that friendship considerations can affect the acceptance of a group-purchase invitation, this influence is insufficient to overcome the internal desire for individualistic decision-making, which presents a stronger negative influence.

The findings suggest that the intrinsic preference for individualistic decision-making among Chinese and Canadian Generation Z may have resulted in insufficient motivation for group purchases with friends. Therefore, the study also suggests that, to increase sales to Generation Z, group-buy applications should emphasize consumers' internal demand for a product, rather than striving to leverage friends' interactions, which is a form of peer pressure exploitation (Berndt & Murphy, 2002).

Regarding the lack of influence of self-construal on group purchases with friends among Canadian participants, the study identifies the role of national culture. The finding that Canadian participants were less likely to share their purchasing information with friends correlates with their higher engagement in the individualistic North American culture, which is characterized by greater personal distance (Hofstede, 1980). An individualistic national culture may have also infused participants with additional sociocultural attributes, resulting in greater variance in behavioural patterns (Hofstede, 1980; Kanagaretnam et al., 2014; Harrison, 1993). Indeed, in this study, the prediction of group-buying propensity in H1-2 among the Chinese participants (with their more collectivist cultural background) acquired greater significance. The study reveals, in summary, that an individualistic national culture may have a non-negligible impact on group purchasing, and this is a factor that group-purchase platforms should consider when expanding their markets globally, even for populations with comparable levels of self-construal.

6.2 Study 2

Among the Chinese participants, the pursuit of popularity can lead to group-buying behaviour. Nonetheless, the study found no statistically significant correlation between self-construal levels and the pursuit of popularity in either participant group. This could be due to the influence of other personality-trait factors, such as fashion sense, aside from the general inclination to follow majority influence that connects to levels of self-construal, as proposed in this study (Gudykunst et al., 1996; Singelis & Brown, 1995; Goldsmith et al., 1996). Moreover, self-construal level did not influence the pursuit of uniqueness in either participant group. Instead, consumers' personality factors, such as their desires for scarce, innovative, and customized products, may have had a greater influence than self-construal level in determining their pursuit of purchase-item uniqueness (Snyder & Fromkin, 1980).

In addition, a comparison of H2 in Study 1 and H6 in Study 2 reveals the significance of majority numbers in determining whether participants adhere to the preference of individualistic decision-making or demonstrate conformity in group purchasing. This is because, unlike the case of friends' influence in H2, which represented the opinions of a small group of individuals, item popularity in H6 was determined by the purchases of a large shopping group. This finding indicates that the size of the reference group is important in generating majority influence and conformity in group purchases (Powell, 2017; Van, 2014). In other words, while a limited number of friend referrals and social pressures cannot impact Chinese consumers' group-purchasing decisions in H2, the majority opinion of other customers can. As a result, this study suggests that it is more practicable for Chinese customers to purchase with an anonymous shopping group than with friends. Group-purchasing systems, consequently, should not anticipate a reliable source of revenue by encouraging the social networking of Generation Z with friends. They should, rather, place greater emphasis on the alternative feature of group savings.

By contrast, none of the factors appear to motivate Canadians to engage in group purchases, which further indicates a lack of incentive for Canadians to adopt such buying behaviour and highlights the role of an individualistic national culture (Money et al., 1998; Choi et al., 2020).

Nevertheless, in both participant groups, a lower self-construal level did increase the intention to engage in group saving. While participants' interest in group saving did not suffice to influence group-buying decisions, this may have less to do with their level of self-construal and more to do with the external components of their economic position. For instance, Pingduoduo targets young individuals with low incomes, from tier-3 and tier-4 cities, who are interested in purchasing inexpensive goods (Chang et al., 2019). As a lower price increases the likelihood of purchasing in general (Gabor, 1979), individuals with a low level of self-construal or a high level of collectivism may still be targeted for group purchases (Gudykunst et al., 1996). In fact, the majority of the Generation-Z survey respondents will enter the workforce within the next one to three years. As a result, they may have a lower starting salary, which is also more common for female employees (Ezhak et al., 2021). Consequently, in the face of economic stress, such individuals may have a greater incentive to save (Gabor, 1979), making them an excellent target for group-buying platforms. This paper suggests, in summary, that individuals with lower levels of self-construal may increase their motivation for group savings upon entering the labour market, with this resulting in discernible group-purchasing behaviour.

