

ABSTRACT

LIU, XI. Understanding Respect through the Lens of Chinese and American Cultures. (Under the direction of Dr. Amy Halberstadt).

Introduction. Respect is a key component in interpersonal interactions and serves adaptive functions in many cultures (Frei & Shaver, 2002; Li & Fischer, 2007; Khalaila et al., 2023).

However, what individuals come to conceptualize and perceive as respect may be differently developed within various cultural contexts. To investigate cross-cultural similarities and variations, I examined what features are perceived to be central for college students in the contexts of Chinese and American cultures. Understanding the meaning of respect in these two cultures is somewhat complicated, in that individuals developing within the context of Chinese culture learn to describe respect using two terms (i.e., “*尊重 (zunzhong)* and *尊敬 (zunjing)*”), and in the context of U.S. culture learn to describe respect with just the one term (i.e., *respect*).

Method. I surveyed 416 Chinese and 227 U.S. college students on what is central in respect in close relationships. My research goals were 1) to descriptively map the central features of the two ways in which respect is conceptualized in Mandarin (*zunzhong, zunjing*) separately (1a) and then comparatively (1b); and 2) to descriptively map the similarities and differences of these potentially different constructs regarding respect in Chinese and U.S. contexts (*zunzhong, zunjing, respect*). To achieve these goals, I utilized descriptives, independent *t*-tests, qualitative analysis, correlation matrices, ANOVAs, EFAs, and multigroup CFAs.

Results. Within Chinese culture, independent *t*-tests revealed no significant differences across 18 respect-related features between *zunzhong* and *zunjing*. Qualitative analyses of participants' responses about "what is missing" revealed ten themes common to both terms and two themes uniquely related to *zunjing*. Exploratory factor analyses and correlation matrices indicated a

similar three-factor structure underlying both Chinese concepts. Multigroup CFAs confirmed measurement invariance and reinforced that *zunzhong* and *zunjing* share an overarching conceptual structure and three shared constructs—(1) Moral Integrity; (2) Assertiveness; (3) Open Courtesy. Yet nuanced differences emerged—specifically, *zunjing* showed a stronger association between moral traits and open courtesy than *zunzhong*.

Within the U.S. sample, exploratory factor analysis (EFA) indicated three distinct dimensions of *respect*— (1) Ethical and Moral Integrity, (2) Behavioral Approaches, and (3) Interpersonal Considerations. ANOVAs indicated significant cross-cultural differences, with Chinese participants generally rating respect-related features as more central compared to U.S. participants. The observed divergence in factor structures and feature ratings limited my ability to conduct subsequent cross-cultural multigroup confirmatory factor analyses (CFA) due to measurement invariance concerns.

Discussion. Our findings indicate that Chinese and U.S. individuals prioritize different core elements of respect. In China, *zunzhong* and *zunjing* emphasize moral-relational integrity and a sense of hierarchical formality, whereas in the United States, respect often centers on authenticity and openness. These results have important implications for understanding how respect is socialized across developmental stages and cultural contexts, as well as for fostering more effective interpersonal and intergroup communication and conflict resolution.

Keywords: respect; culture; relationships; language

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Understanding Respect through the Lens of Chinese and American Cultures

by
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DEDICATION

To the countless hours of researching respect,
To every collaboration, every spark of inspiration,
To the love and kindness that lifted me,
To the culture that embraced me,
nourishing my mind and spirit,
And to a future where “respect” is not a theory—
but a shared heartbeat.

BIOGRAPHY

Xi Liu was born and raised in Chongqing, a southwestern city in China. She received her B.S. in Psychology from Beijing Normal University, where she worked with Dr. Xiuyun Lin, Dr. Huamao Peng, and Dr. Dahua Wang from 2014-2018. Following her undergraduate studies, she moved to the United States to pursue a Ph.D. in Lifespan Developmental Psychology at North Carolina State University, conducting research under the mentorship of Dr. Amy Halberstadt in the Family, Affect, Beliefs, and Behavior Lab from 2018 to 2025. Xi's research interests span emotion development, mindset beliefs, close relationships, and the influence of familial, school, and cultural contexts on socialization processes.

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Understanding Respect through the Lens of Chinese and American Cultures

Introduction

Across cultures and through history, respect has been consistently recognized as integral to interpersonal relationships. Thought to be essential for fostering social harmony and cooperation, respect reflects foundational insights from diverse philosophical traditions, such as Confucianism and Western moral theory (Frei & Shaver, 2002, Drummond, 2006; Jackson et al., 2001; Li & Fischer, 2007; Khalaila et al., 2023).

Despite the broad consensus on its importance, respect also exhibits considerable variation within different cultural and linguistic frameworks (Li & Fischer, 2007; Khalaila et al., 2023). For instance, the ancient Confucian tradition anchors respect within hierarchical obligations, filial piety, and relational harmony, explicitly emphasizing reverence toward elders and proper social conduct, thus characterizing respect as both an internal attitude and outward behavior aligned with social roles and familial duties (Analects 1:6; Drummond, 2006). Linguistically, Mandarin further refines the cultural conceptualization of respect through two distinct terms: *zunzhong* (尊重) and *zunjing* (尊敬). *Zunzhong* broadly encompasses general respect for rights, autonomy, and equality, manifesting in behaviors that promote mutual acceptance and open-mindedness (Ma & Chen, 2005; Li & Fischer, 2007). *Zunjing*, however, seems to denote reverent respect reserved primarily for authority figures or moral exemplars, expressed through formal, deferential behaviors (Liu, 2020; Li & Fischer, 2007).

Meanwhile, in the West, the Latin root of respect—*respicere*—literally means “to look again” (Giorgini & Irrera, 2017). This etymology positions respect as both an attitude and a practice of re-examining or valuing another person’s worth or rights. Recent empirical research

in U.S. contexts further confirms respect as a multidimensional construct involving both status-based esteem and inclusive appreciation of personal uniqueness (Young & Zeigler-Hill, 2023). Over time, the English term “*respect*” is thought to have grown to encompass admiration for positive qualities (e.g., morality, achievement) as well as acknowledgment of another’s autonomy and dignity (Frei & Shaver, 2002).

Despite broad consensus on the importance of respect, there may be considerable cultural variation in how respect is expressed, understood, or “activated”. It is widely argued that cultural traditions, value systems, and available linguistic frames all shape our conceptual “landscapes”, and this is likely true for respect as well (Van der Geest, 2002; Mesquita & Frijda, 1992; Markus & Kitayama, 2009). For instance, Mandarin includes two distinct terms for respect—*zunzhong* (尊重) and *zunjing* (尊敬)—while English typically employs just one term (Hsueh et al., 2005). However, because English uses only one term, the specific meanings and contexts of respect can become unclear (Van der Geest, 2002). Even though these three terms may appear superficially similar, research suggests that they may carry unique connotations regarding hierarchy, formality, openness, and morality (Li & Fischer, 2007).

By situating respect within both historical and cross-cultural perspectives, I lay the foundation for examining how individuals from Chinese and U.S. cultures conceptualize and evaluate respect in close relationships. To do so, I begin with some theoretical underpinnings to investigate respect across these two countries which vary linguistically and culturally, then I plan to specify the ways in which respect may be differently understood by digging further into what is central in the conceptualization of respect embedded within cultural frames. Clarifying the different linguistic frames—*zunzhong*, *zunjing*, and “*respect*”—provides a lens for understanding

the varied social norms, moral obligations, and interpersonal behaviors that emerge under the umbrella of “respect”, therefore contributing to broader theoretical discussions on cultural models of dignity, face, and interpersonal ethics (Smith, 2022). By doing so, I aim to illuminate the broader cultural dynamics at play, thereby offering new insights into cross-cultural communication and the socialization of respect.

Theoretical Underpinnings on Culture, Language, and the Socialization of Respect

Drawing on Vygotsky’s (1978) sociocultural framework, language can be viewed as a primary mediating tool through which cultural knowledge—including conceptions of respect—is transmitted. Language not only reflects culture but also actively shapes cognitive processes and social interactions (Mejía-Arauz et al., 2007). From an early age, children acquire social norms and display rules related to respect by observing how respected individuals are talked about and treated (Bandura, 1977; Skinner et al., 2017). This socialization process is multifaceted and context-dependent, influenced by family, school, media, and broader cultural traditions.

The close interconnection between language and culture provides important insights into how respect is conceptualized. Mandarin, for instance, distinguishes between two nuanced concepts of respect—*zunzhong* (egalitarian respect) and *zunjing* (hierarchical reverence)—reflecting culturally embedded notions of unconditional recognition of others' rights versus conditional reverence toward authority (Li & Fischer, 2007). However, the English language uses a single, broader term—“*respect*”—which encompasses multiple dimensions without explicit differentiation. This linguistic fusion may occasionally blur moral reasoning, particularly when individuals attempt to differentiate respect granted due to someone’s social position from respect based on personal qualities or achievements. Understanding these nuances may be

particularly relevant during emerging adulthood, a critical developmental period marked by identity exploration and heightened cultural awareness (Arnett, 2000). During this critical period, college students actively navigate inherited cultural and familial scripts alongside their evolving independent values, potentially leading to increasingly complex and nuanced conceptualizations of respect. Although linguistic relativity theory (often called the Sapir-Whorf hypothesis) has historically proposed that language shapes cognitive and moral frameworks, the strength and direction of this influence remain controversial. Nonetheless, the reciprocal relationship between culture and language remains evident: cultural values and practices both influence and are reflected by linguistic distinctions, highlighting their interconnected roles in shaping social concepts such as respect.

Bronfenbrenner's bioecological model (Bronfenbrenner & Ceci, 1994) further illuminates how these sociocultural influences on respect operate across multiple layers of a child's environment. At the microsystem level, for instance, children witness demonstrations of respect or disrespect within immediate settings such as the home or classroom. At the mesosystem and exosystem levels, even when not directly experienced by the child, culture can still shape children's development through the connected settings (e.g., a parent's stressful working conditions, parents' organizational bring-in-your-child-to-work values and policies) and broader messages (e.g., neighborhood norms, media representation, and local institutions). Specifically, parents' hierarchical or collaborative workplace can affect the way parents model deference and empathy at home as well as the message delivered through neighborhood norms or media, which might shape how children understand the related aspects in respect (e.g., hierarchy, equality, the condition of respect). At the macrosystem level, broader cultural values and belief systems (e.g., collectivism vs. individualism, or cultural values that prioritize hierarchy or equality (Markus &

Kitayama, 2009)) provide overarching standards that guide how respect is expressed or withheld. Additionally, the chronosystem level underscores how historical shifts and societal transformations in modern China—such as transitions from traditional Confucian values toward globalization—may dynamically alter the cultural meaning and expression of respect over time (Yan, 2010; Xu & Hamamura, 2014).

