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Platform affordances, communication condition, and social capital in Japan: A comparison of Instagram and X users

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Keywords:
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Abstract

Research on social media and social capital has moved from focusing on overall usage to examining how specific practices and contexts shape relational outcomes. This study investigates how platform-specific practices, communication tendencies, and private channel preferences relate to bonding and bridging social capital among Japanese university students. A survey of 519 participants aged 18–25 who used LINE and either Instagram or X was conducted. Multiple regression analyses revealed distinct patterns across platforms. Self-presentation was positively associated with bridging but not bonding social capital, suggesting that public visibility supports weak ties but does not strengthen close ones. Social feedback was associated with bonding and bridging on Instagram but showed weaker associations on X. Communication apprehension was negatively related to bonding on both platforms and bridging only on X, reflecting the higher demands of public, text-based interaction with weak ties. In addition, private communication preference was strongly and positively associated with both bonding and bridging across platforms, underscoring the complementary role of private channels in relationship maintenance. Cultural mechanisms in Japan, including *shinrai* (trust), *anshin* (psychological security), and the *uchi-soto* distinction, further highlight why private communication is socially expected and central to sustain relationships. Overall, the findings demonstrate that platform affordances, individual dispositions, and cultural norms jointly structure the development of social capital, and that private channels remain indispensable complements to public platforms.

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1. Introduction

Social capital, in both its bridging and bonding forms, is widely regarded as a foundational resource for individual well-being and social cohesion (Hawe & Shiell, 2000; Putnam, 2000). Bridging social capital refers to the benefits derived from weak, heterogeneous ties, while bonding social capital stems from close ties (Granovetter, 1973; Putnam, 2000). Given its significance, the development of social capital has been a central focus of academic research.

A substantial literature shows that social media can help people accumulate social capital (Ellison et al., 2007; Shane-Simpson et al., 2018). Platforms such as Instagram and X (formerly Twitter) allow information sharing and maintenance of social relationships (Shane-Simpson et al., 2018). Evidence from Japan points in the same direction (Ye, 2019). However, the effects are not uniform across studies. Comparable activities have been found to show weak or non-significant links with social capital (Valkenburg et al., 2022; Krause et al., 2022). This variability suggests that outcomes are contingent on both behaviors and the contexts in which they take place (Valkenburg et al., 2022). A social media affordances perspective helps account for these variations by showing how platform design and norms structure users' action possibilities and set the conditions under which social connections develop (boyd, 2010; Bucher & Helmond, 2018).

These considerations indicate the importance of examining practices within specific communication conditions. Japan offers a useful setting for this analysis, given its communication ecology of differentiated public platforms and private channels. Building on work on networked publics, Instagram and X can be understood as public platforms that afford scalable visibility and searchability, allowing posts to reach broad and partly indeterminate audiences (boyd, 2010; Treem & Leonardi, 2013). In Japan, among internet users, LINE (74.7%), X (55.9%), and Instagram (54.5%) all show high penetration, with LINE serving as the dominant private channel, Instagram as a venue for visual self-presentation, and X for topical and comparatively anonymous publics (Matsuda, 2022; ICT Research & Consulting, 2025). This configuration, reinforced by cultural norms of *uchi-soto* (in-group/out-group boundaries) (Sugimoto, 2010) and the salience of *shinrai* (trust) and *anshin* (psychological security) in Japanese social life (Yamagishi, 1998), position Japan as a valuable case for examining how communication conditions influence social capital and as a reference point for cross-cultural comparison.

Building on this background, this study addresses three research questions: (1) the relationship between platform-specific practices on Instagram and X and bonding and bridging social capital, (2) the role of private channel preferences alongside platform-specific practices in social capital, and (3) whether such associations vary across platforms. The study makes three contributions. It develops a platform-sensitive account of social capital within an affordances framework, introduces private channel preference as a contextual factor, and derives implications for platform design to support social capital formation.

