



COUNTRY REPORT:

China

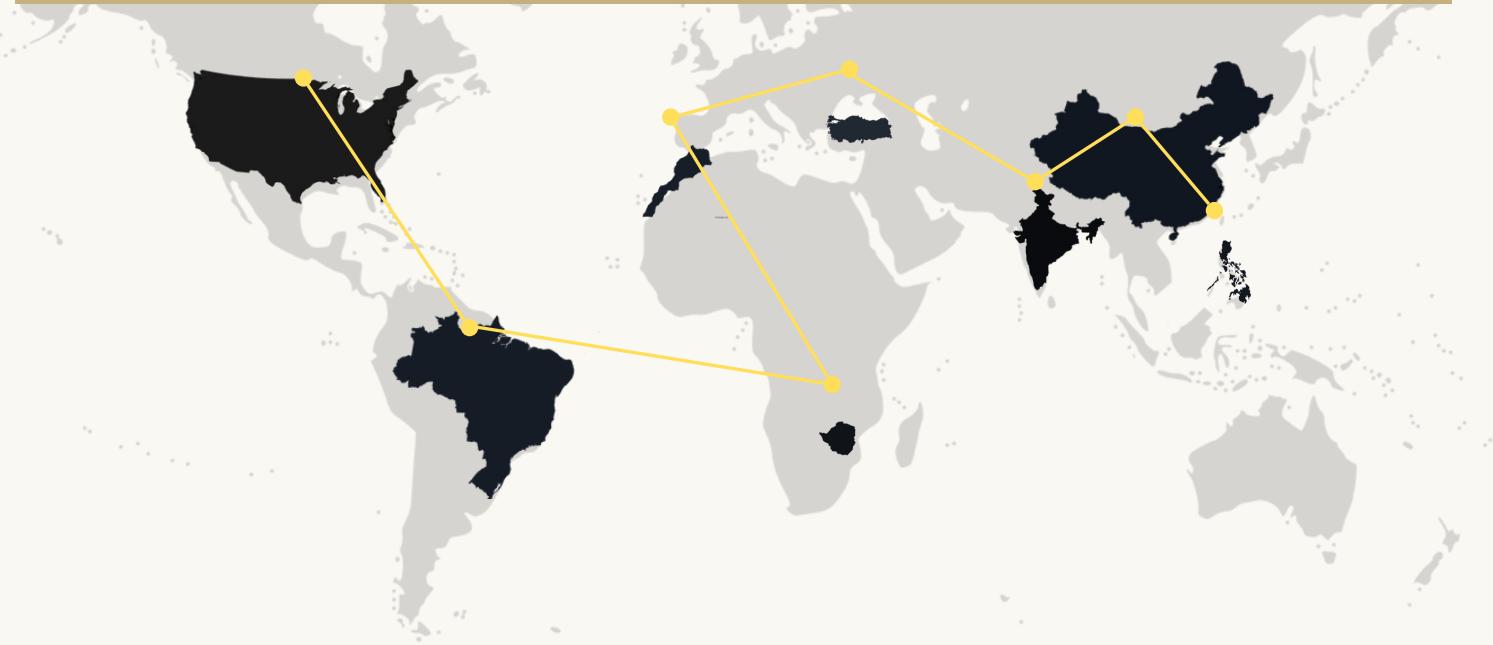


**Harmony and Home:
Social Ties in China**

Dr. Hans Rocha IJzerman
Dr. Miguel Silan

Annecy Behavioral Science Lab

CONTENTS



Research Team	3
---------------------	---

1. Summary Report 5

Introduction	6
Methodology.....	6
Analytic Approach.....	7
Sample Page.....	8
Summary of Select Findings.....	9
Summary of Research Questions.....	11
Summary of Project Resources.....	13

2. Full Analysis Report 15

Notes.....	43
Image Credits.....	44

Rethinking the Science of Human Connection

A Multi-Country Investigation into the Conceptualization and Experience of Social Connection, Social Isolation, and Loneliness

Research team

Project Leads: Hans Rocha IJzerman, Miguel Silan

Project Coordination: Pauline Therese Toren

Research Team (China):

- Xin Liu – Renmin Business School, Renmin University of China (Team Lead)
- Jackson G. Lu – MIT Sloan School of Management, Massachusetts Institute of Technology
- Ya Li – Student Mental Health Education Center, Henan University of Technology
- Xiaoning Sun – School of Psychology, Shanghai Jiao Tong University
- Bo Lv – Renmin Business School, Renmin University of China
- Yinxu Zhou – Renmin Business School, Renmin University of China
- Yuke Yang – School of Journalism and Communication, Nanjing University

Cross-country/General Advisory Board: Paul Cann (Independent Consultant, UK), Eugenio Degregorio (UniLink, Italy), Daniela Rocha IJzerman (Independent Scholar)



Final Report Writing, Design and Copy Editing: Rissa Coronel, Kristine Rayco, Prakhar Srivastava, Yuke Yang

Commissioned by: Templeton World Charity Foundation

Grant DOI: <https://doi.org/10.54224/32560>

Completed with the support of: Global Initiative on Loneliness and Connection



1. Summary Report

“Good relationships are those where people remember your needs without [your] asking.”

- participant from China





Introduction

This report presents findings from a multi-country qualitative study examining how people across diverse cultural settings conceptualize and experience social connection, belonging, disconnection, and loneliness. The project engages with eight countries: Brazil, China, India, Morocco, the Philippines, Turkey, the United States, and Zimbabwe.

The goal is to provide actionable insights for policymakers, practitioners, and researchers by highlighting both universal and culture-specific dimensions of social life. Through a consistent analytic framework, we identify challenges, cultural practices, and opportunities for strengthening social connections.

In China, family and social harmony are central, but rapid modernization and migration are reshaping traditional forms of connection.

Methodology

The study employed a stratified sampling design and recruited 354 participants aged 18 and older across eight countries. Stratification included age, gender, income, partnership status, loneliness severity, urban/rural residence, and region. Recruitment followed a drift sampling strategy, combining targeted outreach with participant referrals.

Semi-structured interviews (2–3 hours each) explored social mapping, definitions of connection, experiences of disconnection and loneliness, and cultural expectations. Data were transcribed, translated into English, and de-identified. Country teams conducted inductive coding before synthesizing results into a shared framework. Thematic coding was supported by qualitative analysis tools (Quirkos, NVivo, Google Sheets). Country leads produced national reports, which informed the cross-country synthesis presented here.



Analytic Approach

For each interview the whole transcript was first mapped to an analysis summary sheet which summarizes all sections of the interview. Information from these summary sheets were then aggregated together to form the evidence table. Concurrently, each transcript was subjected to a selective line-by-line coding focusing on how individuals experience and conceptualize social connection (including how individuals define social connection, how they characterize good and deficient social connections, and how they define belonging); as well as how they experience and conceptualize disconnection and loneliness (including how the individuals experience and define disconnection, experience and define loneliness, and whether they make a distinction between loneliness and solitude).

For the line-by-line coding, country leads initially inductively coded manuscripts independently of the rest of the team. The codes that were developed then reflected culturally applicable elements. Codes from across all countries were then collated and synthesized, and overlapping or similar codes were integrated.

This synthesis provided the coding framework, which the research team then applied to the full set of transcripts.