Within these multilayered cultural contexts, children learn to identify and produce the “appropriate” verbal, facial, and behavioral cues that convey respect (Halberstadt & Lozada, 2011; Malti et al., 2020). For example, children in collectivistic contexts often receive explicit instructions on respect for elders, emphasizing deference to authority and age-based hierarchies. In contrast, children in more individualistic settings may acquire respect concepts associated with personal autonomy, fairness, and mutual acknowledgment (Hsueh et al., 2005). In the Chinese context, respect (*zunjing*) is tied to filial piety and hierarchical obligations, and children internalize deference to authority as a moral duty (Yeh & Bedford, 2019). Nevertheless, these concepts of fairness and justice are also represented in Chinese culture, and perhaps more so in *zunzhong* than in *zunjing* (Francomano, 2015). However, in the U.S. context, respect is framed as mutual acknowledgment of rights, fostering egalitarian values through open dialogue and autonomy (Hsueh et al., 2005). Kohlberg’s moral development theory, centered on fairness and justice, aligns with this approach but overlooks collectivist virtues such as those which may be represented in *zunzhong*.

Social domain theory (Turiel, 1983) offers additional insight by suggesting that children differentiate moral, social-conventional, and personal domains when reasoning about social issues. Under this framework, respect may straddle both moral concerns (e.g., fairness, preventing harm) and social conventions (e.g., using polite forms of address, deferring to elders

in certain contexts, or even obedience), as well as the appreciation and recognition of the inherent value or dignity of others (e.g., people, animals, environment) beyond the concerns of justice or harm development, encompassing elements such as fairness, reciprocity, and empathy (Malti et al., 2020). When children learn how to “show respect”, they are often navigating broader questions about right and wrong—for example, whether it is fair to disagree with someone older or whether empathy requires deference to an elder’s views. This moral dimension highlights why respect is not merely about adherence to social rules but also in some accounts about valuing the other person’s feelings and well-being. As children’s moral understanding deepens, so too does their nuanced awareness of respect as a complex, reciprocal process (Malti et al., 2020). By integrating Bronfenbrenner’s emphasis on nested social influences and social domain theory’s focus on differentiated moral reasoning, we can better illuminate how individuals in diverse cultural settings come to differently interpret and enact their understanding of respect throughout development.

Below I first review previous literatures related to respect, including its conceptualization as well as socialization, in Chinese cultural context and then add in U.S. cultural contexts.

The Chinese Cultural Context: *Zunzhong* (尊重) and *Zunjing* (尊敬)

In Chinese culture, respect has been recognized as a core principle, shaping daily interpersonal interactions. Indeed, even compared with other Asian countries, Chinese students display greater deference to elders or people with higher social positions (Zhou & You, 2013). Children begin learning respect by internalizing social manners taught by their parents or elders in their early social interactions, but also admirations, with evidence for admiration as a component of respect occurring in the preschool years (Hsueh et al., 2005; Cohen et al., 2006).

By elementary school, 3rd- to 5th-grade children's understandings of respect demonstrate three different themes: manners, admiration, and equality (Zhang et al., 2006).

As noted above, the concept of respect is represented by the use of two Chinese overlapping but distinct terms, *zunzhong* (尊重) and *zunjing* (尊敬; Li & Fischer, 2007). These two terms represent overlapping yet distinctly nuanced conceptualizations of respect (Li & Fischer, 2007). Although both terms share the character “尊” (indicating “honor” or “regard”), each implies different sociocultural nuances and patterns of usage. Understanding these terms requires examining both the nature of the entities they address (people vs. non-human subjects) and the degree of formality or hierarchy they convey. By doing so, one gains insight into how Chinese speakers articulate and navigate complex interpersonal and societal relationships.

Zunzhong can be directed toward human beings as well as non-human entities, such as laws, rules, or opinions (Ma & Chen, 2005). This broad applicability reflects a general ethos of acknowledging the inherent worth of others and the significance of societal guidelines. At its core, *zunzhong* emphasizes individuals' rights, equality, and mutual acceptance, thereby promoting social harmony. It often manifests through behaviors that demonstrate open-mindedness and a willingness to accommodate diverse perspectives or beliefs (Li & Fischer, 2007). For instance, a student expressing *zunzhong* might carefully listen to peers with differing viewpoints, aiming to understand rather than dismiss opposing ideas. Such interactions underscore the reciprocal dimension of *zunzhong*, with respect seen as flowing in both directions and facilitating constructive dialogue.

By contrast, *zunjing* typically refers to respect reserved for individuals in higher-status or morally exemplary positions (Liu, 2020). This connotation implies a deeper sense of reverence

or awe, often reinforced by tangible gestures such as gift-giving, bowing, or other forms of respectful ceremony. These behaviors support vertical relationships, wherein deference is extended to those deemed worthy because of seniority, moral virtue, or notable achievements (Hsueh et al., 2005). A classic example of *zunjing* might appear in a traditional classroom setting, where students exhibit pronounced reverence for a distinguished scholar—perhaps by standing when the scholar enters the room, speaking more formally, and offering tokens of gratitude for their teachings. In this sense, *zunjing* hinges on recognizing established hierarchies and demonstrating respect through outward forms of formality.

Despite their differences, *zunzhong* and *zunjing* are not entirely separate constructs. Both reflect a foundational concern for honoring another's position or perspective, suggesting a shared moral and social framework within Chinese culture. Nonetheless, the contexts in which each term is used often convey different relational expectations. *Zunzhong* underscores mutual acceptance, potentially taking shape in horizontal relationships (e.g., peer interactions) as well as in broader communal norms (e.g., respecting public rules or laws). Meanwhile, *zunjing* implies a certain verticality, as it focuses on deference to authority, moral excellence, or higher social standing. Thus, while one can show *zunzhong* to virtually anyone or anything deserving of acknowledgment, *zunjing* typically emerges when distinct power differentials or high moral admiration come into play.

Taken together, *zunzhong* and *zunjing* highlight the culturally embedded ways in which respect is both conceptualized and enacted in Mandarin-speaking contexts. These linguistic nuances point to broader value systems that balance egalitarian ideals with hierarchical considerations, reflecting the interplay of moral, social, and communal values. For researchers examining cross-cultural perspectives on respect, these terms underscore why direct translations

between languages may obscure subtle yet significant distinctions. In practice, understanding when to invoke *zunzhong* versus *zunjing* carries implications for everyday interactions—ranging from family life to professional or academic settings—and reveals how speakers negotiate moral standing, authority, and community harmony.

The U.S. Cultural Context: *Respect*

In contrast to Mandarin’s two-term framework, the English language employs a single, overarching term—“*respect*”—to capture a broad spectrum of attitudes and behaviors (Frei & Shaver, 2002). In contemporary American usage, “*respect*” frequently denotes recognition of another’s autonomy, moral worth, or personal accomplishment (Hsueh et al., 2005). This emphasis on acknowledging individuality aligns with the United States’ cultural priorities around self-expression and personal rights, such that respecting someone entails validating their personhood and giving them the space to exercise their agency.

Moreover, children in the United States tend to learn that respect includes the components of kindness, fairness, and avoiding harm or interference—attributes closely tied to broader cultural values of egalitarianism and personal freedom. Through socialization agents such as parents, teachers, and peers, children are encouraged to develop a sense of reciprocity, whereby “*respect*” is conceptualized as both an action and a response: individuals earn or trade respect by demonstrating it themselves (Jackson et al., 2001). This process extends beyond simple courtesy and can encompass deeper moral components, such as empathy or admiration for prosocial behaviors (Frei & Shaver, 2002).

At the same time, “*respect*” in this cultural-linguistic context embraces forms of civility and compliance with social norms. This can involve abiding by community rules, honoring

others' personal boundaries, and recognizing hierarchical relationships in professional or institutional arenas (Brown & Levinson, 1987; Goffman, 1967). This occurs with less emphasis on ritualized deference than is typically observed in cultures that use multiple terms for respect (e.g., *zunjing* vs. *zunzhong*). However, the breadth and flexibility of this single term may introduce ambiguity, as it lacks clear linguistic differentiation between distinct types or contexts of respect. Unlike Mandarin, in which the explicit distinction between *zunjing* and *zunzhong* clarifies hierarchical reverence versus mutual egalitarian regard, the single term “*respect*” is thus adaptable, spanning everything from moral admiration for a community leader to the basic politeness one shows a stranger. Consequently, although “*respect*” in English appears monolithic, it may encapsulate an array of social and emotional dimensions, ranging from mutual courtesy and fairness to deep-seated admiration for virtues or achievements.

The Current Study

Building on previous studies of cultural and linguistic distinctions in how respect is conceptualized along with a theoretical lens, I investigate the nuances of *zunzhong* (尊重), *zunjing* (尊敬), and the English term “*respect*” across Chinese and U.S. contexts. I have two primary aims. First, I explore whether *zunzhong* and *zunjing*—while sharing a common root character that may demonstrate similarities in conceptualizing respect also, with the differentiation in their extensions, also reflect distinct underlying dimensions of respect within Chinese culture. Second, I examine how these terms compare to the single English concept of “*respect*”, paying particular attention to potential differences in hierarchy, formality, and interpersonal reciprocity.

To accomplish these goals, I draw on data from Chinese and American college students, who are in emerging adulthood—a developmental stage marked by active navigation of inherited

cultural scripts and evolving individual beliefs. Participants completed a questionnaire assessing the centrality of various respect-related features (e.g., openness, obedience, gift-giving, mutuality). By integrating factor-analytic methods with measurement invariance tests and cross-cultural comparisons, I aim to clarify how each term (and its associated behaviors) is understood, and whether the culturally specific constructs of *zunzhong* and *zunjing* map onto or diverge from the Anglo-American notion of “*respect*” This inquiry not only sheds light on the rich tapestry of respect in Mandarin-speaking and English-speaking communities but also contributes to broader theoretical discussions regarding the socialization and moral underpinnings of respect across cultures.

Methods

Participants

The final sample was comprised of 622 college students and included 416 Mandarin-speaking Chinese college students born and currently in China (241 females (57.9%) and 175 males (42.1%), $M(\text{age})=21.17$, $SD = 1.67$, Range= 18~26) and 227 English-speaking college students currently in North Carolina ¹(56.4% female, 41.0% male, other 2.6%; $M=19.60$ years, $SD=2.67$; 65.6% White, 7.9% Asian, 7.4% Black, 7.3% Biracial, 5.8% Latinx, 5.3% Asian American, 0.7% from other groups). Both Chinese and U.S. samples participated from September to December 2022 or six months later, when I determined that a larger sample would be useful, from May 2023 to February 2024. The two samples were similar in age range and

¹ According to institutional data from the NC State University, approximately 85% of undergraduate students are domestic, with the majority being U.S.-born citizens.

gender composition, and there were no large contextual events over the time of data collection, so these samples were combined.

Procedure

The U.S. data collection preceded Chinese data collection. The U.S. participants were recruited online from North Carolina State University in southeastern U.S. from April 2022 to October 2022 via an Introduction to Psychology course. The Chinese participants were recruited online from the psychological study college student participant pools and from snowball sampling via social media (e.g., *Wechat* and *Rednote*) at two timepoints: T1 (September ~ December 2022) and T2 (May 2023 ~February 2024). The study was advertised in both cultural contexts as “*a study related to emotion and attitudes in interpersonal relationships*” and the goal of this study was “*to know more about people’s ideas associated with emotion-related concepts in interpersonal relationships and also to assess emotion and attitudes*”. The vagueness in the advertisement helped avoid including only participants who were exclusively interested in respect, and, in fact, the study began with a question on general interpersonal relationships and then funneled to respect in the questionnaire.