2. Literature Review

Research on social media and social capital has shifted from examining usage intensity to examining patterns of use. Early studies connected

higher intensity with social capital (Ellison et al., 2007), but later studies found how people use platforms more consequential. Active participation, such as messaging and posting, tends to strengthen ties, while passive browsing shows weaker or non-significant associations (Burke et al., 2011; Valkenburg et al., 2022). Motivational approaches have examined drivers such as self-expression and information seeking in relation to social capital (Hong & Bae, 2023). Yet findings remain mixed, with some activities associated with social capital and others showing no significant relationship (Shane-Simpson et al., 2018; Krause et al., 2022). These inconsistencies indicate the importance of specifying the conditions under which social media contributes to relationship building. To address this, the present study adopts a social media affordances perspective to examine how interaction contexts and platform features influence social capital.

Social media affordances theory offers a framework for analyzing how communication channels influence the development of social capital. Platforms can be understood as environments whose design and norms condition interaction (boyd, 2010; Bucher & Helmond, 2018). Foundational frameworks highlight affordances such as scalability, referring to the distribution of content across networks; searchability, referring to the ability to locate people or information; and visibility, referring to the presentation of content and networks (boyd, 2010; Treem & Leonardi, 2013). While useful, these categories remain abstract and insufficiently tied to concrete practices (Bucher & Helmond, 2018). Affordances may also be examined at the feature level, such as profile pages (Ellison & Vitak, 2015). To advance beyond this limitation, Bucher and Helmond (2018) propose that affordances are relational, platform-specific, and multi-layered, influenced by technical design, culture norms, digital environments, and user groups. Guided by this view, the present study connects conceptual and feature-level affordances to analyze platforms as communication environments that structure opportunities for connection and social capital.

On broadcast-oriented platforms such as Instagram and X, a defining characteristic is the capacity to share content with broad audiences (boyd, 2010; Treem & Leonardi, 2013). This functions as both information exchange and relational cue visible to connected and peripheral audiences (boyd, 2010; Ellison & Vitak, 2015). Self-presentation is a central mechanism through which users employ these affordances, referring to how individuals curate their online persona to influence others' perceptions (Manago et al., 2008). By instantiating affordances of visibility and scalability, self-presentation conveys identity signals, draws attention, and studies show it reinforces close ties and sustains wider networks, thereby supporting both bonding and bridging social capital (Liu et al., 2016; Desjarlais, 2022). In Japan, Instagram and X are major venues for youth identity expression, where visual curation and topical display are common (Matsuda, 2022; Nishimura, 2024). These patterns suggest that self-presentation on Instagram and X is associated with bonding and bridging social capital (H1).

Following self-presentation, audiences respond through likes and comments, which this study treats as social feedback. Social feedback consists of lightweight, publicly visible acknowledgments that validate the posts and signal shared interest (Wenninger et al., 2019). Such reciprocal interactions strengthen social ties by sustaining routine contact and reinforcing relational

commitment (Burke et al., 2011), while positive feedback consolidates relationships by affirming identity work and encouraging continued interaction (Brudner et al., 2023). In the Japanese media environment, feedback on broadcast-oriented platforms is expected to play an important role in relationship maintenance, supporting both strong and weak ties. Accordingly, this study hypothesizes that social feedback is associated with bonding and bridging social capital among users of Instagram and X (H2).

Affordances become meaningful when enacted in contexts users perceive as appropriate for interaction (Bucher & Helmond, 2018). Communication apprehension, defined as the fear or anxiety associated with real or anticipated communication, constrains the use of social media affordances (McCroskey, 1977; Krishnan & Hunt, 2015). Users comfortable with communication are more likely to post, reply, and sustain exchanges, whereas apprehensive users withdraw, reducing social capital built on frequent contact (Krishnan & Hunt, 2015). Platforms norms shape these relationships. Instagram is visually oriented, with low-effort responses such as likes and story reactions, which maintain both strong and weak ties with minimal conversational load (Krause et al., 2022). X, as a predominantly text-based platform, facilitates broader but less personal connections (Malik et al., 2019). In Japan, X hosts active topical publics around gaming, anime, and fandom, where messages from strangers increase demands for conversational engagement to form new ties (Matsuda, 2022). Based on these distinctions, this study hypothesizes that communication apprehension is negatively associated with bonding social capital on both platforms (H3) and more strongly associated with bridging social capital on X than on Instagram (H4).