Overall, this study recommends that group-buying platforms maintain a focus on the promotion of "saving together" at national and international level, while targeting market segments characterized by individuals with lower levels of self-construal, higher levels of collectivism, and/or less favourable economic conditions. In particular, in countries with a collective national culture, product popularity should be highlighted as one of the key purchasing motivations, such as through the use of celebrity endorsements (Rindova et al., 2006).

7. Limitations

First, because this article uses a non-probability sample of a very small percentage of the population, it is impossible to determine how well it represents the attitudes of the Chinese and Canadian Generation-Z populations. Moreover, since the participant groups both reflect North American cultural influences, with both having studied in Canada, actual differences in behaviour between Chinese and Canadian participants could be greater than those reflected in this paper. Additionally, as the majority of the participants are female, the results may be less representative of the purchasing behaviour of the general community than those of the female population. Although men's perceptions of online shopping have been comparable to (Alreck & Settle, 2002), or even more favourable than (Slyke et al., 2002), those of female consumers, further research with respondents outside student groups, from countries with various ethnicities, and comprising more than one gender, will add to our understanding of the effect of self-construal on group purchasing.

Moreover, the current research has assessed self-reported intentions to engage in group buying rather than the actual action of group buying. There may thus be variations between intentions and acts. In addition to respondent inattention,

which can occur with online sampling, motivational elements may be strongly dependent on specific item types and groups of friends (Aguinis et al., 2021; Smith et al., 2016). For instance, individuals may have different interpretations of the scenario offered in the questionnaire and respond differently in the various decision-making environments that they interpret. Furthermore, due to the prevalence of group-buying platforms in China, the variance between the findings of a hypothetical survey and reality may be greater among Canadian participants than among Chinese participants, who are more likely to have heard of and used a group-buying platform (Chang et al., 2019). This paper therefore recommends collecting data via interviews, which would allow participants to articulate their thoughts and experiences in their own words, as opposed to relying on terms provided by the researcher (Reinharz, 1992). Even if such interviews do not deal with the real experiences of individuals, they allow one to monitor and control participants' interpretations of the scenario, which can otherwise add noise to the study.

In addition, the questionnaires presented the participants with a situation in which they would have access to a grouppurchase platform, whereas in reality, they may not have sufficient interest or motivation to acquire a relevant account. For instance, although a lower level of self-construal correlates with a greater preference for group savings, this preference may not translate to active participation on the platform as posited by the study. Therefore, actual market expansion of groupbuying platforms in countries where they are not already popular may be more challenging than this article implies.

8. Conclusion

This study drew on the theoretical framework of self-construal to investigate whether and how self-construal level influenced group-buying propensity in the model of shopping with friends, versus shopping with anonymous shopping groups, among Chinese and Canadian participants. After distributing questionnaires regarding hypothetical situations and collecting participants' responses, the paper concludes the following. In the case of shopping with friends: (1) lower self-construal levels led to a greater tendency to share purchasing information among the Chinese participants; (2) strengthening friendship motivated the Chinese participants to share purchasing information with friends and accept shopping invitations from friends; (3) strengthening friendship motivated the Canadian participants to accept shopping invitations from friends. Meanwhile, in the case of shopping with anonymous shopping groups on the platform: (5) the Chinese participants' pursuit of popularity led to a greater tendency to engage in group buying; and (6) in both participant groups, a greater level of interdependent self-construal led to a greater propensity to participate in group savings.

Overall, the study suggests the following. (1) Group-purchasing platforms are more profitable in countries with a collective culture. (2) The model of shopping with strangers has a higher degree of validity. (3) The group-saving model might help companies engage profitably with Generation Z when the latter face economic uncertainty. (4) For countries with a collective culture, product popularity and majority opinion can be leveraged in advertising.