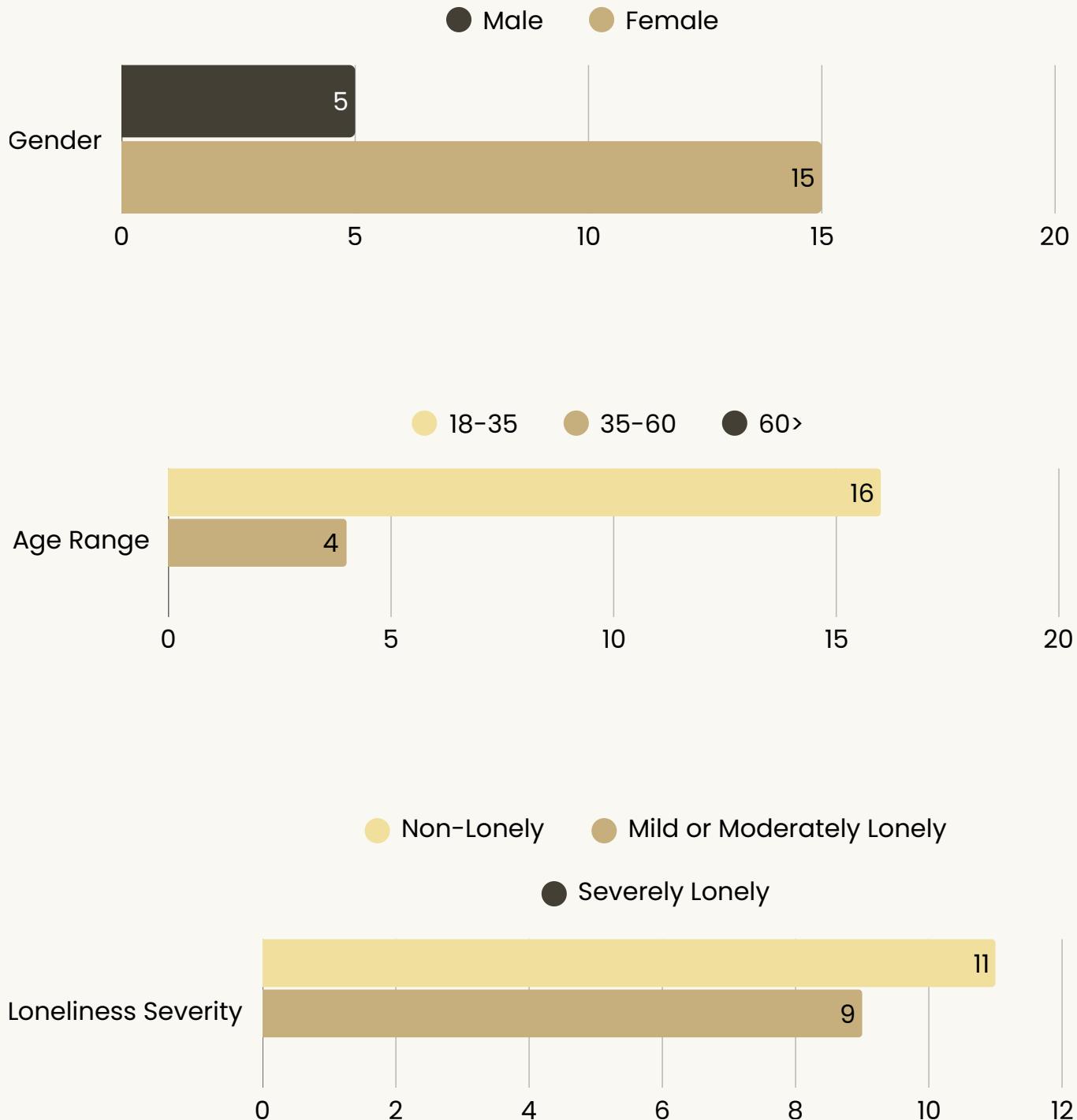
For example, the code [Emotional depth / superficiality] were used for responses that indicate the depth or superficiality of the emotional connection such as when one participant mentioned "People could be extroverted but still lonely if they don't really connect on a deeper level." Codes are not mutually exclusive, and transcript portions can be coded with multiple applicable codes

Codes were clustered as to whether they referred to the characterization of the relationship (e.g., "closeness/depth", "duration"), the interaction (e.g., "frequency of interaction", "reciprocity of interaction"), the function of the interaction (e.g., "instrumental support", "emotional support"), the perceived characteristics of the other (e.g., "availability", "trustworthiness"), or one's self state (e.g., "satisfaction", "obligation"). The full list of codes can be found in the project OSF. The team met weekly to refine the codes, clarifying provisional definitions and applicability of the codes to instances in the data.

Summary of Sample Demographics

Participant Profile Summary

👤 Total Sample: 20



*Loneliness severity was determined during sampling using a single item from the Centre for Epidemiological Studies Depression scale (CES-D): *“During the past week, have you felt lonely?”* Responses were categorized as: Non-lonely: ≤1 day, Mild/Moderate: 1–4 days, Severe: 5–7 days.

Summary of Select Findings

Key Social Categories

In China, connection is deeply tied to family, place, and tradition. Parents, children, and extended kin remain at the center of social life, reinforced by filial piety and ancestral ties. At the same time, hometowns and ancestral villages serve as anchors of belonging that persist even amid migration. Friends and colleagues also provide vital everyday support, though often secondary to family obligations.

Challenges and Quality of Connection

Migration, urbanization, and economic pressures disrupt traditional ties, creating both opportunity and strain. Participants described feeling displaced when away from ancestral places, and many struggled with balancing work demands against family responsibilities. Emotional needs often go unspoken, as cultural norms prioritize duty over open vulnerability.

Definitions of Connection and Belonging

Belonging in China is often expressed through place-based ties, ancestral continuity, and shared rituals. Maintaining connection to one's hometown, even

symbolically, was repeatedly described as essential. For many, belonging also means being embedded in collective identity rather than standing out as an individual.

“Belonging means being part of the group, not alone.”

- participant from China

Cultural Specificity

Chinese participants highlighted how geographic anchoring shapes identity—displacement from ancestral communities can be as painful as social rejection. Festivals, rituals, and ancestral worship reinforce belonging, linking people across generations. At the same time, modernization and internal migration place new strains on these traditions, leaving individuals caught between old obligations and new realities.

Disconnection and Loneliness

Loneliness in China often arises from geographic and generational separation rather than absence of people. Migrant workers in particular described feeling rootless, unable to replicate the sense of belonging tied to their hometowns. Emotional restraint also limits open

Summary of Select Findings

acknowledgment of loneliness, making disconnection a silent burden.

Implications

Measurement in China must incorporate place-based belonging and ancestral continuity as key dimensions of connection. Tools should reflect how migration and modernization reshape connection without erasing the cultural weight of tradition. Policy and intervention

design must account for the importance of festivals, rituals, and geographic roots in fostering belonging, while addressing the silent loneliness created by displacement.



Summary of Research Questions

This study was guided by a shared analytic framework and research questions across eight participating countries:

SOCIAL MAPPING

- What are common social categories among the target population?
- What are common challenges/burdens of social connection among the target population?

SOCIAL CONNECTION

- Definition of social connection: How does the target population define social connection?
- Characteristics of a good (and deficient) social connection: what makes for a good social connection for the target population?
- Definition of belonging: what is belonging for the target population?
- What are culture-specific aspects of social connection among the target population?
- What else does the target population feel connected to?