Although this study focuses on Instagram and X users, other channels also shape their social capital, and Mixing Multiple Media Theory suggests that individuals combine platforms to sustain different ties (Sweeney et al., 2024). Public posting on Instagram and X enables reach and lightweight interaction, whereas private channels such as LINE and face-to-face facilitate intimacy, coordination, and trust, and are associated with social capital (Baym et al., 2004; Katsura, 2018; High et al., 2024). While Instagram and X provide direct messaging, this study treats LINE and face-to-face as Japan's primary bounded channels, viewing direct messages on public platforms as crossovers (Valkenburg et al., 2022). Prior research highlights young adults as a cohort in which social media use is particularly prevalent and closely tied to peer relationship development, making them an especially important group for investigation (Sweeney et al., 2024). Taken together, stronger private channel preferences are expected to complement public affordances by reinforcing strong and weak ties, and are hypothesized to be associated with both bonding and bridging social capital (H5).

3. Research Method

The quantitative survey examines how platform-specific practices relate to social capital among Japanese university students aged 18–25. It is the quantitative phase of an exploratory sequential project, following an earlier qualitative study of students' social media use and social connections. Insights from that phase guided variables selection and operationalization. The study focuses on four connection venues in Japan, with Instagram and X as public channels, LINE as

the primary private channel, and face-to-face interaction as the offline counterpart.

3.1 Procedure

A questionnaire was developed to test the hypotheses. Most scales were adapted from the prior research and translated into Japanese using forward translation by the author, expert proofreading by a native Japanese researcher, and back-translation ensuring semantic equivalence. The survey was fielded vis Cross Marketing's panel from June 18 to Jun 24, 2024. Before participation, respondents viewed an information sheet and provided consent. The study complied with human-subjects standards, received institutional review board approval and collected no personal identifiers beyond demographics. Eligibility criteria were Japanese nationality, current university enrollment, use of LINE, and use of either Instagram or X, along with informed consent. Cases failing these criteria were excluded prior to analysis, resulting in a final sample of 519.

3.2 Participants

This study analyzed 519 participants aged 18 to 25 years (M = 20.53, SD = 1.51), including 386 females, 130 males, and 3 others. Daily use exceeding one hour was reported by 152 for LINE (29.3%), 224 for Instagram (43.2%), and 187 for X (36%). Participants identified their primary public platform for social connection, which determined group assignment: 383 (73.8%) preferred Instagram and 136 (26.2%) preferred X. The Instagram group (M = 20.46, SD = 1.46) comprised 309 females, 71 males, and 3 others, while the X group (M = 20.74, SD = 1.63) included 77 females and 59 males. The full descriptive statistics for all variables are detailed in Table 1. Unequal group sizes reflect panel constraints and prevailing youth usage. Analysis therefore proceeds by group, with caution in interpreting effects in the smaller group.

3.3 Measures

Social capital was assessed using the 20-item scale Williams (2006), comprising two 10-item subscales: bridging and bonding. Responses were recorded on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). Bridging social capital, reflecting ties to broader and more diverse networks, showed high reliability (α = .90 for both Instagram and X). Bonding social capital, reflecting close and supportive ties within

Table 1 Descriptive statistics of key variables

Variable	Instagram M (SD)	X M (SD)
Bonding social capital	4.45 (0.98)	4.16 (0.91)
Bridging social capital	4.61 (1.06)	4.36 (1.06)
Self-presentation	2.83 (1.46)	2.99 (1.63)
Social feedback	2.28 (0.81)	1.99 (0.79)
Communication apprehension	3.43 (1.27)	3.40 (1.29)
LINE preference	4.89 (1.25)	4.57 (1.41)
Face-to-face preference	5.09 (1.25)	4.58 (1.44)
Private communication preference	4.99 (1.10)	4.57 (1.33)
Preference differentiation	0.19 (1.10)	0.01 (0.99)

immediate circles, demonstrated acceptable reliability (α = .79 for Instagram, .78 for X).