After providing consent, participants were given the online survey through *Qualtrics* which they could take at a time of their choosing using their mobile phone. The questionnaire required approximately 30~45 minutes to complete². The questionnaire began with the general question on key features in close relationships and then funneled to the goal of exploring respect in the two countries by asking a variety of questions about respect e.g., giving respect, earning respect, being respected, showing respect, feeling respect). All participants responded to the questionnaire in their language (i.e., English for U.S. participants and Mandarin for Chinese

² For Chinese T2 sample, I cut some sections of the questionnaire, and the whole questionnaire took 15~30 minutes to finish and adjusted the amount of compensation (to ¥5).

participants). Chinese participants were randomly assigned to complete the portion of the questionnaire that focused on centrality by utilizing one of the two Chinese respect terms in *Qualtrics*, with the goal of evenly distributing them between “*尊重 (zunzhong)*” and “*尊敬 (zunjing)*”. U.S. participants were asked about “*respect*”. Compensation for U.S. participants was 2 research credits and for Chinese participants was ¥20 via *Alipay* and *Wechat Pay*. Participation was anonymous, with compensation provided via *Alipay* or *WeChat* IDs collected separately in *Qualtrics*.

A total of 506 Chinese and 240 U.S. participants initially completed the survey via *Qualtrics*. As data collection proceeded, I screened all the completed responses to verify that participants met the target criteria (i.e., currently college students in China and U.S.) and had fully completed the survey. In addition, responses were inspected for unusually short completion times, random or inconsistent rating patterns, and alignment with open-ended prompts. To avoid including so-called “professional participants” seeking compensation through minimal or irrelevant responses, the open-ended entries were assessed for sufficient detail, coherence, and signs of potential AI-generated content. Any cases exhibiting these or other anomalies were removed to ensure data integrity, and those participants ($N= 103$) were not compensated and therefore were not included in the final sample.

Measure Development

Respect Centrality Feature Questionnaire. To assess individuals’ perceptions of respect, we adapted the **Respect Centrality Feature Questionnaire** (Frei & Shaver, 2002), which originally contained 31 items derived from free-listing procedures with young adults in the United States. To ensure cross-cultural relevance beyond the American contexts, four cultural experts (two from the U.S. and two from East Asia) independently evaluated each item for

clarity, redundancy, and cultural applicability. Items deemed duplicative or culturally ambiguous were removed or merged following group discussion, substantially reducing the questionnaire down to 12 items. An expanded expert panel (representing China, Korea, and Japan) then recommended six additional items (e.g., *gift-giving*, *obedience*, *politeness/courtesy*, *deference*, *learning from others*, *creativity*) as particularly salient in East Asian contexts (Chao, 1994; Li, 2001, 2006; Yang, 1994). This process reduced the original 31 items to a final set of 18 items.

I recognized that this measure originated from the work of Frei and Shaver (2002) and was initially developed with U.S. college student participants. To help address that this measure was inevitably from an American perspective, I also asked the Chinese participants to identify any additional elements they believed were central to *zunzhong* or *zunjing* (depending on the term under consideration) but were not captured by the current measure. I accomplished this by including a nineteenth item, an open-ended “others” item, which allowed participants to enter their own responses.

Translation Process. The revised Respect Centrality Feature questionnaire was translated into Chinese in a careful process that ultimately included five translators. First, a professor of linguistics teaching at one southern University in the U.S. and I, a native Chinese speaker, translated the items from English to Chinese independently, and then we met to resolve discrepancies. Then I asked a research assistant fluent in both English and Chinese to serve as the third translator to check the translation. Finally, the questionnaire was back translated into English by two other bilingual language experts (native Chinese speakers, and fluent in English) to ensure linguistic equivalence.

In preparing the Chinese version, the translators and back translators sought to align wording with everyday usage rather than rely on direct translations, which can sometimes confuse Chinese participants. I had two goals in accurately translating the English version to Chinese. First, my intention was to preserve both the conceptual intent of the English as well as the natural expression in Chinese. Most items involved interpersonal qualities or behaviors (e.g., “acceptance,” “honesty,” “listening”) that were rendered that way. Second, recognizing that some words inherently carry positive or negative connotations, I wanted to minimize the risk that Chinese participants would rate items as low centrality merely because they disliked those features, rather than because they saw those as being irrelevant. Therefore, special attention was given to cultural and linguistic nuances and rephrasing items to more neutral and positive texts, such as translating “judgmental toward the other” as “不戴有色眼镜看待对方” which literally means “viewing the other person without bias or prejudice”, “decisiveness” to “having the ability to make clear and confident decisions when the other person is unsure or hesitant”), and “demandingness towards others” to “对对方有一定要求,” conveying the idea of holding certain expectations for the other person .

I acknowledge this is a trade-off and that such adjustments may introduce some error for cross-cultural comparisons between the Chinese and U.S. versions. Accordingly, I provide a table detailing the exact items in both languages, along with explanations of the Chinese wording, to enhance clarity and interpretive accuracy. Please see Table 1.

Table 1. *English and Chinese Translated Items Comparison.*

Study Items	English Items	Chinese Items	Chinese Items Explained in English
Acceptance	Acceptance of the other	接纳对方	Fully accepting the other person for who they are.
Considerate	Considerateness of the other	体贴对方	Being thoughtful and caring towards the other person.
Decisiveness	Decisiveness toward the other	在对方拿不定主意时，有决断力	Having the ability to make clear and confident decisions when the other person is unsure or hesitant.
Demanding	Demandingness of the other	与对方有一定要求	Having reasonable standards or expectations for the other person in the relationship.
Helpfulness	Helpfulness toward the other	愿意并且能够帮助对方	Being ready and capable of providing support or assistance to the other person when needed.
Honesty	Honesty toward the other	诚实	Being truthful and transparent in your interactions with the other person.
Judgmental	Judgmental toward the other	不戴有色眼镜看待对方	Viewing the other person without bias or prejudice.
Listening	Listening to the other	愿意倾听对方	Willing to listen to the other person.
Openness	Openness to the others' views	对对方的意见保持开放的态度	Be open-minded about the other person's opinions, being receptive to the other person's viewpoints, even if they differ from your own.
Loyalty	Loyalty toward the other	忠实于对方	Being loyal to the other person.
Morality	Behaving morally with the other	品行端正	Exhibiting upright moral conduct, behaving in a way that is ethical, upright, and respectful.
Mutuality	Mutuality between each other	能够互相尊重	Engaging in mutual respect, valuing and honoring each other's dignity, boundaries, and individuality.
Obedience	Obedience toward the other	遵从对方的意见	Following or complying with the other person's decisions or views.
Creativity	Creativity toward the other	有创造力	Being creative.
Politeness	Politeness/ Courtesy toward the other	有礼貌	Being polite or courteous in your interactions with the other person.
Deference	Deference toward the other	保持谦逊	Remaining modest and not letting pride or arrogance affect your behavior.
Learning	Learning from the other	能够互相学习	Being able to learn from each other
Gifting	Giving gifts to the other	赠送礼物	Giving gifts to the other person

Demographics. Following the questionnaire participants provided demographic information, such as age, gender identity, educational background, number of children at home, whether the participant was living with elders and the languages spoken at home. For U.S. participants, I also asked their race/ ethnicity, socioeconomic status based on family annual income, the types of cities they grew up in, and open-ended responses on whether they have religious beliefs.

Analytic Plan

All data were prepared and screened in *IBM SPSS* (Version 29.0) to confirm completeness and participant eligibility. I then used *SPSS* (Version 29.0), *AMOS*, and *R & RStudio* (Version 4.4.2) to address my central research questions through descriptive analyses, factor analyses, and group comparisons.

For **Aim 1**, which was to identify the characteristics most central to *zunzhong* and *zunjing* within Chinese culture, I computed means and standard deviations for each characteristic, performed exploratory factor analyses (EFAs) for each term. To understand the data better, I did open-ended analyses as well as created correlation matrices for *zunzhong* and *zunjing* separately. I also compared item-level means for each centrality item between *zunzhong* and *zunjing* using independent *t*-tests. Then I conducted multigroup CFAs to assess measurement invariance between *zunzhong* and *zunjing*.

For **Aim 2**, which was to examine how *zunzhong* and *zunjing* in the Chinese context and *respect* in the U.S. context differ from or overlap with each other, I first created a correlation matrix of U.S. *respect*. Then I conducted multigroup CFAs to assess measurement invariance. In instances where full invariance was not achievable, I explored partial invariance or analyzed each group separately. Finally, I employed additional *t*-tests to compare item-level means across

the Chinese terms and U.S. *respect*, while acknowledging that the absence of measurement invariance complicates direct interpretation of group-level differences.

RESULTS

Aim 1: Within the Chinese Cultural Context, What Is Central to Each of the Two Respect Concepts (*zunzhong*, *zunjing*)?

To examine this research question, I first evaluated which features participants identified as most central to *zunzhong* and *zunjing*. As shown in Table 2, most features have mean scores above 5.00 on a 1~7 scale, suggesting that participants view many of these features as relatively central to both *zunzhong* and *zunjing*. *Zunzhong* and *zunjing* share the same five features (i.e., *Mutuality*, *Honesty*, *Morality*, *Judgmental*, *Listening*) as the most central, although in different order. In contrast, gift-giving and creativity were among the least highly rated features (below 4.50), and again for both *zunzhong* and *zunjing*, implying that they were perceived as less central compared to interpersonal traits such as honesty or mutual consideration. Taken together, these descriptive findings provide initial evidence that participants in each group hold broadly similar views on the most and least central dimensions of respect.

Table 2. Mean Score Ranking of Respect Centrality within Mandarin Terms (From Highest to Lowest Centrality).

<i>Zunzhong</i> (N=206)		<i>Zunjing</i> (N=210)	
Mutuality	6.48 (0.90)	Mutuality	6.33 (0.97)
Honesty	6.30 (1.02)	Judgmental	6.22 (0.98)
Morality	6.23 (1.07)	Morality	6.18 (1.09)
Judgmental	6.21 (0.96)	Honesty	6.14 (1.15)
Listening	6.09 (1.06)	Listening	6.02 (1.04)
Politeness	5.89 (1.11)	Politeness	5.92 (1.16)
Openness	5.82 (1.07)	Loyalty	5.81 (1.17)
Acceptance	5.81 (1.07)	Helpfulness	5.80 (1.12)
Helpfulness	5.77 (1.10)	Learning	5.76 (1.18)
Deference	5.74 (1.13)	Acceptance	5.71 (1.07)
Learning	5.73 (1.25)	Openness	5.70 (1.15)
Loyalty	5.70 (1.29)	Deference	5.63 (1.18)
Considerate	5.56 (1.15)	Considerate	5.61 (1.15)
Obedience	5.33 (1.39)	Obedience	5.42 (1.30)
Decisiveness	5.03 (1.41)	Decisiveness	5.02 (1.32)
Demanding	4.50 (1.35)	Demanding	4.54 (1.48)
Creativity	4.47 (1.73)	Creativity	4.50 (1.64)
Gifting	3.83 (1.54)	Gifting	3.97 (1.62)

Note. Higher scores on this 1-7 scale indicate centrality of the feature.