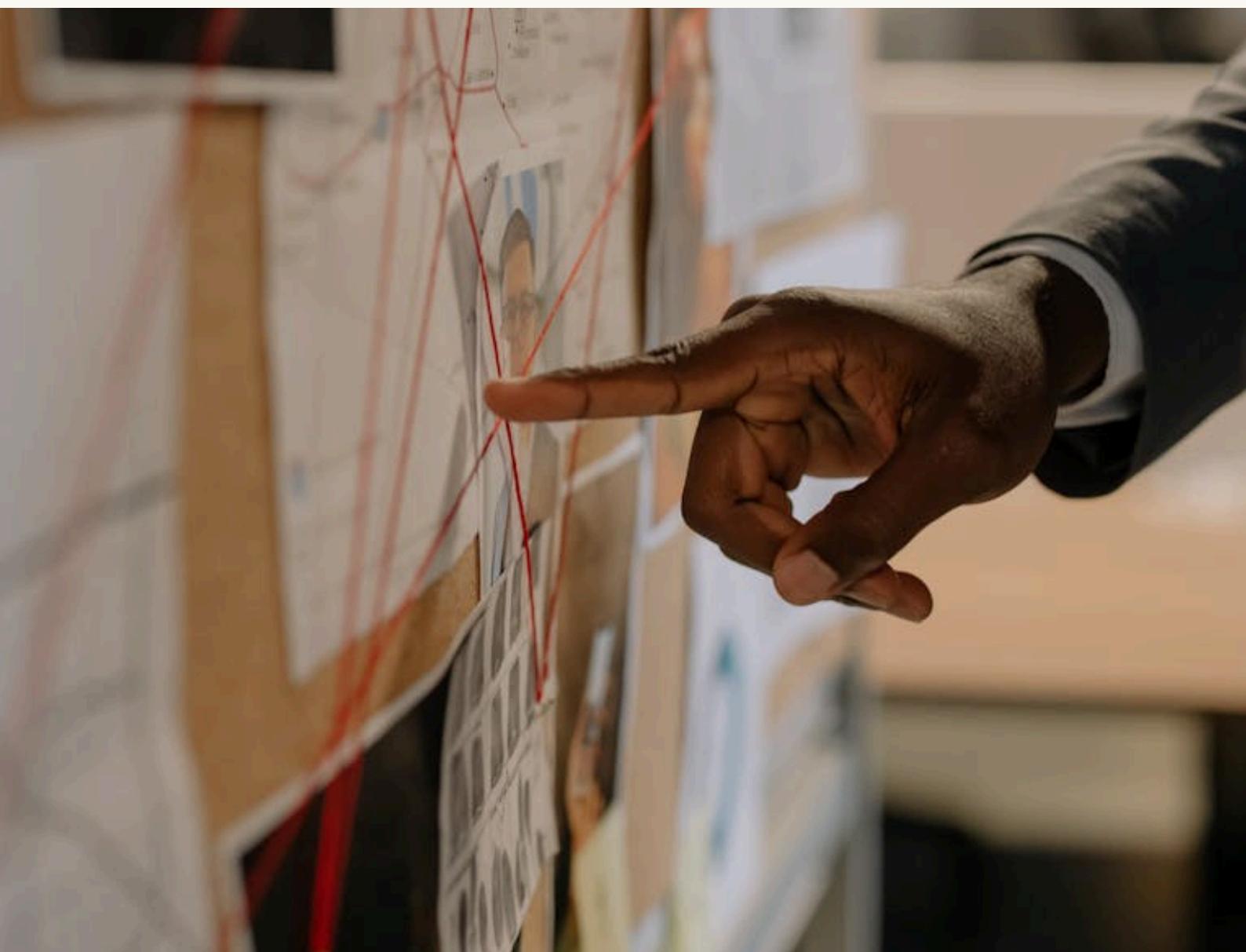
DISCONNECTION AND LONELINESS

- Experiences of disconnection: What are the experiences of disconnection among the target population?
- Definition of disconnection: How does the target population define disconnection?
- Experiences of loneliness: What are the experiences of loneliness among the target population?
- What is the physiology of loneliness among the target population?
- What are the effects of loneliness among the target population?
- How does the target population cope with loneliness?
- What factors affect loneliness for the target population?
- Definition of loneliness: How do the target population define and explain loneliness?
- Definition of loneliness: What/do the target population make a difference between loneliness and solitude?
- How are lonely individuals perceived among the target population?
- Why is loneliness difficult to be spoken about among the target population?
- What are culture-specific aspects of loneliness among the target population?



META-COGNITION

- What are the response processes leading to the participants answering their last instance of loneliness
- What are the response processes leading to the participants answering what loneliness is for them
- What are the response processes leading to the participants answering what makes for a good social connection for them
- What are the response processes leading to the participant answering the scale item of "I feel lonely" from 0-100



Summary of Project Resources



This project's materials are openly available on the Open Science Framework (OSF) at <https://osf.io/p3msu>, to ensure transparency, and accessibility.

- **Interview Guide:** A copy of the interview guide containing the questions asked across 8 countries
- **Deidentified Transcripts:** Interview transcripts (anonymized) from all participating countries
- **Ethics:** Documentation of institutional ethics approvals, consent processes, and ethical safeguards
- **Evidence Tables:** Verbatim transcript portions and summarized information per participant across different research questions
- **Codebook:** The codebook contains the codes, provisional code definitions and transcript portion examples across different research questions
- **Country Reports:** Country reports from the analysis of within-country data in Brazil, China, India, Morocco, the Philippines, Türkiye, the United States, and Zimbabwe.
- **Main Publication:** Pre-print of the publication that features the cross-country comparisons across the global project.

DOI

- <https://doi.org/10.54224/32560>



*Multi-Country Investigation into the Conceptualization and
Experience of Social Connection, Social Isolation, and Loneliness*

Commissioned by the Templeton World Charity Foundation

doi.org/10.54224/32560

2. Analysis Report

“That’s because everyone is born with a brain that isn’t connected to others—we can’t read each other’s minds, and sometimes we can’t even understand our own inner thoughts. So I think this is an essential part of human nature.”

- participant from China



Common social categories

For Chinese interviewees, family and friends are universally mentioned social categories. Among those who are employed, additional social categories often include colleagues, professional colleagues (ID 2538), and clients (or individuals they serve in a professional capacity, such as students for teachers) (ID 2538, ID 118). For those still in school, roommates, classmates, and teachers also emerge as common social categories in their social networks. Only two respondents mentioned neighbors, and there was just one participant who mentioned the student association (ID 4216). While university students may cite participation in campus clubs or student organizations, these affiliations are uniformly categorized as “classmates” in their social classification. Similarly, for these participants, the boundaries between colleagues/classmates/clients and friends often remain fluid. Individuals with whom they connect well in professional or academic settings are frequently categorized as friends. In the social categorization of a respondent, only two categories were mentioned: parents and classmates (ID 137).

Furthermore, due to marked variations in educational backgrounds, income levels, and city of residence among participants, significant discrepancies exist in how different individuals classify relationships within each category.

Family. For Chinese participants, the concept of “family” encompasses an extensive network that typically includes spouse, children, parents, grandparents, siblings, maternal grandparents, uncles/aunts, and, for married individuals, the extended familial structure of their spouse’s relatives. This complexity poses significant communication challenges. Generally, the most immediate family members – parents, children, and spouses – maintain the closest contact, with communication frequencies

ranging from daily to 2-3 times weekly. Interactions with collateral relatives (e.g., uncles/aunts) predominantly occur weekly or monthly. But more often than not, this frequency is not absolutely fixed. Communication with in-laws, apart from fixed occasions like the Spring Festival, primarily occurs through WeChat group chats, with notably lower engagement frequency. Among unmarried participants, parents constitute the primary communication focus. Notably, nearly all respondents reported more frequent communication with mothers (ID 2538, ID 2942, ID 3339, ID 2735, ID 1021), with two cases explicitly omitting paternal interaction from their accounts.

Neighbors. Among the 20 interview transcripts analyzed, only three participants mentioned neighbors within their social categories (ID 2538, ID 2942, ID 315). One participant stated that their relationship with neighbors was limited to greeting each other when meeting; another participant shared an experience of teaching a neighbor to play the piano. Additionally, one participant mentioned, "I have a neighbor who invited me to his party when he got divorced and greets me when we meet, but we don't have much contact in daily life." Notably, one participant observed that neighbor relations in China tend to be more prevalent in rural communities. For urban residents, while occasional interactions occur through residential WeChat groups (a collective chat including all community members, often used for selling or exchanging items), these connections predominantly remain at the level of casual greetings during chance encounters.

Friends. As previously noted, Chinese participants demonstrate fluid boundaries in distinguishing friendships from other professional contacts, such as colleagues and clients. Potential differentiation criteria may include: engagement in social activities beyond working hours, substantive discussions about non-work-related matters, and the frequency of such interpersonal exchanges (ID 2942, ID 315). In China, one of the manifestations of close relationships is engaging in offline activities together, such as shopping, dining, or gathering at each other's homes during free time.

About “Da zi”. The term “*Da zi*” (which can be loosely translated as buddy to some extent), which has emerged among Chinese youth over the past year, describes a novel category of social relationships that transcends conventional classifications of friends, colleagues, or classmates. It specifically refers to activity-specific companions who collaborate temporarily for shared purposes, such as meal companions for dining together or gaming companions for coordinated gameplay. Notably, one interviewee highlighted her gaming companion within their friend circle—a relationship characterized by zero communication outside scheduled gaming sessions, with interactions strictly confined to gameplay coordination (ID 2942). Another respondent (ID 1412) mentioned his workout companion, with whom he exercises 20 days each month, yet he does not consider them a friend.