Self-presentation was measured for Instagram and X users with a five-item scale adapted from Lin and Hsieh (2021) and tailored to Japanese youth. Items asked about sharing frequency in five areas: emotions, daily events, social issues, noncontroversial trends, and campus life. Responses were recorded on a 7-point scale (1 = never, 7 = almost every day). The scale showed high reliability (α = .87 for Instagram, .86 for X).

Social feedback was measured by the frequency of reactions received (e.g., likes, comments) on each platform. Instagram users reported feedback on posts and stories, and X users on posts. Responses were recorded on a 5-point Likert scale (1 = never, 5 = frequently). The scale showed good reliability (α = .85 for Instagram, .80 for X).

Communication apprehension was measured with items adapted from prior scales (Karr-Wisniewski & Lu, 2010; Krishnan & Hunt, 2015) to capture discomfort and anxiety when communicating on Instagram or X. Responses were recorded on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). A sample item was, "I feel awkward communicating on Instagram/X." The scale showed high reliability (α = .88 for Instagram, .86 for X).

Private communication preference was measured to capture participants' inclination toward private channels relative to Instagram or X. The construct included two components: LINE preference and face-to-face preference. Two parallel five-item scales developed from qualitative insights. One scale assessed preference for LINE over each public platform (e.g., "I am more satisfied with communication via LINE than via Instagram/X"), and the other assessed preference for face-to-face communication (e.g., "I prefer face-to-face interactions over communicating via Instagram/X"). Responses were recorded on a 7-point scale (1 = strongly disagree, 7 = strongly agree). For Instagram users, the LINE scale (α = .88, CR = .88, AVE = .60) and face-to-face scale (α = .88, CR = .88, AVE = .61.) showed good reliability and validity. For X users, the LINE scale (α = .90 CR = .91, AVE = .66) and face-to-face scale (α = .89, CR = .90, AVE = .63) also showed good reliability. Given their high correlation (r = .71 for X, .58 for Instagram), an overall private communication preference score was created by averaging the two subscales (α = .91 for Instagram, .93 for X). Preference differentiation was computed as face-to-face minus LINE, where positive scores denote stronger face-to-face communication preference. This measure reflects both overall private communication preference and the relative weighting of LINE versus face-to-face.

4. Results

Correlation analyses were first conducted to examine relationships among the variables (see Tables 2 and 3). Histograms indicated that bonding and bridging social capital were approximately normal for both Instagram and X users. Q-Q plots showed regression residuals aligned with the expected line, supporting the normality assumption. Durbin-Watson tests indicated no significant autocorrelation, and all VIF values were below 2.0 (range = 1.01–1.79), suggesting no multicollinearity. All analyses were conducted in R (version 4.0.4). Table 4 reports the regression models. The predictors explained 24% of the variance in bonding social capital for Instagram users and 32% for X users. For bridging

Table 2 Correlations among study variables for Instagram (N=383)

Variable	1	2	3	4	5	6	7	8	9
1. Bonding social capital	1	.53***	.09	.15**	−.09	.32***	.42***	.40***	.08
2. Bridging social capital		1	.22***	.26***	.06	.32***	.45***	.43***	.13*
3. Self-presentation			1	.60***	.08	−.13**	−.10	−.14**	.03
4. Social feedback				1	.10*	−.06	−.002	−.04	.04
5. Communication apprehension					1	.10	−.07	.02	−.13*
6. LINE preference						1	.58***	.90***	−.43***
7. Face-to-face preference							1	.87***	.41***
8. Private communication preference								1	−.03
9. Preference differentiation									1

Note. *$p < .05$, **$p < .01$, ***$p < .001$.