Table 3. *Respect Centrality in Mandarin: Group Comparisons of Zunzhong and Zunjing.*

Features	<i>Zunzhong</i> (N=206)	<i>Zunjing</i> (N=210)	<i>t</i> (<i>df</i> = 414)	<i>p</i>
Acceptance	5.81 (1.07)	5.71 (1.07)	0.87	.384
Considerate	5.56 (1.15)	5.61 (1.15)	-0.45	.651
Decisiveness	5.03 (1.41)	5.02 (1.32)	0.08	.939
Demanding	4.50 (1.35)	4.54 (1.48)	-0.27	.784
Helpfulness	5.77 (1.10)	5.80 (1.12)	-0.35	.728
Honesty	6.30 (1.02)	6.14 (1.15)	1.44	.151
Judgmental	6.21 (0.96)	6.22 (0.98)	-0.11	.915
Listening	6.09 (1.06)	6.02 (1.04)	0.67	.505
Openness	5.82 (1.07)	5.70 (1.15)	1.10	.271
Loyalty	5.70 (1.29)	5.81 (1.17)	-0.95	.341
Morality	6.23 (1.07)	6.18 (1.09)	0.49	.622
Mutuality	6.48 (0.90)	6.33 (0.97)	1.61	.108
Obedience	5.33 (1.39)	5.42 (1.30)	-0.67	.502
Creativity	4.47 (1.73)	4.50 (1.64)	-0.21	.837
Politeness	5.89 (1.11)	5.92 (1.16)	-0.28	.783
Deference	5.74 (1.13)	5.63 (1.18)	0.92	.357
Learning	5.73 (1.25)	5.76 (1.18)	-0.24	.808
Giftng	3.83 (1.54)	3.97 (1.62)	-0.88	.380

Note. Scale is 1 (“not central at all”) to 7 (“very central in respect”). There were no significant differences between *zunzhong* and *zunjing* in independent *t*-tests.

To examine potential differences between *zunzhong* and *zunjing* on the centrality ratings of respect features, I conducted 18 independent *t*-tests (one per feature) (see Table 3). None yielded statistically significant differences, suggesting that, at least in this sample, *zunzhong* and *zunjing* participants perceive these features similarly.

Chinese Participants Open-ended Response Analyses

Approximately half (49.52%) of the Chinese participants chose to contribute additional responses to the “*others*” in centrality measures. I analyzed these open-ended responses ($N=103$ for *zunzhong*, $N=100$ for *zunjing*) in Mandarin, given that language can influence information processing (Perunovic et al., 2007). Initially, I reviewed all the responses for *zunzhong* and *zunjing* separately to identify recurring or conceptually related ideas. Similar responses were subsequently grouped into overarching themes. For instance, responses such as “*互相帮助*” (“*help each other*”) and “*与对方共同努力*” (“*work together*”) were categorized under the theme *互助与合作* (“*Mutual Assistance & Cooperation*”). I also allowed each response to be classified into multiple themes. Themes were iteratively refined to enhance clarity and precision. Subsequently, all responses and themes were translated into English. Each theme was labeled bilingually in Chinese and English, and representative examples were compiled into a summary table for straightforward interpretation (shown in Table 4).

The analysis of qualitative responses revealed both shared and distinct themes underlying the conceptualizations of *zunzhong* and *zunjing*. Participants emphasized ten themes for both *zunzhong* and *zunjing*. These included *Mutual Assistance & Cooperation* (e.g., “helping each other,” “facing difficulties together”), *Understanding & Acceptance* (e.g., “mutual understanding,” “perspective-taking”), *Emotional Companionship & Care* (e.g., “companionship,” “expressing love”), *Sincerity* (e.g., “treating people sincerely”), *Trust* (e.g., “trustworthiness”, “mutual trust”), *Equality & Respect* (e.g., “mutual respect,” “treating equally”), *Moral Character & Maturity* (e.g., “proper world values,” “filial piety”), *Expression & Communication* (e.g., “listening,” “maintaining contact”), *Courtesy & Etiquette* (e.g.,

"politeness," "reciprocity"), and *Common Interests & Values* (e.g., "shared interests," "compatible personalities").

However, two distinct themes also emerged, and these were found exclusively within *zunjing*, reflecting a greater emphasis on formalized social expectations. Specifically, themes of *Respecting Boundaries & Rules* (e.g., "not gossiping," "not forcing others") and *Social Status & Competence* (e.g., "high status," "economic strength") uniquely characterized *zunjing*. This distinction suggests that while *zunzhong* and *zunjing* share substantial overlap in emphasizing relational harmony, ethical integrity, and mutuality, *zunjing* uniquely incorporates elements reflecting explicit social hierarchy, formal etiquette, and acknowledgment of status differentials.

Table 4. Summary of Shared and Distinct Themes Generated by Participants for Zunzhong and Zunjing.

Themes	Examples in Zunzhong (N=103)	Examples in Zunjing (N=100)
Mutual Assistance & Cooperation (互助与合作)	互相帮助 Helping each other, 相互帮助 Helping mutually, 与对方共同努力 Working together, 一起学习 Learning together, 互相促进 Promoting each other's growth	互相帮助 Mutual support, 互惠互利 Mutual benefit, 一起面对困难 Facing difficulties together
Understanding & Acceptance (理解与包容)	互相理解 Mutual understanding, 包容对方 Tolerating each other, 换位思考 Perspective-taking, 接纳对方的缺点 Accepting each other's flaws	包容 Tolerance, 互相理解 Mutual understanding, 换位思考 Perspective-taking, 能互相理解包容 Mutual understanding and acceptance
Emotional Companionship & Care (情感陪伴与关怀)	陪伴 Companionship, 互相关心 Mutual caring, 在意对方 Caring about each other, 可以对别人倾诉 Able to confide	陪伴 Companionship, 安慰对方 Comforting each other, 互相关心 Mutual caring, 表达爱意 Expressing love
Sincerity (真诚)	真诚 Sincerity, 坦诚相待 Treating each other honestly and sincerely, 真诚坦然 Frank and sincere	真诚待人 Treating people sincerely, 诚实守信 Honesty and trustworthiness

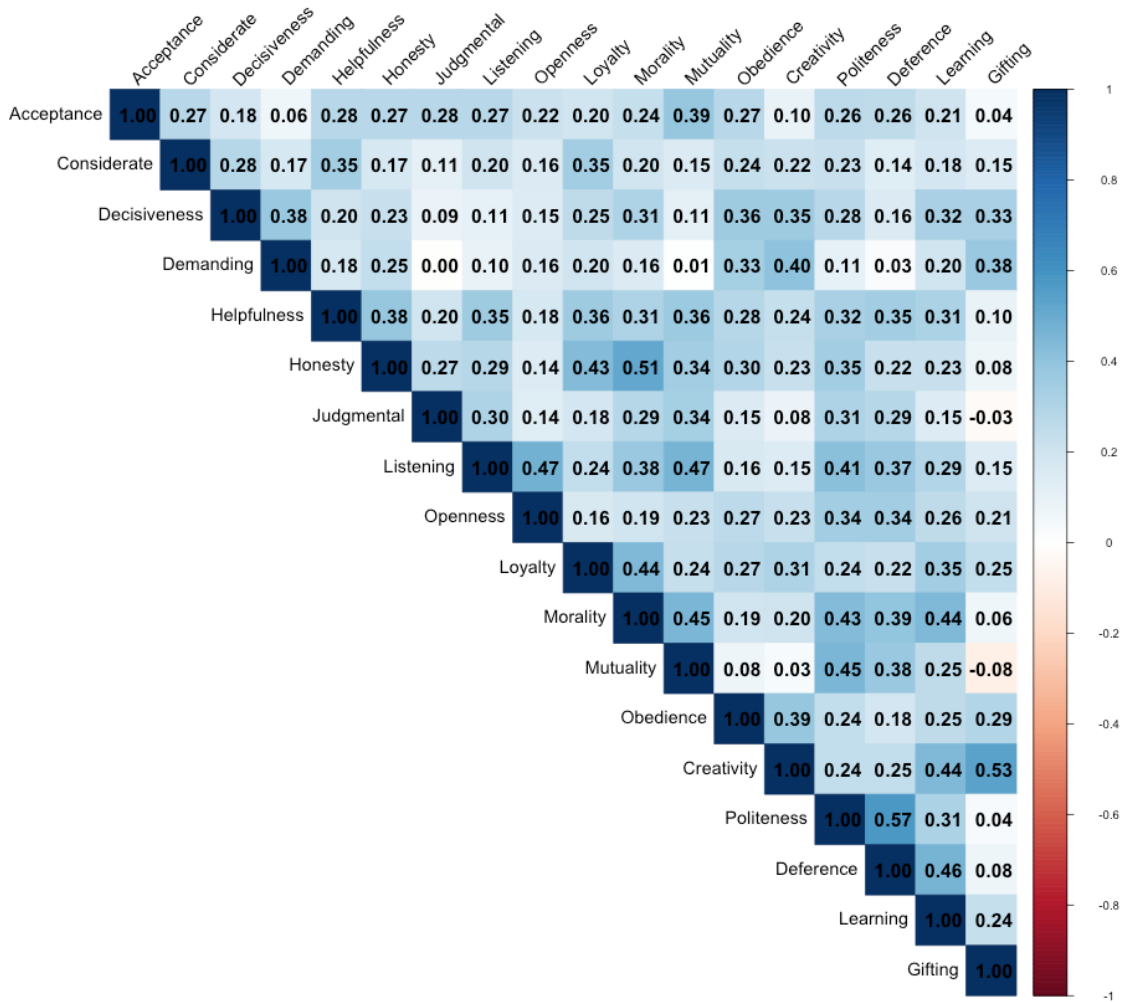
Table 4 (continued).

Themes	Examples in <i>Zunzhong</i> (N=103)	Examples in <i>Zunjing</i> (N=100)
Trust (信任)	信任 Trust	互相信任 Mutual trust 诚实守信 Honesty and trustworthiness, 忠诚 Loyalty,
Equality & Respect (平等与尊重)	互相尊重 Mutual respect, 平等 Equality, 对人尊重 Respecting people, 尊重他人行为方式 Respecting the way others behave	对长辈尊重 Respect elders, 时刻保持尊敬 Maintaining constant respect, 平等看待 Treat equally
Moral Character & Maturity (人格品质与成熟)	人品 Moral character, 道德 Virtue, 三观正 Proper world values, 孝顺 Filial piety, 情绪稳定 Emotional stability	三观正 Proper world values, 有教养 Well-mannered, 态度平和 Calm attitude, 有理想 Having ideals and aspirations
Expression & Communication (表达与沟通)	表达 Expression, 保持联系 Maintaining contact, 分享欲望 Desire to share, 能够倾诉 Able to confide	沟通力 Communication skills, 倾听对方 Listening to others, 沟通时婉转的语言 Gentle and tactful language during communication

Table 4 (continued).