References

- [1] A theory of cultural value orientations: explication and applications Comparative Sociology, 5 (2006), pp. 136-182.
- [2] Alreck, P. and Settle, R. B., "Gender Effects on Internet, Catalogue and Store Shopping," Journal of Database Marketing Vol. 9, No. 2:150-162, 2002.
- [3] Arpaci, I., Baloğlu, M., 2016. The impact of cultural collectivism on knowledge sharing among information technology majoring undergraduates. Comput. Hum. Behav. 56, 65–71.
- [4] Berkup, S. B. (2014). Working with generations X and Y in generation Z period: Management of different generations in business life. Mediterranean journal of social Sciences, 5(19), 218-218.
- [5] Berndt, T. J., & Murphy, L. M. (2002). Influences of friends and friendships: Myths, truths, and research recommendations. Advances in child development and behavior, 30, 275-310.
- [6] Brewer, M.B., Gardner, W. (1996). Who is this "We"? Levels of collective identity and self representations. Journal of Personality and Social Psychology, 71, 83–93.
- [7] Chang, Y., Wong, S. F., Libaque-Saenz, C. F., & Lee, H. (2019). E-commerce sustainability: the case of Pinduoduo in China. Sustainability, 11(15), 4053.
- [8] Choi, Danny Woosik, Seoki Lee, and Michelle Alcorn. "Influence of culture on purchase decision: Integrative models development of amusement park customers." International Journal of Hospitality Management 87 (2020): 102502.
- [9] De Mooij, M., Hofstede, G., 2002. Convergence and divergence in consumer behavior:
- [10] Ezhak, E., Podolskaya, T., Karagozova, E., Subhani, M. I., & Ushakov, D. (2021). Are male to female employment ratio and salary compensations in agricultural sector co-integrated?. In E3S Web of Conferences (Vol. 258, p. 06041). EDP Sciences.

- [11] Gabor, A., & Granger, C. W. J. (1979). Price sensitivity of the consumer. Management Decision.
- [12] Goldsmith, R. E., Flynn, L. R., & Moore, M. A. (1996). The self-concept of fashion leaders. Clothing and Textiles Research Journal, 14(4), 242-248.
- [13] Goldsmith, R. E., Flynn, L. R., & Moore, M. A. (1996). The self-concept of fashion leaders. Clothing and Textiles Research Journal, 14(4), 242-248.
- [14] Goya-Tocchetto, D., & Payne, B. K. (2022). How economic inequality shapes thought and action. Journal of Consumer Psychology, 32(1), 146-161.
- [15] Gudykunst, W. B., Matsumoto, Y., Ting-Toomey, S., Nishida, T., Kim, K., & Heyman, S. (1996). The influence of cultural individualism-collectivism, self construals, and individual values on communication styles across cultures. Human communication research, 22(4), 510-543.
- [16] Harrison, G. L. (1993). Reliance on accounting performance measures in superior evaluative style—the influence of national culture and personality. Accounting, Organizations and Society, 18(4), 319-339.
- [17] Hofstede, G. 1980. Culture's Consequences: International Differences in Work-Related Values. Thousand Oaks, CA: Sage.
- [18] Holland, R. W., Roeder, U. R., Rick B. van, B., Brandt, A. C., & Hannover, B. (2004). Don't stand so close to me: The effects of self-construal on interpersonal closeness. Psychological science, 15(4), 237-242.
- [19] Holmvall, C. M., & Bobocel, D. R. (2008). What fair procedures say about me: Self-construals and reactions to procedural fairness. Organizational Behavior and Human Decision Processes, 105(2), 147–168.
- [20] Jain, S. P., Desai, K. K., & Mao, H. (2007). The influence of chronic and situational self-construal on categorization. Journal of Consumer Research, 34(1), 66-76.
- [21] Johnson, R. E., Selenta, C., & Lord, R. G. (2006). When organizational justice and the self- concept meet: Consequences for the organization and its members. Organizational Behavior and Human Decision Processes, 99(2), 175–201.
- [22] Kanagaretnam, K., Lim, C. Y., & Lobo, G. J. (2014). Influence of national culture on accounting conservatism and risk-taking in the banking industry. The Accounting Review, 89(3), 1115-1149.
- [23] Kirchmayer, Z., & Fratričová, J. (2020). What motivates generation Z at work? Insights into motivation drivers of business students in Slovakia. Proceedings of the Innovation management and education excellence through vision, 6019-6030.
- [24] Kuang, J. (2022, April). Research on the Marketing Strategy of Pinduoduo—Based on the STP and 4Ps Methods. In 2022 7th International Conference on Social Sciences and Economic Development (ICSSED 2022) (pp. 2128-2133). Atlantis Press.
- [25] Li, M., Tsai, C., & Tran, L. T. T. (2021, August). A Case Study of Pinduoduo Strategy Based on SWOT Analysis. In 1st International Symposium on Innovative Management and Economics (ISIME 2021) (pp. 337-346). Atlantis Press.
- [26] Liu, Y. (2011). Self-Construal: Review and Prospect. Advances in Psychological Science, 19(3), 427-439.
- [27] Lynn, M., & Harris, J. (1997). Individual differences in the pursuit of self-uniqueness through consumption. Journal of Applied Social Psychology, 27(21), 1861-1883.
- [28] Markus H., Kitayama S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. Psychological Review, 98, 224–253.
- [29] McCrindle, M. (2014), The ABC of XYZ: Understanding the Global Generations, 3rd ed., McCrindle Research, Bella Vista.
- [30] Mir, S. A., Farooq, S., Shah, M. A., Sofi, S. A., Dar, B. N., Sunooj, K. V., & Mousavi Khaneghah, A. (2022). Recent advancements in the development of multigrain bread. Cereal Chemistry.
- [31] Money, R. B., Gilly, M. C., & Graham, J. L. (1998). Explorations of national culture and word-of-mouth referral behavior in the purchase of industrial services in the United States and Japan. Journal of marketing, 62(4), 76-87.
- [32] Payne, J., Bettman, J. R., & Johnson, E. J. (1991). Consumer decision making. Handbook of consumer behaviour, 50-84.
- [33] Powell, D., Yu, J., DeWolf, M., & Holyoak, K. J. (2017). The love of large numbers: A popularity bias in consumer choice. Psychological science, 28(10), 1432-1442.
- [34] Rindova, V. P., Pollock, T. G., & Hayward, M. L. (2006). Celebrity firms: The social construction of market popularity. Academy of management review, 31(1), 50-71.
- [35] Schawbel, D. (2014). Gen Y and Gen Z global workplace expectations study. Millennial Branding news release, September, 12.
- [36] Schwartz, S. H. (1990). Individualism-collectivism: Critique and proposed refinements. Journal of cross-cultural psychology, 21(2), 139-157.
- [37] Si, Z., Schumilas, T., Chen, W., Fuller, T., & Scott, S. (2020). What Makes a CSA a CSA? A Framework for Comparing Community Supported Agriculture with Cases of Canada and China. Canadian Food Studies/La Revue canadienne des études sur l'alimentation, 7(1), 64-87.
- [38] Singelis, T. M., & Brown, W. J. (1995). Culture, self, and collectivist communication: Linking culture to individual