Table 3 Correlations among study variables for X (N=136)

Variable	1	2	3	4	5	6	7	8	9
1. Bonding social capital	1	.60***	.23**	.28***	.08	.40***	.41***	.43***	.01
2. Bridging social capital		1	.24**	.29***	.01	.42***	.49***	.49***	.09
3. Self-presentation			1	.67***	−.04	−.03	−.06	−.06	−.03
4. Social feedback				1	−.02	−.04	−.08	−.06	−.04
5. Communication apprehension					1	.24**	.28***	.27**	.09
6. LINE preference						1	.71***	.92***	−.31***
7. Face-to-face preference							1	.92***	.39***
8. Private communication preference								1	.05
9. Preference differentiation									1

Note. *$p < .05$, **$p < .01$, ***$p < .001$.

social capital, the models accounted for 35% of the variance for Instagram users and 37% for X users.

Self-presentation did not significantly predict bonding social capital for either Instagram or X users. In contrast, it was positively associated with bridging social capital on both platforms (Instagram: ß = .17, $p < .001$; X: ß = .19, $p < .05$). Thus, H1 was not supported for bonding but was supported for bridging social capital. These results suggests that self-presentation functions more to expand weak-ties networks than to reinforce close ties.

Social feedback was positively associated with bonding social capital for Instagram users (ß = .12, $p < .05$) and was marginally for X users (ß = .18, $p < .10$). For bridging social capital, it was significant on Instagram (ß = .15, $p < .01$) but non-significant on X (ß = .14, ns). These findings provide partial support for H2. The results suggest that lightweight acknowledgements help maintain relationships, though their effects on broader networks may differ by platform and sample size.

Communication apprehension was negatively associated with bonding social capital on both

Table 4 Standardized regression models predicting bonding and bridging social capital

	Bonding IG (N = 383)	Bonding X (N = 136)	Bridging IG (N = 383)	Bridging X (N = 136)
Predictors	ß (SE)	ß (SE)	ß (SE)	ß (SE)
Age	.10* (0.03)	.07 (0.04)	−.01 (0.03)	.09 (0.05)
Gender	−.01 (0.11)	.06 (0.14)	.04 (0.11)	.01 (0.15)
Self-presentation	.08 (0.04)	.12 (0.05)	.17*** (0.04)	.19* (0.06)
Social feedback	.12* (0.07)	.18† (0.11)	.15** (0.05)	.14 (0.12)
Communication apprehension	−.10* (0.04)	−.17* (0.06)	.04 (0.07)	−.20* (0.06)
Private communication preference	.44*** (0.04)	.52*** (0.05)	.49*** (0.04)	.58*** (0.06)
Preference differentiation	.08† (0.04)	−.01 (0.07)	.13** (0.04)	.04 (0.08)
Model statistics	R^2 = .24, R^2_{adj} = .22, F (7, 375) = 16.51***	R^2 = .32, R^2_{adj} = .28, F (7, 128) = 8.41***	R^2 = .35, R^2_{adj} = .34, F (7, 375) = 28.96***	R^2 = .37, R^2_{adj} = .34, F (7, 128) = 10.90***

Note. †$p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$. β (Beta): standardized regression coefficient. Gender is coded as 0 = Male, 1 = Non-Male (including Female and Others).

platforms (Instagram: ß = −.10, $p < .05$; X: ß = −.17, $p < .05$), supporting H3. Users experiencing anxiety when communicating appear less able to sustain strong tie relationships on public platforms. For bridging social capital, communication apprehension was nonsignificant on Instagram but negatively associated with bridging social capital for X users (ß = −.20, $p < .05$), supporting H4. This suggests that the more conversational demands of X make anxiety a stronger barrier to weak tie formation than on Instagram.

Private channel preference was strongly and positively associated with both bonding (Instagram: ß = .44, $p < .001$; X: ß = .52, $p < .001$) and bridging (Instagram: ß = .49, $p < .001$; X: ß = .58, $p < .001$), providing robust support for H5. This indicates the complementary role of private channels in sustaining both close and extended connections. Although not a central hypothesis, preference differentiation showed marginal significance for bonding social capital (Instagram: ß = .08, $p < .10$) and a positive association with bridging for Instagram users (ß = .13 $p < .01$), but was nonsignificant for X. This suggests that variation in reliance on LINE versus face-to-face matters primarily among Instagram users.