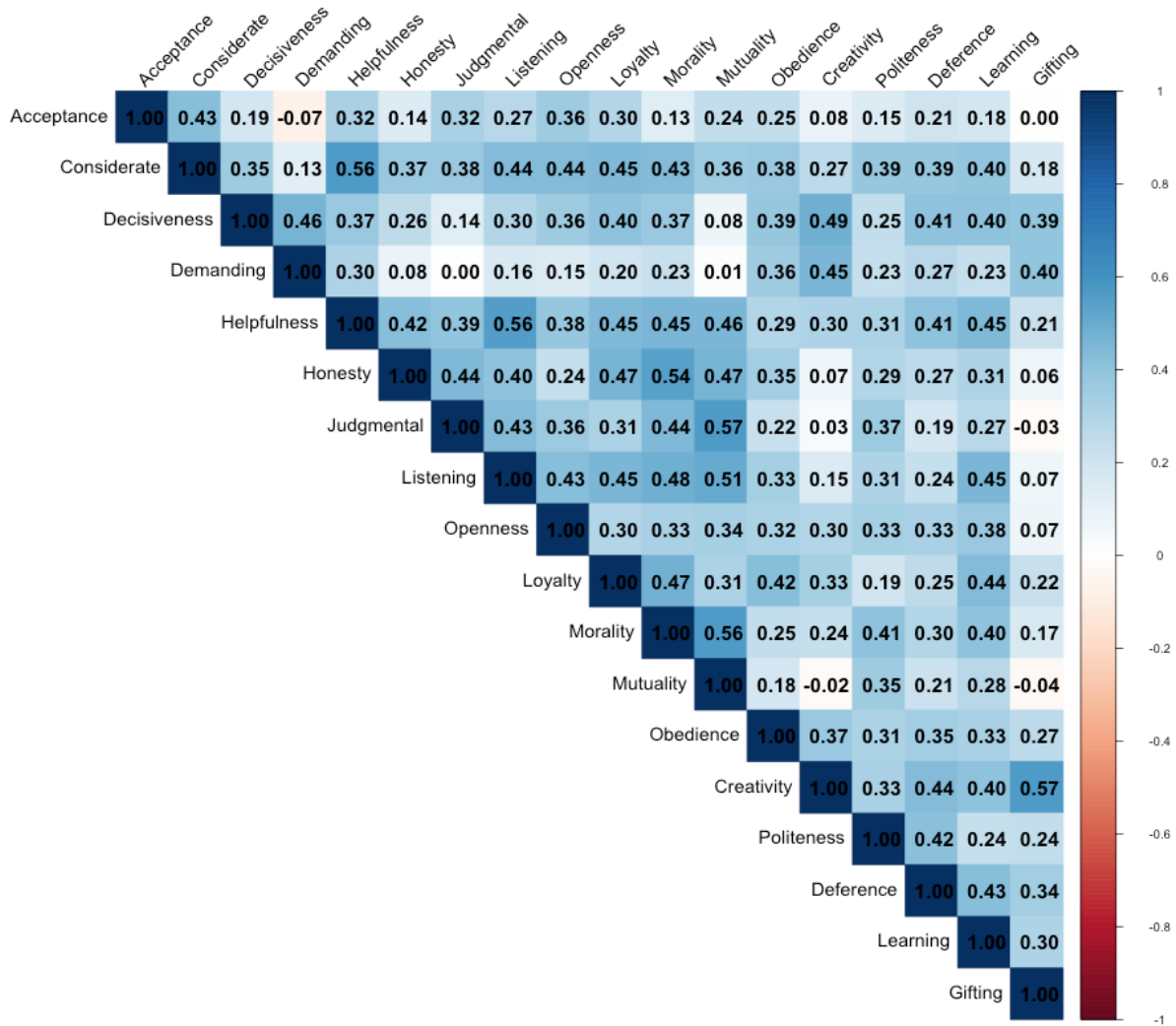
Themes	Examples in <i>Zunzhong</i> (N=103)	Examples in <i>Zunjing</i> (N=100)
Courtesy & Etiquette (礼貌与礼仪)	礼貌 Politeness, 虚心接受他人的意见 Humility in accepting advice	礼貌 Politeness, 礼尚往来 Reciprocity, 相互礼貌 Mutual politeness
Common Interests & Values (共同兴趣与价值观)	兴趣爱好相同 Similar interests, 性格能够处得来 Compatible personalities, 同步想法 Synchronizing ideas	共同爱好 Shared interests, 兴趣相投 Common interests, 思想共鸣 Shared thoughts
Respecting Boundaries & Rules (尊重界限与规矩)	/	不随便发脾气 Not easily losing temper, 不在背后议论 Not gossiping, 不强迫他人 Not forcing others
Social Status & Competence (社会地位与能力)	/	对长辈尊重 Respect elders 地位高 High status, 学历 Education level, 经济实力 Economic strength, 自己有能力 Having ability

Figure 1. Correlation Matrix of the 18 Items Within the Term Zunzhong ($N=206$) and Zunjing ($N=210$).



(a) Zunzhong

Figure 1 (continued).



(b) *Zunjing*

The correlation matrices revealed what appear to be distinct patterns for *zunzhong* (Figure 1a) and *zunjing* (Figure 1b), suggesting important differences in how each term of respect is understood. For *zunzhong*, morality and courteous behaviors showed strong or nearly strong correlations according to Cohen's (1988) guidelines (e.g., politeness–honesty, $r = .51$; morality–

listening, $r = .47$), suggesting these features are closely interrelated. Meanwhile, features such as demanding had weaker correlations with relational traits (mutuality, $r = .03$), suggesting assertiveness may form a separate aspect of *zunzhong*.

For *zunjing*, assertive behaviors showed distinctive correlations that were notably between demanding-decisiveness ($r = .56$) and gifting-creativity ($r = .57$), suggesting that *zunjing* uniquely emphasizes clear interpersonal boundaries, decisive interactions, and proactive generosity. Additionally, mutuality correlated more strongly with listening for *zunjing* ($r = .56$) compared to *zunzhong* ($r = .24$), indicating a more intertwining of these attentive and reciprocal social relationships for *zunjing* than *zunzhong*.

It is important to note, however, that these observations are descriptive, as tests of statistical significance were not conducted. Thus, these interpretations should be considered preliminary, providing direction for subsequent exploratory factor analysis (EFA) and multi-group confirmatory factor analysis (multi-group CFA). These patterns suggest the possibility of distinct underlying factor structures for *zunzhong* and *zunjing*, despite some overlapping characteristics. Specifically, *zunzhong* might emphasize moral integrity and respectful courtesy, whereas *zunjing* may prioritize structured, assertive interactions and proactive social behaviors.

Exploratory Factor Analysis

To further explore the underlying structure of *zunzhong* and in *zunjing*, I examined the factor structure of the 18 features assessing respect centrality (e.g., Acceptance, Considerate, Deference, etc.) by conducting separate exploratory factor analyses (EFAs) for each concept to determine whether the same underlying construct(s) emerged across these conditions. I used the

psych package in R (Revelle, 2023), and maximum likelihood extraction with *oblimin* rotation as I expected the factors to be correlated with each other.

Model fit was assessed using several goodness-of-fit indices: Chi-square statistic, Comparative Fit Index (CFI), Tucker–Lewis Index (TLI), and Root Mean Square Error of Approximation (RMSEA). According to recommendations by Kline (2016) and Weston and Gore (2006), a good model fit is indicated by a non-significant or near non-significant Chi-square value. When the chi-square value is significant, acceptable fit is indicated by CFI and TLI values $\geq .90$, with values $\geq .95$ considered excellent (Weston & Gore, 2006). RMSEA values $\leq .08$ indicate acceptable fit (Kline, 2016), and values $\leq .06$ reflect excellent model fit (Weston & Gore, 2006).

Exploratory Factor Analysis for *Zunzhong*

Before extracting factors for the *zunzhong* condition ($N = 206$), I assessed the data's suitability for EFA. Bartlett's test of sphericity, $\chi^2(153) = 1105.70, p < .001$, indicated that the correlation matrix was not an identity matrix, thus supporting the presence of meaningful inter-item correlations. Additionally, the KMO measure of sampling adequacy was .85—above the recommended threshold of .70 (Hair et al., 2019)—further confirming that the sample was appropriate for factor extraction.

Because global model fit statistics (e.g., χ^2 , RMSEA, CFI) inevitably improve with additional factors (due to greater degrees of freedom), I used several criteria to determine the optimal number of factors: (1) Through parallel analysis (Horn, 1965), I compared observed eigenvalues to those obtained from random data and retained factors whose observed eigenvalues exceeded the 95th percentile of eigenvalues from the randomly generated datasets; (2) As suggested in Fabrigar et al. (1999) and Hair et al. (2019), factors with fewer than three strongly

loading items often exhibit poor theoretical clarity as well as unstable psychometric properties. Thus, I evaluated each solution's factor structure for item loadings $\geq .40$ (on a primary factor) and cross-loadings $< .25$, to maintain a balance between rigor and interpretability; (3) I also examined Model fit indices (χ^2 , RMSEA, CFI, TLI), interpreting χ^2 cautiously due to its known sensitivity to sample size (Brown, 2015).

To determine the number of factors to extract, I conducted a parallel analysis (Horn, 1965) using a maximum likelihood estimation (Revelle, 2023). This procedure compared the observed eigenvalues for each potential factor to the eigenvalues obtained from 100 random-data replications of equivalent size and dimensionality. The 95th percentile criterion represents the threshold above which only 5% of randomly generated eigenvalues would exceed by chance alone. When an observed eigenvalue surpasses this threshold, it suggests that the factor captures meaningful variance beyond what would be expected from random data alone.

As shown in Table 5, the parallel analysis results revealed that the first factor had an observed eigenvalue of 4.63, substantially exceeding the 95th percentile criterion of 0.82. The second factor's observed eigenvalue of 1.37 also surpassed the 95th percentile threshold of 0.82, indicating genuine factor structure. The third factor's observed eigenvalue of 0.53 marginally exceeded the 95th percentile criterion of 0.49, suggesting the presence of a third meaningful factor. However, the fourth factor's observed eigenvalue of 0.33 fell well below the 95th percentile criterion of 0.82, indicating that any additional factors would likely represent random noise rather than meaningful underlying constructs. Based on these comparisons, the parallel analysis supported retaining three factors for the zunzhong condition.

Table 5. *Parallel Analysis Results for Factor Retention in Zunzhong.*

Factor	Eigenvalue	95th Percentile Eigenvalue	Retained
1	4.63	0.82	Yes
2	1.37	0.82	Yes
3	0.53	0.49	Yes
4	0.33	0.82	No

I also tested four-factor and five-factor solutions, which yielded slightly better overall fit indices but included factors represented by fewer than three items, thereby undermining interpretability. Consequently, I selected the three-factor solution as the most conceptually coherent and parsimonious structure for *zunzhong*. Then I performed a maximum likelihood extraction with direct *oblimin* rotation on the 18 features for participants in the *zunzhong* ($N = 206$). Consistent with recommendations for moderate sample sizes (Fabrigar et al., 1999; Hair et al., 2019), items loading $\geq .40$ on a primary factor without cross-loading $> .25$ were retained.

Table 6 presents the final three-factor solution's feature loadings and model fit. Despite the significant chi-square: $\chi^2(102) = 160.43, p < .001$, all other fit indices indicate that the three-factor model is an adequate to good fit, with RMSEA a good model fit, CFI close to good fit, and TLI showing adequate fit: CFI = .946, TLI = .918, RMSEA = .049 (90% CI = 0.033, 0.065). These findings support the suitability of a three-factor structure to represent the conceptualization of *zunzhong* in this sample.