Online friends. Only one participant mentioned “online friends”, a rather general category under which she shared stories about her “star-chasing *Da zi*” (those who share her interest in idol chasing). When facing unsolvable problems, she would post help-seeking messages on social platforms, soliciting assistance from online friends and listening to their opinions (ID 3339). For participants in China, the concept of “online friends” is very vague. Some people believe that online friends refer to real-life friends with whom they chat online, while others consider online friends as strangers who only communicate via the internet without any offline contact.

What are common challenges/burdens of social connection among the target population?

As for common challenges/burdens of social connection among Chinese interviewees, generally speaking, these relational dynamics may vary according to social relationship categories and relational proximity.

Within familial contexts, key challenges predominantly manifest in parent-child relationships. Difficulties in parent-child relationships may arise from the following: Firstly, the generation gap between parents and children often leads to differing perspectives on various issues, resulting in limited opportunities for in-depth communication (ID 2538, ID 2735, ID 137). Sometimes, people may engage in conflicts or disputes due to disagreements with their parents (ID 1513). Secondly, parents sometimes interfere in their children's personal lives, causing discomfort for the latter (ID 3547). As for the burdens of parenting, they typically stem from the significant time and energy required for childcare, leaving little room for parents to focus on personal matters (ID 2538).

Within friendships, potential challenges may include: a. physical distance. In-person interactions remain crucial for maintaining friendships, yet diverging career paths and life trajectories often result in friends residing and working in different cities, significantly reducing opportunities for face-to-face meetings (ID 2538, ID 2130, ID 2942); b. communication apprehension. Some respondents reported becoming overly cautious during conversations due to excessive concern about unintentionally offending friends with casual remarks (ID 2942); c. time constraints. Multiple participants emphasized insufficient time and energy for relationship maintenance, as demanding work schedules leave few opportunities for sustained communication (ID 2538, ID 2942). Some participants also believe that in the process of getting along with friends, they sometimes feel unhappy due to the inequality between their efforts and returns in friendship (ID 3547). Certainly, in addition to maintaining frequent communication to sustain long-term and stable relationships, some participants also point out that excessive indulgence in entertainment with friends often leads to significant time waste (ID 137).

Regarding workplace relationships with colleagues, some participants indicated that while they maintain amicable interactions in professional

settings, the inherent presence of competing interests and underlying competition necessitates cautious engagement in daily exchanges (ID 2735, ID 2942). Moreover, as some participants need to greet numerous clients and work counterparts every day, they sometimes encountered particularly difficult individuals, which makes their work feel highly challenging (ID 118, ID 315).

Many individuals attribute challenges in social connection to inherent personality traits and interpersonal skill deficiencies (ID 2130), such as limited communicative competence, impaired emotional attunement, heightened apprehension regarding social awkwardness, difficulties in conversational initiation, and tendencies toward unmediated verbal directness.

In addition to the challenges that may be faced by the different types of relationships mentioned above, there may also be some common challenges. For example, as some participants have pointed out, people will always go through the cycle of life, aging, illness, and death, and all relationships have a time limit. As the participant said, "I guess the only challenge is that people will eventually die. So, maybe it's the same with social relationships—they'll always come to an end as circumstances change. Anyway, that might be a challenge." (ID 2433)



Definition of social connection

When defining social connection, “informational support” emerges as a critical dimension. Participants emphasized that social connection entails a sense of linkage to society, manifested through synchronization with societal progress—such as staying attuned to trending events or cutting-edge information, and avoiding perceived obsolescence. As the participant said, “I guess I’d think about... uh, whether you can keep up with the times—like, being exposed to new trends in society, or like, being able to quickly adapt to new things (ID 315).” This perspective may underscore a collective anxiety shaped by rapid economic advancement, potentially serving as a hallmark characteristic of the information age. Similarly, the other facet of social connection lies in bonds with individuals or specific interpersonal relationships, such as those with colleagues, classmates, and family members, which was coded as “Social structure”.

In understanding social connection, close relationships may serve as a confounding factor. To some extent, people often perceive society and the self as distinct entities, whereas intimate relationships—such as those with family or partners or friends—are assimilated into the self-concept. Consequently, certain participants argued that social connection should not encompass ties with family members or other emotionally bonded individuals, framing it instead as a mechanism for bridging the perceived divide between the “self” and the broader “external world.” This cognitive framing positions social connection as a collective orientation rather than an extension of personal relational spheres. One participant shared “I think social connection might refer to our ‘soft connections’ — the bonds between people that are not overly intimate, essentially relationships beyond close ones (ID 2735).” And another said “Hmm, I don’t think I have any social interaction with my family.” (ID 2538)



Characteristics of good (and deficient) social connection

Regarding the question of what makes for good social connections, participants in China have provided a range of answers. Chinese participants often characterize good social connections by pointing to positive qualities of the individuals involved. “A personality that enjoys communication and is relatively proactive and enthusiastic makes me feel that it is easier to form good social connections (ID 1021).” In addition, multiple interviewees pointed out that sincerity is crucial for a good social connection (ID 4216, ID 1513, ID 2433, ID 3845).

Further, high-quality and frequent interactions are considered to be of great significance for a good social connection. High-quality interactions may include meaningful conversations and the exchange of opinions (ID 2538), both happy and unhappy things sharing (ID 2634), true thoughts and feelings expression (ID 3845), and so on. Many participants emphasized the importance of maintaining sustained interactions (ID 2634, ID 3339, ID 315). As one interviewee mentioned, “regular daily communication or maintaining a habit of interaction may foster good social connections (ID 3339).”

For good social connections, support is also considered very important. Two interviewees, from a self-oriented perspective, argued that the prerequisite for good social connections is the ability to provide help (ID 118, ID 1631).

One of them stated: "For example, I can directly help them make money, or even if I provide emotional support really well and the other person thinks I'm a good person, they might be willing to interact with me (ID 118)."

Surprisingly, unlike in other countries in the global dataset, Chinese participants only minimally refer to self-states, such as whether or not they were satisfied, when judging social connections to be good or bad. Chinese interviewees tend to objectively describe the characteristics of good social connections, paying less attention to personal feelings. Even when incorporating personal experiences, they focus more on individual contributions rather than internal emotions. As one interviewee mentioned, "I don't know why I've all met such nice people, I think it's very lucky, but I also think it's because I'm so nice in my own right that I'm able to attract the same people. And the second thing is to be good at expressing myself and to talk to people with love (ID 2836)."



Definition of belonging: what is belonging for the target population?

When defining a sense of belonging, Chinese participants mainly understand it from the perspectives of personal emotional states as well as group and relational characterization. Chinese participants tend to understand the sense of belonging from the perspective of the relationship between individuals and society, as well as between individuals and other collectives in society. One participant used a metaphor to illustrate their understanding of a sense of belonging, saying, "The feeling of belonging is more like being in a circle. For example, it might be similar to being a water drop in a bottle of water (ID 3339)." Chinese participants' understanding of the sense of belonging often involves an object, which may be a specific group (colleagues, classmates, family members) or a location (such as home or hometown). In some special contexts, their descriptions of belonging typically involve a specific time or occasion, such as the Spring Festival (ID 3547) or school opening ceremonies (ID 3339); they may also refer to a particular form of connection, such as making video calls (ID 3641, ID 1631).

Another perspective for understanding the sense of belonging is from the individual's emotional experience. In many cases, a sense of belonging may imply a feeling of relaxation and comfort (ID 3845, ID 2942), as well as a sense of security (ID 315, ID 3845). As one participant mentioned, "It means that I have developed an emotional attachment to a certain place, organization, or group, and I will not leave easily (ID 3547)." as well as representing a form of personal satisfaction. "I'm quite happy when I'm working, one can earn money, and I can chat with my coworkers and feel happy (ID 1412)."

In summary, for Chinese participants, the sense of belonging is an individual emotional experience closely tied to personal identity. As a result, when

defining it, people typically mention an “other” (such as family members, groups, or locations), as it relates to an individual’s positioning within society. “First of all I think there needs to be a sense of identity, and then it should be something that makes me feel relaxed about myself (ID 2130).”

What are culture-specific aspects of social connection?

For Chinese participants, the social connections and societal expectations in China exhibit distinct characteristics.