Overall, H1 was supported for bridging but not bonding, H2 and H4 also received partial support, H3 was supported for bonding, and H5 was strongly supported across outcomes. These results underscore the limited and context-dependent role of public affordances and the consistently strong role of private communication preferences, themes elaborated in the discussion.

5. Discussion

This study examined how platform-specific practices, communication apprehension, and communication preferences are associated with bonding and bridging social capital across Instagram and X in Japan. The results show that

self-presentation and social feedback on public platforms had mixed effects, communication apprehension was linked to lower bonding on both platforms and lower bridging on X, and private channel preference emerged as a consistent predictor. As the cross-sectional design does not permit causal inference, the association should be interpreted cautiously, and reverse relationship, such as limited social capital increasing communication apprehension, are also possible. Overall, the findings highlight the importance of considering not only user behaviors but also the communication conditions in which they occur, providing a basis for discussing how platform affordances, individual tendencies, and private channels jointly relate to social capital in the Japanese context.

Self-presentation was not significantly associated with bonding social capital on either platform but was positively associated with bridging social capital on both. This pattern is consistent with an affordance perspective, as sharing photos, post, and updates increases users' visibility and accessibility, which facilitates connections with acquaintances or new contacts (boyd, 2010). These results align with studies linking online self-expression to bridging social capital, but diverging from research associating it with bonding social capital (Liu et al., 2016; Desjarlais, 2022). These findings suggest that public self-presentation supports the growth of weak ties more than the maintenance of close ones.

The lack of significant association with bonding may reflect the nature of bonding social capital, which depends on emotional support and intimate exchanges typically found in close interactions (Putnam, 2000; Bat et al., 2021; Xu et al., 2021). By contrast, bridging can be expanded through lighter and more visible forms of sharing (Reimann et al., 2023). On Instagram in Japan, young people often use visual posts for personal expression and to share and search for information on fashion, cafés, and travel experiences (Matsuda, 2022; Nishimura, 2024). Such curated visuals both shape identity and provide resources for discovering new contacts, thereby supporting bridging social capital (Shane-Simpson et al., 2018; Reimann et al., 2023). On X, sharing is more text-based and centers on public discussions and information exchange (Malik et al., 2019). In Japan, these activities often organize around as fandoms, gaming, and niche hobbies (Matsuda, 2022). Self-presentation on these topics on X encourages interaction among strangers with similar interests, creating entry points for weak-tie connections (Yamaguchi, 2020). Together, these platform-specific practices of self-presentation create opportunities for bridging social capital.

Social feedback was associated with bonding and bridging social capital on Instagram, while on X the effects did not reach significance despite similar coefficient sizes. This suggests that likes and comments generally help maintain ties, but their influence varies by context. These results are consistent with studies identifying feedback as an important factor in everyday connection, yet diverge from research reporting uniformly positive effects across platforms (Wenninger et al., 2019; Brudner et al., 2023). The findings suggest that social feedback can relate to both bonding and bridging social capital, but its effectiveness is conditioned by platform-specific environments.

Two factors help explain this pattern. Methodologically, the smaller X sample may have reduced statistical power, masking effects

similar to those on Instagram (Cohen, 1992). Contextually, Instagram feedback often circulates within semi-familiar peer groups, where mutual likes and comments reinforce closeness and routine interaction (Valkenburg et al., 2022). By contrast, feedback on X is often more anonymous and performative, oriented toward topical publics and fandoms rather than offline personal networks (Yamaguchi, 2020; Matsuda, 2022). As a results, even when present, social feedback on X carries less relational weight and is less likely to translate into durable social capital.

Communication apprehension showed a negative relationship with bonding on both Instagram and X, and with bridging only on X. This suggests that anxiety limits strong ties across platforms and weak ties where interaction is more demanding. These findings extend prior work linking apprehension to reduced online participation (Krishnan & Hunt, 2015). They also indicate that apprehension interacts with platform affordances, influencing the ease or difficulty of engagement.