Table 6. Factor loadings Shown in Zunzhong EFA Results.

Features	Factor 1	Factor 2	Factor 3
Deference	.80		
Politeness	.62		
Listening	.49		
Openness	.48		
Mutuality	.43	.40	
Learning	.41		.34
Judgmental	.29	.27	
Honesty		.73	
Morality		.55	
Loyalty		.53	
Helpfulness		.39	
Acceptance		.31	
Considerate		.30	
Creativity			.72
Gifting			.71
Demanding			.53
Decisiveness			.44
Obedience			.43

Note. Factor loadings that are equal to or lower than 0.25 are suppressed in this table for the readability. Model fit indices: $\chi^2(102) = 160.43, p < .001$, CFI = .946, TLI = .918, RMSEA = .049 (90% CI = .033, .065). The SS loadings (eigenvalues after rotation) were 2.49 (Factor 1), 2.37 (Factor 2), and 2.16 (Factor 3). Collectively, the three factors accounted for approximately 39% of the total variance in the data. The factor correlation matrix showed: $r(F1-F3) = .51$, with $r(F1-F2) = .18$, $r(F2-F3) = .25$.

Factor loadings of the three-factor solution for *zunzhong*, reported in Table 6, indicated that 12 items should be retained. Factor 1 (e.g., Deference, .80; Politeness, .62; Listening, .49; Openness, .48) reflected relational harmony, emphasizing cooperative and deferential interpersonal approach. Factor 2 (e.g., Honesty, .73; Morality, .55; Loyalty, .53) captured ethical integrity, highlighting

trustworthiness and moral consistency. Factor

3 (e.g., Creativity, .72; Gifting, .71; Demanding, .53) highlighted proactive generosity and assertive qualities. Collectively, the three factors accounted for approximately 39% of the total variance in the data. The factor correlation matrix revealed moderate correlations between Factor 1 and Factor 2 ($r = .35$) and between Factor 1 and Factor 3 ($r = .42$), whereas Factor 2 and Factor 3 were somewhat less correlated ($r = .29$).

Exploratory Factor Analysis for *Zunjing*

For *zunjing*, Bartlett's test of sphericity, $\chi^2(153) = 1497.79, p < .001$, and the KMO measure of sampling adequacy, $KMO = .89$, indicated that there is sufficient common variance for factor analysis.

To determine the number of factors to extract, I conducted a parallel analysis (Horn, 1965) using a maximum likelihood estimation (Revelle, 2023). The parallel analysis results for *zunjing* (Table 7) indicated that a three-factor solution was appropriate. Specifically, the first factor demonstrated a robust observed eigenvalue of 5.75, substantially exceeding the random-data 95th-percentile criterion of 0.77. The second factor, with an eigenvalue of 1.57, similarly surpassed the criterion, clearly supporting its retention. Interestingly, the third factor's observed eigenvalue (0.46) slightly missed the 95th-percentile criterion (0.48). However, given the negligible margin (0.02) and considering theoretical relevance, this factor was tentatively retained for subsequent analyses. Conversely, the fourth factor (eigenvalue = 0.34) fell below the threshold (0.77), reinforcing that any additional factors beyond the third would likely reflect random variance rather than meaningful structure. Thus, consistent with the previous *zunzhong* analysis, a three-factor solution was supported and adopted for *zunjing*.

Table 7. *Parallel Analysis Results for Factor Retention in Zunjing.*

Factor	Eigenvalue	95th Percentile Eigenvalue	Retained
1	5.75	0.77	Yes
2	1.57	0.77	Yes
3	0.46	0.48	Yes
4	0.34	0.77	No

Using the same retention criteria (loadings $\geq .40$, cross-loadings $\leq .25$), the same extraction and rotation procedure as well as the similar decision-making process, a three-factor model is my final selected model for *zunjing* with an adequate to good fit; RMSEA shows a good model fit, CFI close to good fit, and TLI showing adequate fit. Factor loadings, reported in Table 8, indicated that 13 items should be retained. Factor 1 (e.g., Mutuality = .81 Morality = .79, Honesty = .68) captured traits related to ethical interpersonal conduct and. Factor 2 (e.g., Creativity = .81, Gifting = .70, Decisiveness = .62) reflected behaviors and approach. Factor 3 (e.g., Acceptance = .75, Openness = .40) emphasized interpersonal consideration.

Table 8. Factor Loadings Shown in Zunjing EFA Results.

Item	Factor 1	Factor 2	Factor 3
Mutuality	.81		
Morality	.79		
Honesty	.68		
Judgmental	.60		
Listening	.55		
Helpfulness	.43		.26
Loyalty	.37	.29	
Politeness	.37	.27	
Creativity		.81	
Demanding		.63	
Decisiveness		.62	
Deference		.48	
Obedience		.41	
Learning	.29	.40	
Acceptance			.75
Gifting			.70
Considerate	.28		.46
Openness			.40

Note. Factor loadings that are equal to or lower than 0.25 are suppressed in this table for readability. Model fit indices: $\chi^2(102) = 173.33, p < .001$, CFI = .946, TLI = .918, RMSEA = .049 (90% CI = .033, .065). The SS loadings (eigenvalues after rotation) were 3.58 (Factor 1), 3.15 (Factor 2), and 1.66 (Factor 3). Collectively, these three factors accounted for 46.6% of the total variance in the data. The factor correlation matrix showed $r(F1-F2) = .30$, $r(F1-F3) = .47$, and $r(F2-F3) = .21$, indicating moderate overlap between Factor 1 and Factor 3, with weaker correlations involving Factor 2.

Both *zunzhong* and *zunjing* yielded three-factor solutions, with each construct sharing a strong emphasis on ethical-relational foundations (e.g., Morality: *zunzhong* = .55, *zunjing* = .79; Mutuality: *zunzhong* = .43, *zunjing* = .81). However, notable differences emerged: *zunzhong* emphasized deference (.80) along with hierarchical loyalty (Honesty = .73; Loyalty = .53) as its primary factor, whereas *zunjing* incorporated pragmatic aspects of authority (Demanding = .63; Creativity = .81) and honesty (.68). Despite these distinctions, both constructs similarly

highlighted gifting—albeit as the least central feature overall—as a culturally salient behavioral ritual (*zunzhong* = .71; *zunjing* = .70).

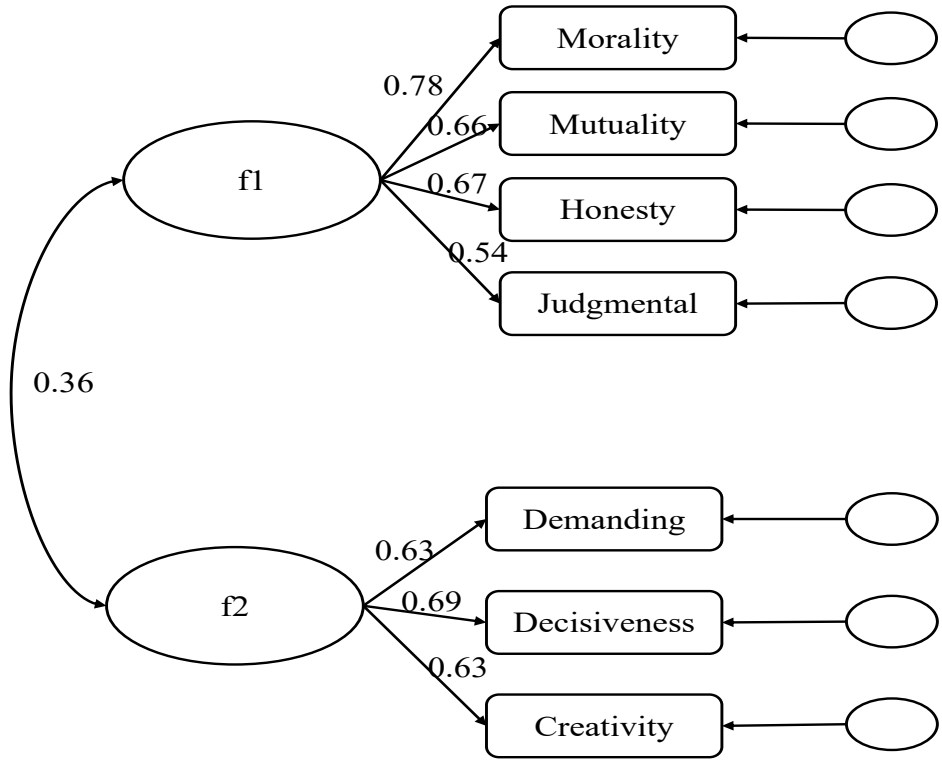
Critical distinctions emerged in Factor 3: *Zunjing* exhibited a robust acceptance/openness dimension (Acceptance = .75; Openness = .40), whereas *zunzhong* displayed weaker, overlapping loadings (Considerate = .30; Learning = .34), suggesting less structural clarity. Cross-loadings (e.g., Learning in *zunzhong*: .41/.34; Considerate in *zunjing*: .28/.46) hinted at conceptual fluidity between ethical and pragmatic domains. Overall, *zunjing* demonstrated sharper differentiation between relational warmth and hierarchical agency, while *zunzhong* intertwined deference and reciprocity with less empirical distinction.

Multigroup CFA between *zunzhong* and *zunjing*

To assess whether the proposed factor structure operated similarly and/or differently across the *zunzhong* ($N = 206$) and *zunjing* ($N = 210$), I conducted two multigroup CFAs between *zunzhong* and *zunjing* based on the similarities shared in *zunzhong* and *zunjiing* EFA results (Model 1 and 2).

In Model 1 (shown in Figure 2), there are two factors with latent variables f_1 and f_2 . Factor 1 (f_1) loads onto Morality, Mutuality, Honesty and Judgmental, and I labeled it as “Moral Integrity”, suggesting a dimension related to ethical integrity, honesty, mutual respect, and fairness (avoiding prejudice). Factor 2 (f_2) loads onto Demandingness, Decisiveness, and Creativity and I labeled it as “Assertiveness”, reflecting being assertive or clear in one's expectations, decisive when others hesitate, and demonstrating creativity or innovative behavior in interpersonal contexts. The model includes covariance relationships between the two latent variables.

Figure 2. Multigroup CFA Model for Zunzhong and Zunjing (Model 1)



Note. Model fit indices: $\chi^2(41) = 94.53, p < .001, CFI = .918, TLI = .916, RMSEA = .056$ (90% CI [.041, .074]), $p_{RMSEA \leq 0.05} = .233$.

The unconstrained model fit indices showed an acceptable fit to the data, $\chi^2(26) = 72.22, p < .001, CFI = .929, TLI = .886, RMSEA = .066$ (90% CI [.048, .084]), $p_{RMSEA \leq 0.05} = .073$.

Then I used the AMOS default function to examine different parameter constrains, that is, measurement weights, measurement intercepts, structural weights, structural intercepts, structural covariances, measurement residuals. I then compared the models in a stepwise procedure. The unconstrained model and the measurement weights model was non-significantly different, $\Delta\chi^2(5) = 5.53, p = .355$. Likewise, constraining structural covariances did not significantly reduce fit,

$\Delta\chi^2(8) = 10.85, p = .210$, nor did constraining measurement residuals, $\Delta\chi^2(15) = 22.31, p = .100$.