First is the emphasis and prioritization placed on social relationships (ID 3547, ID 2942, ID 3641). Many participants mentioned that Chinese people attach great importance to social connections. As encapsulated in the traditional Chinese saying, “Having an additional friend opens another path,” there exists a strong cultural inclination to establish connections with others. As a participant mentioned, “Our society is a relationship-oriented society, placing great emphasis on the nuances of human connections and social etiquette (ID 3547).” One participant pointed out that the emphasis Chinese people place on social connections may be driven by practical needs, and people tend to regard social connections as a type of social resource, saying: “Social connections are cultivated with the expectation that expanded networks may yield future benefits in career development or life circumstances. This mindset prioritizes relationship-building as strategic social capital (ID 2942).” There is also a participant who believes that this emphasis on social connections is actually a reflection of Chinese culture’s emphasis on collective strength, and he pointed out that “I think it emphasizes more on unity and collective strength. It feels that people in our country prefer to rely on collective power to accomplish things and stress mutual help among individuals (ID 137).” It should be noted that, regarding the emphasis on social connections, the participants also believe that there

is a generational difference (ID 3547, ID 2130). It is widely recognized that the older generation is more enthusiastic about establishing more social connections. The participants gave the following answers: "People of our parents' generation tend to dislike being alone and actively strive to build good relationships with those around them. However, today's young people may prefer to spend time alone (ID 3547)"; and "I think young people may not consider many interest-related things in their social relations and are less utilitarian. However, as they grow up, or like our parents' generation, their relationships inevitably involve some interest-related factors, such as helping each other and emphasizing reciprocity (ID 3845)." In addition to the emphasis on social connections, some participants also mentioned some special behaviors or habits of Chinese people in social interactions. One participant pointed out that Chinese people were very good at handling interpersonal relationships and had many special skills, saying, "Chinese are more willing to give up some of their own interests for a better outcome (ID 2735)." Another participant also put forward a similar view, stating, "I've seen so many people in a friendship who will sacrifice part of themselves to accommodate the other person as a way to keep the friendship going (ID 2130)." One participant pointed out that Chinese people emphasized the reciprocity of favors. "If someone helps you, there's an unspoken expectation to return the favor by finding opportunities to support them in the future (ID 1513)."

There remains a significant focus on familial and kinship bonds. Many participants talked about the importance that Chinese people attach to family and blood relations (ID 2130, ID 3339). "I feel that people have quite high expectations for family. In terms of priority, I think family should come



first (ID 3339)." Chinese culture emphasizes prioritizing familial obligations above individual interests, where personal emotions and desires frequently take a backseat to maintaining familial harmony. One participant mentioned, "I'm not sure if this is universal across all regions, but people in northern China especially value family ties. Even if siblings have conflicts and don't stay in touch regularly, they will definitely gather for a meal during the Lunar New Year... in China, when there are elderly family members, children will sit down for a meal together during the New Year—no matter how infrequently they've contacted each other (ID 118)." Another participant expressed a similar view, stating that "In our country, even if the atmosphere in the original family is not good, people still need to return to their hometowns during specific holidays like the Spring Festival (ID 3339)."

This emphasis on family relationships has also led to people's expectations regarding family. In China, people highly value marriage and childbearing. "For example, Chinese people particularly value multigenerational connections, such as the tradition of four generations under one roof. This tends to make Chinese people especially committed to marriage and childbearing (ID 1021)." Thirdly, Chinese culture strongly emphasizes hierarchical dynamics and filial piety within family relationships. One participant put it this way, "Relatively speaking, I think in China, parents there may show excessive concern for their children. Sometimes they always like to treat their children in their own ways and unconsciously interfere in their children's affairs. I feel this is a bit of overprotection, and it may not always be effective (ID 315)."

Beyond familial and blood ties, Chinese society places significant emphasis on geographical kinship. In certain southeastern coastal regions, entire villages often constitute interconnected clans bound by shared ancestry, frequently carrying identical surnames. These intertwined bonds of lineage and locality are continuously reinforced through ancestral worship rituals,

family reunions during festivals like the Spring Festival and Mid-Autumn Festival, as well as communal veneration practices at ancestral halls (3339).

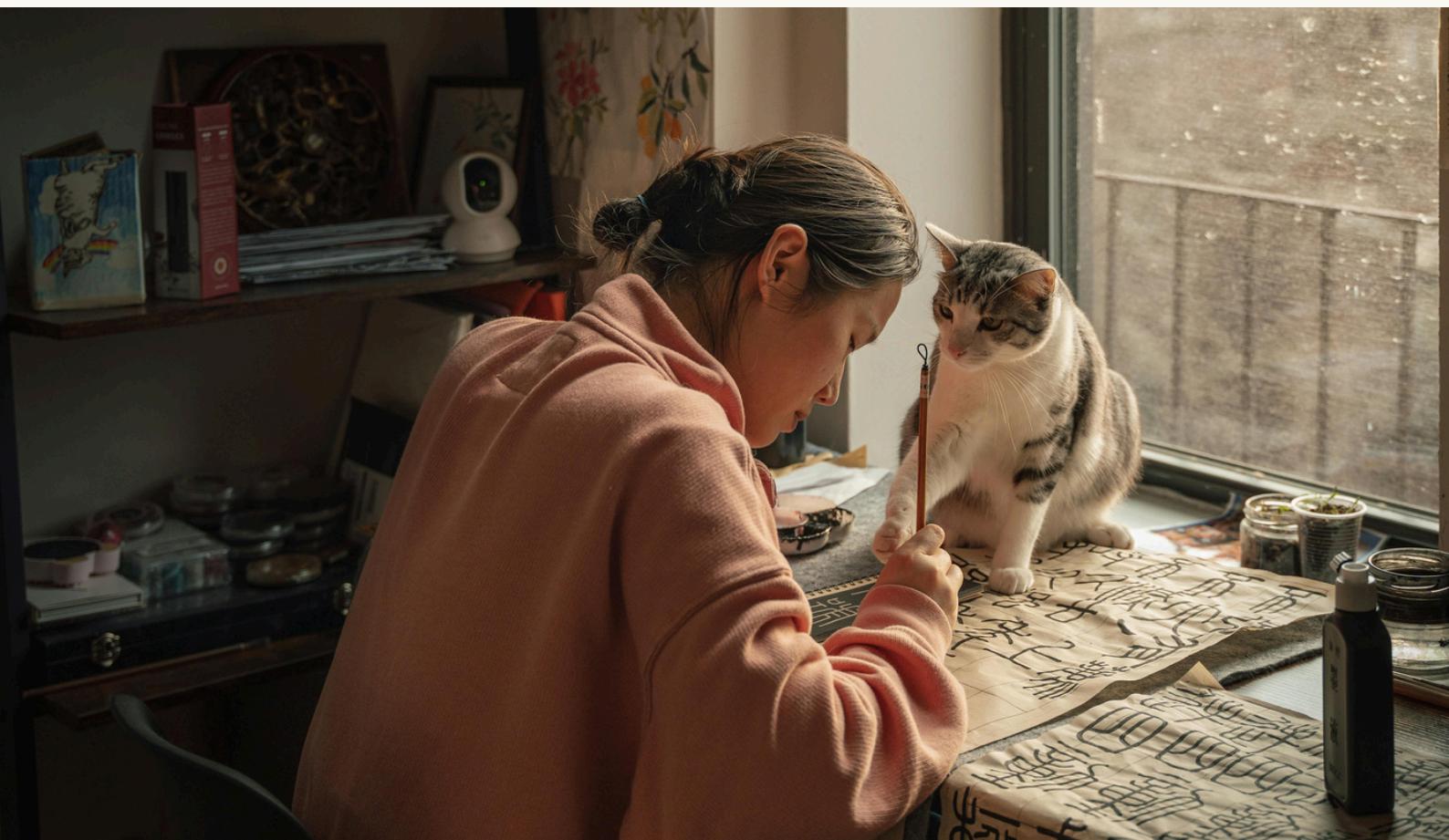
For these Chinese participants, some special cultural forms are regarded as unique. Some participants highlighted China's ritualized drinking culture as a quintessential social ritual governing interpersonal dynamics. This practice involves codified toasting protocols where juniors ceremonially propose drinks to seniors and subordinates to superiors during communal meals. One participant pointed out that this kind of drinking table culture in China is more like a superficial ritual and a ceremonial behavior, which does not belong to genuine social connections (ID 3248). Dining table culture is also regarded as a special part of Chinese culture. One participant pointed out that, "A more special point is that in China, if there are misunderstandings and conflicts between people, they will meet for a drink or a meal and solve the problems at the dinner table (ID 2130)." A participant stated, "In China—especially when giving red envelopes to children, everyone knows the children will eventually accept them, but they must first pretend to refuse a few times as a show of politeness (ID 3248)." He believes that such social behaviors exhibit the characteristics of focusing on superficiality and performativity, which reflect the complex relationship between social etiquette and social connections in Chinese culture.