behavior. Human communication research, 21(3), 354-389.

- [39] Slyke, C. V., Comunale, C. L. and Belanger, F., "Gender Differences in Perceptions of Web-Based Shopping," Communications of the ACM Vol. 45, No. 7: 82-86, 2002.
- [40] Top Group Buying Startups. Tracxn. (2022, July 12). Retrieved from https://tracxn.com/d/trending-themes/Startups-in-Group-Buying
- [41] Snyder, C. R., & Fromkin, H. L. (1980). Uniqueness: The human pursuit of difference. New York, NY: Plenum.
- [42] Student demographic survey mcgill university. (n.d.). Retrieved from https://www.mcgill.ca/studentlifeandlearning/ files/studentlifeandlearning/final_report_1.pdf
- [43] Surge in McGill enrolment among students from China. McGill Alumni. (n.d.). Retrieved from https://mcgillnews.mc-gill.ca/s/1762/news/interior.aspx?sid=1762&gid=2&pgid=1777#:~:text=Some%20parents%20and%20students%20 tell,cent%20from%20other%20Canadian%20provinces.
- [44] Thompson, H. (2014). Who Stole My Customer??: Winning Strategies for Creating and Sustaining Customer Loyalty. FT Press.
- [45] Tian, K. T., Bearden, W. O., & Hunter, G. L. (2001). Consumers' need for uniqueness: Scale development and validation. Journal of consumer research, 28(1), 50-66.
- [46] Triandis, H. C. 1995. Individualism and Collectivism. Boulder, CO: Westview.
- [47] Uggen, C., and A. Blackstone. 2004. "Sexual Harassment as a Gendered Expression of Power." American Sociological Revie, 69 (1): 64–92.
- [48] Van Leeuwen, E. J., & Haun, D. B. (2014). Conformity without majority? The case for demarcating social from majority influences. Animal Behaviour, 96, 187-194.
- [49] Xu, L. (2002). Searching for Life's Meaning: Changes and Tensions in the Worldviews of Chinese Youth in the 1980s. University of Michigan Press.
- [50] Zhang, D., Lowry, P. B., Zhou, L., & Fu, X. (2007). The impact of individualism—collectivism, social presence, and group diversity on group decision making under majority influence. Journal of Management Information Systems, 23(4), 53-80.
- [51] Zhao, W., Wang, A., & Chen, Y. (2019). How to maintain the sustainable development of a business platform: a case study of Pinduoduo social commerce platform in China. Sustainability, 11(22), 6337.
- [52] 2021 quick facts. About McGill. (n.d.). Retrieved from https://www.mcgill.ca/about/quickfacts