Consequently, the most constrained model (measurement residuals) served as the final model and established measurement invariance between *zunzhong* and *zunjing* for those two factors.

For more information on all the constrained models, see Table 9 below.

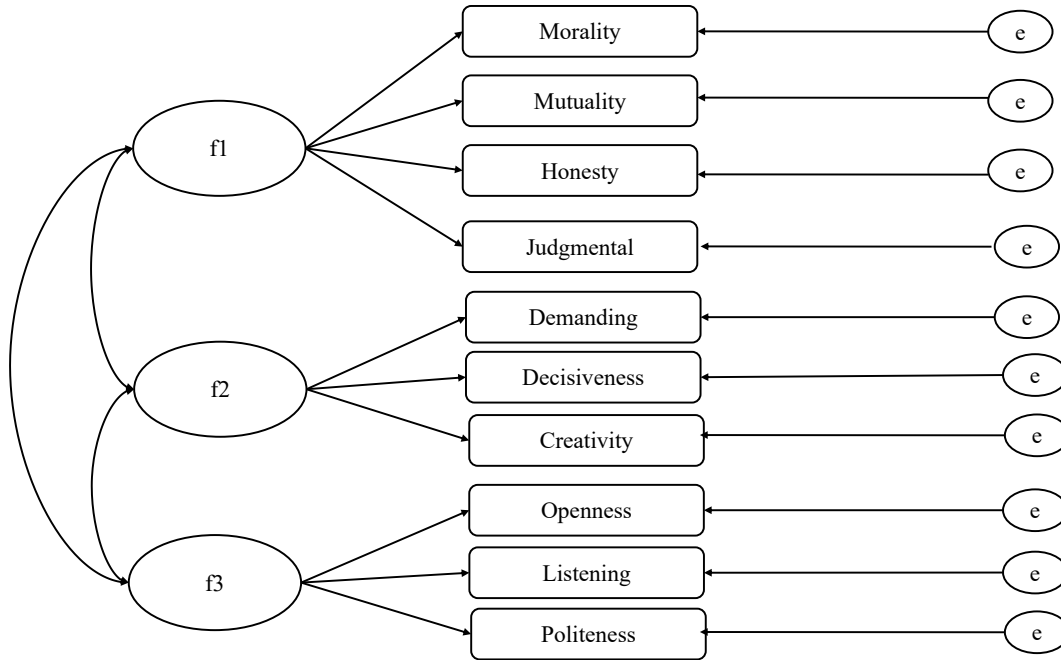
Table 9. *Tests of Measurement Invariance (Multigroup CFA, Model 1).*

Model	χ^2	<i>df</i>	CFI	TLI	RMSEA	$\Delta\chi^2$	Δdf	<i>p</i>
Unconstrained	72.22	26	.929	.886	.066	—	—	—
Measurement Weights	77.75	31	.929	.903	.060	5.53	5	.355
Structural Covariances	83.07	34	.925	.908	.059	5.32	3	.150
Measurement Residuals	94.53	41	.918	.916	.056	11.46	7	.120

Note. $\Delta\chi^2$ and Δdf represent changes in χ^2 and *df* when each model is compared against the previous model. The *p* values represent the significance of those differences via the chi-square difference test.

In Model 2 (shown in Figure 3), there are three factors with latent variables f1, f2 and f3. As in Model 1, Factor 1 (f1) loads onto Morality, Mutuality, Honesty and Judgmental, and I labeled it as “Moral Integrity” and Factor 2(f2) loads onto demandingness, Decisiveness, and Creativity and I labeled in as “Assertiveness”. I also added Factor 3(f3) and it loads onto Openness, Listening and Politeness and I labeled it as “Open Courtesy”, capturing an open interpersonal style, emphasizing willingness to consider others’ perspectives, active listening, and polite behavior in social interactions. The model includes covariance relationships between the three latent variables.

Figure 3. Multigroup CFA Test Model for Zunzhong and Zunjing (Model 2).



The unconstrained (configural invariance) model demonstrated an acceptable fit to the data, $\chi^2(64) = 156.99, p < .001, CFI = .914, TLI = .879, RMSEA = .059$ (90% CI [.045, .067]). I then tested measurement invariance using AMOS's default multi-group invariance procedure, specifically evaluating metric (measurement weights), scalar (measurement intercepts), and additional constraints including structural covariances and measurement residuals. The metric invariance model (constraining factor loadings) did not significantly differ from the configural model, $\Delta\chi^2(7) = 6.02, p = .538$, indicating metric invariance across the *zunzhong* and *zunjing* groups. However, imposing structural covariance constraints significantly worsened the model fit, $\Delta\chi^2(6) = 13.90, p = .031$. Consequently, the metric invariance (measurement weights) model was retained as the final model, confirming equal factor loadings across groups but significant group differences in structural covariance.

To further probe these differences, following the retention of the metric invariance (measurement weights) model, I tested a Partial Structural Invariance Model. This model constrained the structural variance of Factor 1 and the covariance between Factors 1 and 2 to be equal across groups, while allowing other structural parameters to remain free. These specific constraints were selected based on examination of modification indices and theoretical considerations about which structural relationships were most likely to be stable across the zunzhong and zunjing conditions. As shown in Table 8, these added constraints did not significantly worsen the model fit relative to the measurement weights model, $\Delta\chi^2(4) = 7.85, p = .097$, suggesting partial invariance for these specific structural parameters. For detailed model comparisons at all invariance levels, see Table 10 below.

The relatively low Tucker–Lewis Index (TLI) values observed in our multigroup CFA models may reflect the complexity and subtlety of the constructs measured, as well as the limited number of indicators per factor. Given that TLI penalizes model complexity and smaller sample-to-parameter ratios, the moderate sample size and modestly defined factor structures likely contributed to these reduced values. Future studies with larger sample sizes and additional well-defined items per factor could improve TLI values.

Table 10. *Tests of Measurement Invariance (Multigroup CFA, Model 2).*

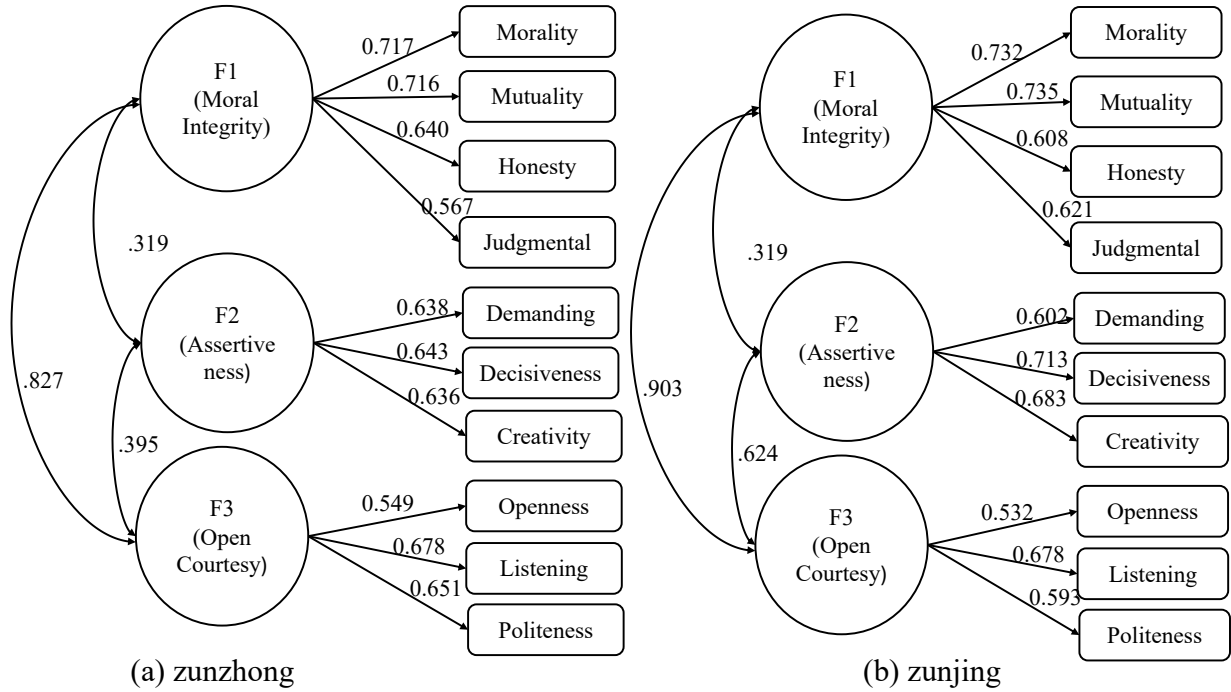
Model	χ^2	<i>df</i>	CFI	TLI	RMSEA	$\Delta\chi^2$	Δdf	<i>p</i>
Unconstrained	156.99	64	.914	.879	.059	—	—	—
Measurement Weights	163.01	71	.915	.892	.056	6.02	7	.538
Structural Covariances	176.91	77	.908	.892	.056	13.90	6	.031
Measurement Residuals	193.61	87	.901	.898	.054	16.71	10	.081
Partial Structural Invariance*	170.86	75	.911	.894	.056	7.85†	4	.097

Note. χ^2 = chi-square; *df* = degrees of freedom; CFI = Comparative Fit Index; TLI = Tucker-Lewis Index; RMSEA = Root Mean Square Error of Approximation. $\Delta\chi^2$ and Δdf represent changes in χ^2 and *df* when each model is compared against the previous model. The *p* values represent the significance of those differences via the chi-square difference test.

*Partial Structural Invariance Model constrains structural variance of Factor 1 and covariance between Factors 1 and 2 to be equal across groups.

†Comparison against Measurement Weights model.

Figure 4. Multi-group Confirmatory Factor Analysis for Zunzhong and Zunjing (Model 2).



Note. Model 2 Fit Indices: $\chi^2(75) = 170.86, p < .001, CFI = .911, TLI = .894, RMSEA = .056, p$

$RMSEA \leq 0.05 = .097.$

Table 11. Multi-Group CFA Results for Zunzhong (N = 206) and Zunjing (N = 210).

Factor / Item	Zunzhong	Zunjing
F1: Moral Integrity		
Morality	.717	.732
Mutuality	.716	.735
Honesty	.640	.608
Judgmental	.567	.621
F2: Assertiveness		
Demanding	.638	.602
Decisiveness	.643	.713
Creativity	.636	.683
F3: Open Courtesy		
Openness	.549	.532
Listening	.678	.678
Politeness	.651	.593
Factor Correlations		
Moral Integrity ↔ Assertiveness	.319	.319
Moral Integrity ↔ Open Courtesy	.827	.903
Assertiveness ↔ Open Courtesy	.395	.624
Factor Variances(Unstandardized)		
Moral Integrity	0.606 ***	0.606 ***
Assertiveness	0.767 ***	0.767***
Open Courtesy	0.359 ***	0.359 ***

Note. All factor loadings, correlations, and factor variances are statistically significant at $p < .001$. Standardized factor loadings and correlations are presented. Factor variances are unstandardized estimates. The item groupings reflect the theoretically proposed three-factor structure.