Chinese social expectations are deeply rooted in the relational framework previously discussed. Familial interdependence is viewed as a fundamental moral imperative (ID 2942), where individuals bear inherent obligations to support relatives through life's challenges. This ethos manifests most profoundly in parent-child dynamics: parents consider providing substantial financial provisions — including purchasing homes and vehicles for their children — a sacrosanct parental duty, while anticipating filial reciprocity through elder care in later years (ID 2942).

What else does the target population feel connected to?

For Chinese participants, besides the social connections with humans such as family and friends, they also felt a sense of connection with non-human elements like pets (ID 118, ID 3339, ID 2942, ID 2735), music (ID 137), films (ID 2538), nature (ID 118, ID 4216, ID 2942, ID 4216), some places such as hometown (ID 2130, ID 2942, ID 137), cities that have been travelled to (ID 2130, ID 2942), old school (ID 315) and other special places. Participants also highlighted experiencing a palpable sense of connection when immersed in gaming (ID 3547) or pursuing personal passions (ID 2942). Among these non-human elements, pets and nature were mentioned most frequently.

In fact, when asked “what else makes you feel connected”, pets are often the first thing that comes to people’s minds. Sometimes, people feel that their connection with pets is even stronger than that with family members. A respondent who does not have a pet shared an example of his friend, saying



"I have a lot of examples around me, like one of my best friends, she got a puppy about a year ago and she has a very strong connection with her puppy and I can feel the connection with her puppy when I go to her house to play. Including when she goes to study abroad now, she makes special trips home because of her puppy not her family (ID 2836)."

Some special places also make participants feel connected because they carry their personal life experiences or memories. As one participant shared, "First of all, it is my hometown. I have been in my hometown for 19 years, so I have a very deep sense of connection to my hometown, and I usually pay attention to news about my hometown when I read it (ID 2130)." Another said, "After graduating, I went on a business trip to [city] and visited my alma mater. When I saw the original teaching building and dormitory building, I felt extremely affectionate. I think it might be because seeing these objects reminded me of people and moments from the past – I was nostalgic for those earlier times (ID 315)." Additionally, cities visited during travel often evoke a sense of connection due to the experiences there. One participant mentioned that she would buy local specialty souvenirs while traveling, and when seeing these items, she also feels a sense of connection (ID 2942).

Some participants point to media and books as sources of connection. One participant, for example, mentioned, "Sometimes when I come across videos of the outside world on short-video platforms, I feel a psychological shock" (ID 4216). While another participant emphasized, "Some books and films can also give me a sense of connection, as can sports and nature." (ID 2538).



Experiences and definition of disconnection

When asked to recount experiences of disconnection, Chinese participants often point to generic or broadly stated moments of disconnection (ID 118, ID 2942, ID 1513, ID 3248, ID 137, ID 4216, ID 3339). As one participant mentioned, "Every morning when I wake up, all my roommates have already left. When I get up alone, pack my things, and go out, I feel a sense of disconnection (ID 137)." Another participant said when she broke up with her boyfriend, she felt a sense of disconnection (ID 118). Additionally, this sense of alienation or disconnection is often linked to changes in life condition (ID 2836), geographical shifts (ID 2130), and psychological states such as feelings of exclusion (ID 2735) or isolation (ID 2538). "When I first entered college as a freshman, I was somewhat unadapted and I feel disconnected (ID 2836)."

Participants also expressed feelings of failure and other ideas related to one's self-worth and its adequacy, "For example, when going out alone or in certain situations, I suddenly feel extremely low-spirited, thinking I'm a terrible person and that I've become disconnected from society, unable to keep up with its pace (ID 4216)."

Further, instances of felt exclusion were also expressed, "I interact very little online, so sometimes I don't know what's going on with the people around me. So when we meet and talk, I feel like everyone knows everything except me (ID 2735)", as well as the perception of having lack of support and diverging views. As one participant mentioned, "I had a very close friend in high school, but now I also feel a sense of disconnection with him. Because after entering college, we're exposed to different environments and people, and I've noticed significant changes in their outlook on life, values, and worldviews compared to before. Sometimes during conversations, we deliberately avoid points of disagreement, which makes the interaction less natural than it used to be (ID 1021)." Another shared, "When I'm in a very

urgent situation and hope to get help from those around me, but receive no response from anyone, I start to feel like I'm not actually that close to them (ID 3641)."

When asked to define disconnection, participants often characterize it with negative emotions such as loneliness (ID 3845, ID 3641) and sadness (ID 4216) as well as the feeling of alienation from surrounding people or groups (ID 118, ID 2130, ID 2735, ID 1513). "Disconnection means I'm different from the people around me (ID 118)." There is also one interviewee who defines disconnection as a detachment from society, believing that disconnection may stem from an imbalance between personal matters and social attention, with saying as "Disconnection means that you have no idea what new things have happened recently, you don't know what to talk about with others, and your life seems to revolve solely around your own affairs (ID 1513)."

Interestingly, it has also been commonly linked to self-awareness (ID 137, ID 3547, ID 2538), which refers to an awakening of self-awareness and a focus on the self. "Disconnection means one can precipitate and reflect on oneself (ID 3547)." Additionally, disconnection has a positive side (ID 2942, ID 3248), as some participants have pointed out. "Disconnection means having time to think about personal matters, time to meditate, time to do things I actually enjoy. Honestly, disconnecting every now and then isn't such a bad thing (ID 2942)."

Experiences and definition of loneliness

When asked to recount experiences of loneliness, participants often recall moments of isolation (ID 3547, ID 2433, ID 2836, ID 315, ID 2634, ID 3339) and its involuntary nature. As one mentioned, "Not long ago, I encountered some difficulties while writing my thesis. When I was trying to figure them out alone at night, I thought it would be great if there was someone to discuss with at

that moment. Maybe it can't be called loneliness. I was just a bit helpless at that time and didn't know what to do (ID 2735)." Sometimes the experience of loneliness can also be accompanied by very complex emotional experiences, making it difficult for people to confirm whether it is indeed loneliness, as one participant mentioned, "When I'm misunderstood at work, I feel very sad, but maybe this isn't called loneliness (ID 2634)."

Participants often link loneliness to experiences of being unable to integrate into social groups (ID 2130, ID 3547), separation from intimate individuals (ID 118, ID 3641), and the unavailability of social interaction (ID 1513). "For example, as the Spring Festival approaches and I haven't been home for a long time, I might occasionally feel lonely (ID 3547)." The emotional experience of loneliness is rich, and it may encompass a variety of feelings such as depression (ID 3547), sadness (2836, 2634), helplessness (ID 2433, ID 315), a sense of being misunderstood (ID 1513), and emptiness (ID 1631).

One interviewee proposed during the interview that in China, loneliness represents the result of "*Gu*", a psychological state of helplessness, loss, and low spirits, and "*Du*", the objective reality of being alone. This participant mentioned, "I think loneliness has two connotations. One is 'isolation' ('*Gu*' in Chinese), which I see as a lack of connection or disengagement; the other is 'solitude' ('*Du*' in Chinese), meaning being alone. When it comes to 'solitude,' I actually enjoy being alone just as much as I enjoy connecting with others, because I view solitude as a process of communicating with myself. However, when 'isolation' is added to the mix, I don't cherish solitude as much. If the proportion of 'isolation' outweighs that of 'solitude,' it signifies a breaking connection. I will feel restless (ID 2836)."