Two mechanisms help explain these results. First, platform affordances influence the costs of anxiety. Instagram's visual sharing through pictures and videos allows apprehensive users to participate without extensive verbal articulation (Maclean et al., 2022; Krause et al., 2022), whereas X emphasizes text-based posting, sharing, and commenting, increasing pressure to articulate opinions (Matsuda, 2022). Second, network composition differs across platforms. Instagram ties can often be reinforced offline, while X relies more heavily on interest-based publics (Amagasa, 2017; Matsuda, 2022) that require sustained dialogue and are more vulnerable when users withdraw. Together, these mechanisms help explain why apprehension is associated with bonding across platforms and with bridging on X.

Private communication preference was strongly associated with both bonding and bridging social capital across platforms. This indicates that private channels are central to relationship work. Rather than substituting for public affordances, private channels complement them. This also show the possibility that, in today's communication ecology, sustaining private and face-to-face communication often involves complementary media use, underscoring the interdependence of offline and online channels. These findings are consistent with Mix Multiple Media Theory (Sweeney et al., 2024).

In Japan, these mechanisms are particularly salient. Private channels such as LINE and face-to-face afford intimacy, coordination, and trust, enabling users to sustain both close and weak ties (Baym et al., 2004). Cultural emphases on *Shinrai* (trust) and *Anshin* (psychological security) make private spaces socially expected settings for relationship maintenance (Yamagishi, 1998). Trust is cultivated through repeated, low-risk exchanges that gradually establish reliability, and private settings minimize uncertainty and avoid the stress of being evaluated by unknown audiences. The uchi-soto distinction further reinforces this boundary: public platforms such as Instagram and X allow signaling to broad, partly anonymous audiences (soto), where moving conversation into LINE or face-to-face interaction marks entry into uchi circles (Sugimoto, 2010). Thus, private channels function not only as complements to public ones, but also culturally meaningful affordances aligned with Japanese boundary management.

Cultural practices illustrate this further. On Instagram, curated posts around fashion, cafés,

and travel project a "fulfilled" (Riajuu) life style that supports discovery but also underscores the need for communication with known others, making private channels such as face-to-face interaction important for sustaining social capital (Matsuda, 2022; Sweeney et al., 2024). By contrast, heavy X users are more engaged with subcultural and indoor interests such as music, gaming, anime, and manga, but less with outdoor activities (Amagasa, 2017). Such exchanges expand weak ties based on shared interests but remain impersonal and less easily integrated into close offline circles. In this context, preference differentiation between LINE and face-to-face mattered for Instagram, where offline and online networks overlap, but not for X, where interactions with strangers in topical publics remain closer to *soto* ties.

6. Limitations and Implications

Despite its contributions, this study has several limitations. Reliance on self-reported data may cause biases, and the cross-sectional design precludes causality. Participants were recruited via an online panel, which may involve biases such as overrepresentation of active internet users. The small number of X users reduces estimates stability. Residence and occupation may affect social media use (Amagasa, 2017; Tsuji, 2021), but were not controlled, limiting generalizability. High female participants and a youth-focused sample add constraints (Bat et al., 2021). The scale for communication preference, while reliable, should be considered exploratory. Finally, as this study is based on a Japanese sample, findings may reflect cultural specificities, though they also provide a valuable reference point for cross-cultural comparison.

This study provides implications for research and practice. Longitudinal and cross-cultural designs could clarify whether weak ties from public self-presentation migrate into private contexts and whether Japan represents a unique case or a broader pattern. Future work should also consider algorithmic curation, cross-platform practices, and large-scale events to extend understanding of how affordances and cultural conditions shape social capital (Bucher & Helmond, 2018). For platform design, the findings suggest that while public affordances such as visibility and scalability benefit connections, sustainable relationships often depend on affordances that provide intimacy and trust.

7. Conclusion

In sum, while the study is constrained by methodological and contextual factors, it advances understanding of how public and private affordances interact in shaping social capital. The findings underscore the theoretical value of applying an affordances perspective, incorporating private channel preferences, and examining Japan as distinctive case for cross-cultural comparison.

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The Editor

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