The physiology of loneliness

When asked about "how does loneliness feel like for you and what is the experience like", Chinese people tend to interpret loneliness as a psychological experience, surprisingly with little mention of physical sensations. One participant mentioned that her experience of loneliness might be related to the onset of menopause (ID 1412), which can be regarded as a physical experience of loneliness. The physical experience of loneliness may also be related to specific events. For example, one participant mentioned that when she gave birth, she felt no one could understand her pain at the time, so she regarded the physical experience of loneliness as pain and tears (ID 1513). There is also a participant who reported the impact of loneliness on physical health, mentioning that during the period when she felt lonely, she was constantly ill (ID 118). In addition, three participants mentioned physical exhaustion (ID 118, ID 1412, ID 2942), describing it as "**like my batteries are permanently dead**" (ID 2942).

The effects of loneliness

The effects of loneliness among Chinese participants manifest across multiple physiological and behavioral dimensions, often reflected as mental health struggles, disrupted routines, and diminished functioning. In terms of mental health, loneliness usually leads to symptoms of depression, fear, low mood and complex emotions like "a feeling of being abandoned, coupled with a touch of fear", indicating the negative impact of loneliness on psychology. One participant even expressed suicidal ideation, saying, "I feel that living is meaningless (ID 1412)." As for behavior and physiology, eating patterns are affected, with variations such as "eating and drinking a lot (ID 2634)", "have no appetite (ID 3339, ID 4216)", "Eat very little, weight fluctuates a lot (ID 118, ID 2130)". Loneliness also affects sleep patterns differently.

When feeling lonely, some people sleep longer, while others suffer from insomnia -- with some using extended sleep as an escape from emotional distress, while others struggle to fall asleep due to restless thoughts. Additionally, loneliness disrupts daily life, such as causing an inability to concentrate at work (ID 118) and changing exercise habits, leading to a lack of motivation to exercise outdoors (ID 1412). The degree and duration of loneliness effects vary, ranging from periodic emotional fluctuations to long-term physical and mental distress, highlighting how loneliness erodes psychological and physical well-being over time.

Coping with loneliness

The strategies that Chinese participants use to cope with loneliness are diverse, covering emotional, social, and behavioral domains, which deeply reflect cultural backgrounds and living habits.

Technological means are the most frequently used ways to cope with loneliness. When feeling lonely, people turn to electronic devices such as mobile phones, computers, and televisions, and relieve the experience of loneliness by watching short videos (ID 4216, ID 1513), listening to music (ID 2816, ID 4236, ID 1613), and using audiobooks. On one hand, the frequent use of technological means as emotional regulation tools conforms to the current digital lifestyle. On the other hand, this also reflects that Chinese participants are more inclined to solve the problem of loneliness by themselves with the help of tools.

Family is one of the key coping resources. Some participants rely on communicating with family members to alleviate loneliness (ID 3547, ID 1513). This reflects the utilization of close family bonds to relieve lonely emotions, continuing the cultural tradition of Chinese people valuing family

connections. Friends and social circles also play a role. Some participants actively seek companionship through social interactions to fill the void of loneliness (ID 118, ID 3547, ID 1513).

Activity participation is also an important supplement. When loneliness strikes, some people will divert their attention through reading (ID 2836, ID 118), traveling (ID 2836), shopping (ID 118), recreational activities (ID 315), etc., and fill their alone time with positive behaviors to achieve emotional relief; some others indicate that they will become more focused on personal matters when feeling lonely (ID 3547, ID 137, ID 2942), which reflects the effort to transform loneliness into an opportunity for self - improvement and inner reflection.

There is rarely direct evidence of professional psychological help. Only one participant noted, "I used to want to talk to a psychologist, but it's too expensive (ID 2634)." Another participant provided an intriguing case related to the religious and spiritual dimension. She pointed out that when feeling lonely, she would turn to tarot cards or the Chinese almanac, stating as "I will check the Chinese almanac or do a tarot reading. But I don't think these things are reliable. I feel like learning the I Ching (Book of Changes) might be better, and maybe I can do fortune-telling for others in the future (ID 118)."

Factors affecting loneliness

When asked to speculate what factors lead to loneliness, Chinese participants mentioned that individual characteristics and relational characteristics are the two main factors. For the individual level, emotionally high-needs individuals are reported to be more prone to loneliness, and their demand for social engagement far exceeds that of ordinary people. One participant mentioned, "I think it all depends on personal emotional needs. Like, some people just have bigger emotional needs, while others have smaller ones. And those with higher emotional needs are definitely more

likely to feel unfulfilled, which makes them more prone to loneliness (ID 137)." Emotionally sensitive individuals, who are generally considered to have an unsteady inner foundation (ID 2735), are also more likely to experience loneliness, and their moods are easily influenced by others. "Umm, sometimes when something happens that really affects one's mood, some people tend to think negatively and struggle to process those bad feelings on their own. That's when they feel really lonely. I think when someone's inner self is strong, they rarely feel lonely (ID 315)" Another cause stems from an individual's social relationships: to some extent, dissatisfaction or disappointment with social connections often leads to loneliness. People may feel lonely due to a lack of perceived connection to the surrounding world (ID 2130) or the absence of companionship (ID 2538).

Additionally, if one is not accepted or recognized by their group, fails to have their needs met within the team, or lacks sufficient attention, they may feel lonely due to a lack of belonging. "When I feel like I'm not being paid attention to and being ignored, I will feel lonely (ID 2634)," as one participant mentioned, with another said "One reason of loneliness is being overlooked in a group and not receiving attention (ID 118)." Some participants believe that loneliness may originate from particular events (ID 2735), such as having too much free time "If your work isn't too busy, you might have time to let your thoughts wander (ID 3845)" and "a person may fell lonely when he has a lot of free time, but the people around her have very little time (ID 2538)." An intriguing perspective is that some participants argue loneliness has no cause—that everyone is inherently lonely and that loneliness is an existential condition of human beings (ID 2433). "That's because everyone is born with a brain that isn't connected to others—we can't read each other's minds, and sometimes we can't even understand our own inner thoughts. So I think this is an essential part of human nature (ID 3248)."

How are lonely individuals perceived among the target population?

How can Chinese people identify if someone around them is experiencing loneliness? For Chinese participants, there are several distinct signals:

First, individuals who have recently encountered unfortunate events are more likely to be inferred to feel lonely. For example, one participant mentioned suspecting their grandfather was lonely after their grandmother's recent passing (ID 118). In daily life, factors such as the death of a loved one, divorce (ID 2942), breakup (ID 2538), or quarrels with close relatives or friends (ID 3547) can all trigger loneliness.

Second, lonely individuals are inferred to exhibit noticeable behaviors that signal their state. These may include frequently seeking others to chat with (ID 2538) or prolonged avoidance of social interactions (ID 2942). For elderly people, if their children are not around them and they spend all day indulging in television while showing no interest in other activities, they are often perceived as likely to experience loneliness.

Third, those in loneliness often display significantly poor emotional states, such as persistent low spirits, listlessness, extreme mood swings, or emotional instability (ID 3339, ID 2130, ID 3547, ID 315).

Fourth, people observe that lonely individuals often share common traits, such as being taciturn and lacking the inclination or skill to engage in interpersonal communication (ID 1021, ID 137, ID 4216).

When asked, "What characteristics come to mind when you think of a lonely person?" Many participants mentioned that a gray-toned image often emerges in their minds, one for example, mentioned "What comes to my



mind is a picture where she stands there all alone, and the picture is in gray tones (ID 2538)." The chromatic symbolism of gray aligns with cultural associations of melancholy and emotional detachment, serving as a visual metaphor for diminished vitality and psychological isolation.

Why is loneliness difficult to be spoken about among the target population?

The reasons why people are reluctant to openly discuss loneliness can be interpreted from four aspects. First, as "the feeling of loneliness is not easy to describe (ID 1513)", some may choose not to express it because they do not know how to do so. "I think loneliness is quite abstract, and people often don't know how to describe it in words (ID 3339)." And one participant said that people may be in a state of loneliness precisely due to limited expressive abilities, making it very difficult for these lonely individuals to share it. "Loneliness itself stems from a state of being unable to effectively communicate with those around you or feel understood by them. If one can discuss things with others, they would not feel lonely (ID 137)." One participant pointed out that this habit of being inclined not to express loneliness may be related to family atmosphere and developmental experiences (ID 2836).

Another possible explanation might be that people are not aware they are experiencing loneliness, as one participant mentioned, "It may also be because people can't distinguish between solitude and loneliness (ID 3547)."

Second, according to Chinese participants, the Chinese tendency to be reticent about their loneliness may also be influenced by cultural factors. "As I said, many people instinctively believe that loneliness is something negative. They associate it with, for example, a lack of social skills or a flaw in one's personality. They may wonder whether loneliness means one cannot gain a sense of honor or presence in collective life, especially in a country that values collectivism (ID 3248)." In this context, loneliness can evoke feelings of being isolated, excluded, or marginalized. Consequently, people tend to view loneliness as undesirable, and few have the courage to confront such negative emotions. "Because it might be a form of self-negation, as if it sounds like one has no friends (ID 3845)." However, loneliness is a highly personalized emotional state, and in many cases, having many friends or numerous social connections does not mean one is not lonely, as the participant mentioned, "I think many people might feel a bit ashamed of feeling lonely. It's because if you seem to have many friends or appear highly sociable, others might find it strange if you say you're lonely—they might even think you're pretending (ID 2538)."

Third, for those experiencing loneliness, maintaining silence may be a form of escape from reality, "maybe he doesn't want to admit that he's lonely or that he isn't understood (ID 118)." Fourth, silence about loneliness is sometimes also reported to be so that others are not burdened with negative emotions. This is said to be more evident among the older generation in China. "In China, elders seldom talk about their emotions with younger generations. When sharing, they only talk about the good things they experience...elders won't take the initiative to talk about their difficulties because they don't want to burden others (ID 2942)." Another participant also put forward a similar view, as he said, "I think they might have some kind

of 'idol baggage', or perhaps because they are more senior in their field and older in age, they find it hard to speak up, especially in front of younger generations (ID 2735)."

What are culture specific aspects of loneliness among the target population?

Some participants discussed the low tolerance for loneliness in Chinese society, which is often reflected in stigmatization, labeling, and a lack of medical and psychological support resources. One participant pointed out that Chinese people rarely discussed loneliness (ID 1513), and those who experience it tend to solve problems on their own rather than seek external help (ID 2836). "I feel that our society doesn't seem to allow for loneliness (ID 3339)." Another participant stated, "I feel like in China, people often label others as 'lonely', which is kind of disrespectful. Chinese society doesn't really accept people being alone—some folks just enjoy staying by themselves, but people's stereotypes make them think those individuals are lonely. That's not actually the case though (ID 137)." Some participants found the question inherently difficult to answer (ID 4216, ID 2433) because they were not familiar with the situations in other countries. Some participants mentioned the contradictory feeling between social connections and loneliness in China, arguing that many social connections in China often remain superficial and sometimes even reflect a form of collective loneliness. "In China, social connections are often superficial, with everyone wasting large amounts of time and energy on social connection performance—which in turn deepens people's sense of loneliness (ID 3248)." "We have a very strong drinking table culture, but I think many people actually feel lonely at such banquets, as if forced to learn a lot of drinking table rituals (ID 2538)." "In fact, in our country, there's often a superficial hustle and bustle—like during the Lunar New Year, when it looks like everyone is reuniting, but in reality, there isn't much meaningful communication. It mainly revolves around eating and drinking, especially with some relatives, where there's actually very little emotional connection. Yes, I feel that in our country, the surface

often doesn't match what people truly feel inside (ID 3339)." A participant shared two examples he considered to be uniquely Chinese, demonstrating the distinctive ways in which Chinese people cope with loneliness (ID 118). One is fellow-villager associations—associations formed by migrants who leave their hometowns to work in big cities, aiming to ease homesickness in unfamiliar urban environments. The other is square dancing groups, where middle-aged and elderly people—often relocated to cities by their children for care—build social connections through dance to adapt to strange living and social surroundings in their residential communities.

Some participants also mentioned that in China, people who have left their hometowns often feel more acutely lonely when special festivals approach. China has numerous unique festivals, such as the Dragon Boat Festival, Mid-Autumn Festival, and Spring Festival—traditionally moments for family reunions in Chinese culture. The inability to return home and gather with family during these times can evoke profound feelings of isolation (ID 3547). Some also addressed the loneliness experienced by children in modern Chinese families, arguing that in contemporary society, parents are often so occupied with work and earning a living that they have little time to spend with their children, leaving many children in Chinese households in a relatively lonely state (ID 1021). This interweaving of traditional frameworks and modernity-induced fractures reveals loneliness as both culturally constructed and socioeconomically precipitated within contemporary Chinese society.



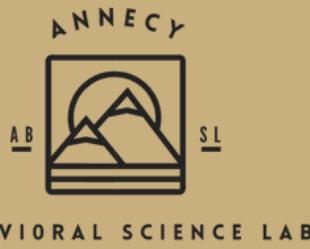
Notes

- CN_ML_High_18-
35_Married_Female_Xin_1checked_deidentified_2checked_2538
- CN_ML_High_18-35_Single_Female_Xin_1checked_deidentified_2checked_2634
- CN_ML_High_35-60_Single_Female_Xin_1checked_deidentified_2checked_118
- CN_ML_Low_35-60_Married_Female_Xin
_1checked_deidentified_2checked_1412
- CN_ML_Middle_18-
35_Single_Female_Xin_1checked_deidentified_2checked_2836
- CN_ML_Middle_18-
35_Single_Female_Xin_1checked_deidentified_2checked_3547
- CN_ML_Middle_18-
35_Single_Female_Xin_1checked_deidentified_2checked_3339
- CN_ML_No_18-35_Single_Male_Xin_1checked_deidentified_2checked_2130
- CN_ML_Unknown_18-
35_Single_male_Xin_1checked_deidentified_2checked_4216
- CN_NL_High_18-35_Married_Female_Xin_1checked_deidentified_2checked_1513
- CN_NL_High_18-
35_Married_Female_Xin_1checked_deidentified_2checked_2942
- CN_NL_High_35-60_Married_Male_Xin_1checked_deidentified_2checked_2433
- CN_NL_High_35-60_Single_Female_Xin_1checked_deidentified_2checked_2735
- CN_NL_low_18-35_Single_Female_Xin_1checked_deidentified_2checked_1021
- CN_NL_Middle_18-35_Married_Male_Xin_1checked_deidentified_2checked_315
- CN_NL_Middle_18-35_Single_Female_Xin_1checked_deidentified_2checked_137
- CN_NL_No_18-35_Single_Female_Xin_1checked_deidentified_2checked_3248
- CN_NL_Unkonwn_18-
35_Single_Female_Xin_1checked_deidentified_2checked_3845
- CN_NL_Unkonwn_18-
35_Single_Female_Xin_1checked_deidentified_2checked_3641
- CN_NL_Ukown_18-35_Single_Male_Xin_1checked_deidentified_2checked_1631

Image credits

1. Photo on Unsplash: <https://images.unsplash.com/photo-1614183464050-969b0ee63015>
2. Photo on Unsplash: <https://images.unsplash.com/photo-1580360373745-958591861813>
3. Photo on Pexels: <https://images.pexels.com/photos/3053838/pexels-photo-3053838.jpeg>
4. Photo on Unsplash: <https://unsplash.com/photos/group-of-people-beside-coffee-table-xDSD3Vmzh70>
5. Photo on Pexels: <https://images.pexels.com/photos/34009433/pexels-photo-34009433.jpeg>
6. Photo on Unsplash: <https://unsplash.com/photos/2-people-hiking-on-mountain-during-daytime-dZu-TGJbMaM>
7. Photo on Unsplash: <https://images.unsplash.com/photo-1563856729808-8ddd07e645af>
8. Close-Up Shot of a Person Pointing at Evidence Board – cottonbro studio: <https://www.pexels.com/photo/close-up-shot-of-a-person-pointing-at-evidence-board-8369524/>
9. Photo on Pexels: <https://www.pexels.com/photo/children-in-school-uniforms-on-playground-35128449/>
10. Photo on Pexels: <https://www.pexels.com/photo/indoor-artistic-scene-with-calligraphy-and-cat-30913847/>
11. Photo on Unsplash: <https://unsplash.com/photos/a-woman-wearing-a-face-mask-standing-in-a-doorway-6yy9rmyf8bQ>





*Multi-Country Investigation into the Conceptualization and
Experience of Social Connection, Social Isolation, and Loneliness*