Both *zunzhong* and *zunjing* exhibit a similar three-factor structure: Moral Integrity (F1) (morality, mutuality, honesty, judgmental attitudes), Assertiveness (F2) (demandingness, decisiveness, creativity), and Open Courtesy (F3) (openness, listening, politeness). However, factor correlations reveal notable differences between these two concepts: *Zunjing* participants showed a particularly strong correlation between Moral Integrity (F1) and Open Courtesy (F3) (r

= .903), even higher than *zunzhong* ($r = .826$), exceeding the conventional threshold of .85 and thus raising potential discriminant validity concerns (Kline, 2016). This suggests that within the context of *zunjing*, moral and courteous behaviors are closely intertwined, indicating ethical actions may inherently involve courteousness in the context of *zunjing*. By contrast, in *zunzhong*, these three dimensions—while still present—are relatively more distinct from one another.

Aim 2: Across Chinese and U.S. Cultural Contexts, How Are *Zunzhong*, *Zunjing*, and “Respect” Similar or Different?

To explore potential similarities and differences in how *zunzhong*, *zunjing*, and “respect” are conceptualized in Chinese versus U.S. cultural contexts, I first examined how U.S. participants rated the centrality of 18 key features (see Table 12). This initial step establishes a benchmark for comparing U.S. perspectives to those observed in the Chinese samples.

Table 12. *Central Characteristics for Respect in the U.S. Listed by Mean (SD) Scores.*

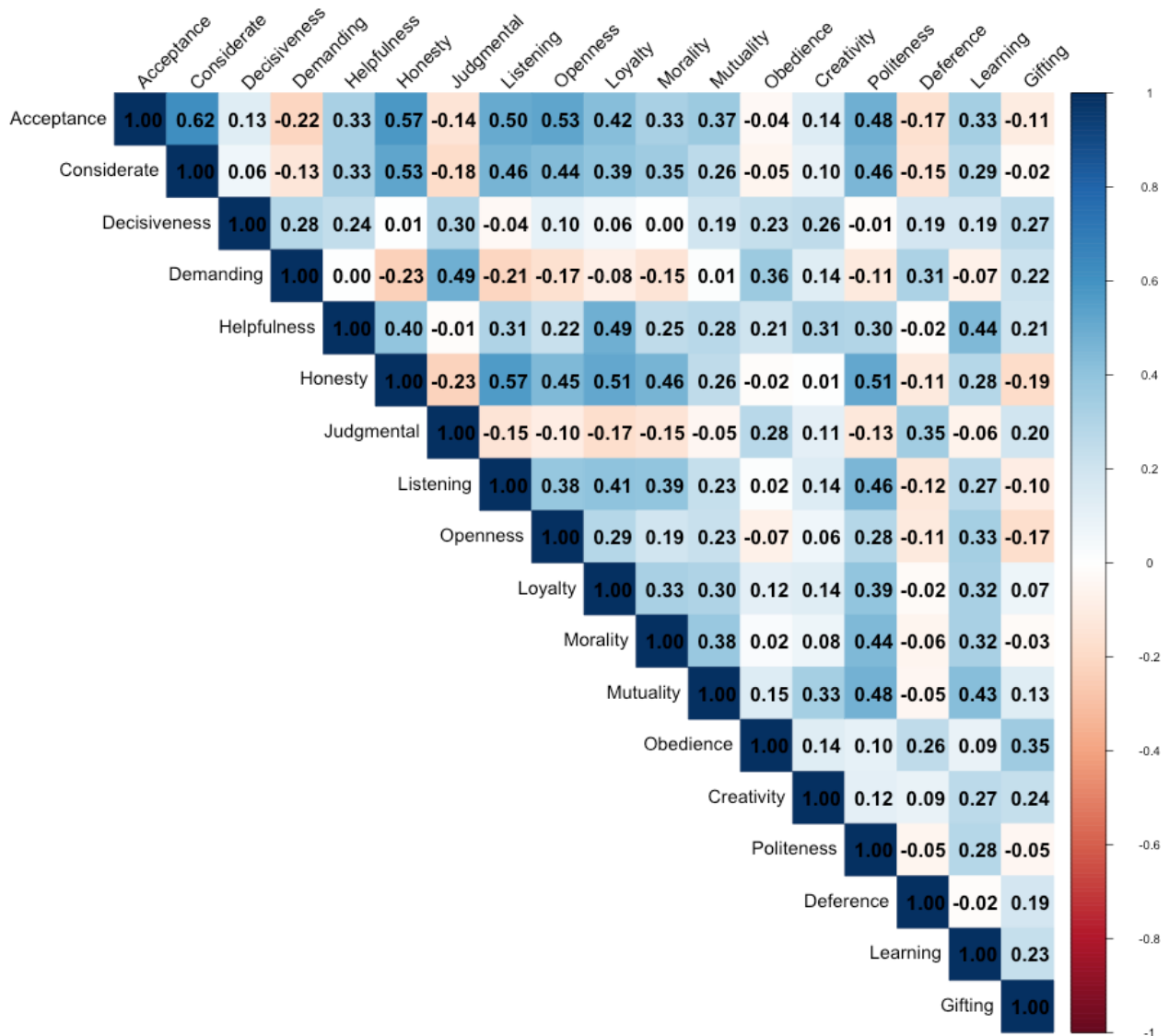
Features	Respect <i>M(SD)</i>
Honesty	6.56 (0.89)
Listening	6.48 (0.99)
Acceptance	6.41 (0.90)
Loyalty	6.30 (1.14)
Considerate	6.24 (0.97)
Openness	6.21 (1.06)
Politeness	6.17 (1.09)
Morality	5.99 (1.19)
Helpfulness	5.84 (1.19)
Mutuality	5.64 (1.37)
Learning	5.59 (1.26)
Creativity	4.45 (1.55)
Decisiveness	4.24 (1.47)
Obedience	3.93 (1.86)
Deference	3.70 (1.61)
Gifting	3.12 (1.49)
Demandingness	2.58 (1.38)
Judgmental	2.52 (1.60)

Note. The scale range was from 1 (*least central*) to 7 (*most central*).

Within U.S. culture, honesty, listening, acceptance, loyalty, and considerateness were rated as the most central items in the conceptualization of respect, reflecting a strong emphasis

on integrity and interpersonal attentiveness. Judgmental attitudes, demandingness, and gift-giving were rated as the least associated with the concept of respect.

Figure 5. *Correlation Matrix in U.S. Term "Respect".*



As shown in Figure 5, the correlation matrix for the U.S. concept of "respect" seemed to reveal strong positive correlations between acceptance–honesty ($r = .57$), acceptance–openness ($r = .53$), considerate–politeness ($r = .48$), and honesty–openness ($r = .51$), indicating that

American participants may closely associate respect with individual authenticity, sincerity, and openness. In contrast, lower correlations seemed to emerge for creativity and gifting (e.g., creativity–openness, $r = .10$; gifting–politeness, $r = -.05$), suggesting these attributes may be less central to the U.S. notion of respect.

Comparatively, the correlation matrix for the U.S. concept of “*respect*” differs distinctly from Chinese concepts of *zunzhong* and *zunjing*. For *zunzhong*, correlations among morality–mutuality ($r = .71$), morality–politeness ($r = .67$), mutuality–politeness ($r = .61$), and honesty–politeness ($r = .57$) seem to be substantially stronger, emphasizing moral integrity and relational harmony. In contrast, these correlations seemed to be notably weaker for the U.S. concept of “*respect*,” with morality–mutuality ($r = .38$), morality–politeness ($r = .40$), mutuality–politeness ($r = .40$), and honesty–politeness ($r = .28$). Similarly, *zunjing* showed high correlations emphasizing formality and etiquette—such as politeness–listening ($r = .67$), politeness–deference ($r = .65$), and politeness–gifting ($r = .62$)—whereas the corresponding correlations seemed to be substantially lower in the U.S. (politeness–listening $r = .45$, politeness–deference $r = .15$, politeness–gifting $r = -.05$). Conversely, correlations that seemed to be notably strong in the U.S. (e.g., acceptance–honesty, acceptance–openness) seemed to be weaker in both *zunzhong* (acceptance–honesty $r = .28$, acceptance–openness $r = .16$) and *zunjing* (acceptance–honesty $r = .14$, acceptance–openness $r = .31$). Again, it is important to note, however, that these observations are descriptive, as tests of statistical significance were not conducted. These distinctive correlation patterns may underscore culturally nuanced interpretations of respect, highlighting authenticity and openness in the *respect* versus moral-relational integrity in *zunzhong* and hierarchical formality in *zunjing*.

EFA Analysis of “*Respect*”

In terms of *respect*, Bartlett’s test of sphericity, $\chi^2 (153) = 1302.21, p < .001$, and the KMO measure of sampling adequacy, $KMO = 0.86$, indicated that there is sufficient common variance for factor analysis.

Consistent with the prior analyses for *zunzhong* and *zunjing*, parallel analysis was conducted to determine the number of meaningful factors for the U.S. *respect* condition (see Table 13). Results indicated that two factors had observed eigenvalues clearly exceeding the 95th-percentile random-data criterion (Factor 1: eigenvalue = 4.45; Factor 2: eigenvalue = 1.84; criterion = 0.72), strongly supporting their retention. In contrast, the third factor (eigenvalue = 0.42) and the fourth factor (eigenvalue = 0.36) fell below the respective threshold values, suggesting these factors primarily reflected random variance.

Table 13. *Parallel Analysis Results for Factor Retention in Respect Group.*

Factor	Eigenvalue	95th Percentile Eigenvalue	Retained
1	4.45	0.72	Yes
2	1.84	0.72	Yes
3	0.42	0.45	No
4	0.36	0.72	No

However, given that the eigenvalue of Factor 3 is close to cutoff (0.42 vs 0.45), I also evaluated a three-factor structure based on theoretical considerations and interpretability.

Although the parallel analysis favored two factors, the two-factor model provided limited theoretical clarity as well as a poor model fit. Consequently, I selected the three-factor solution for *respect* as the final model. This three-factor model exhibited an adequate to good fit: $\chi^2(102) = 136.15, p < .001, CFI = .935, TLI = .902, RMSEA = .049$ (90% CI = [.033, .065]). The RMSEA indicated good fit, the CFI approached good fit, and the TLI showed adequate fit. As reported in Table 14, it indicated that 13 items should be retained. Factor 1 (e.g., Mutuality = .81, Morality = .79, Honesty = .68) captured traits related to ethical interpersonal conduct and. Factor 2 (e.g., Creativity = .81, Gifting = .70, Decisiveness = .62) reflected behaviors and approach. Factor 3 (e.g., Acceptance = .75, Openness = .40) emphasized interpersonal consideration. Collectively, the three factors accounted for approximately 40.5% of the total variance in the data. The factor correlation matrix showed $r(F1-F2) = .33, r(F1-F3) = -.31,$ and $r(F2-F3) = .21,$ indicating a moderate positive association between Factors 1 and 2, a modest negative association between Factors 1 and 3, and a weaker positive correlation between Factors 2 and 3.

Table 14. *U.S. Term Respect EFA Three-Factor Solution.*

Feature	Factor 1	Factor 2	Factor 3
Honesty	.81		
Acceptance	.78		
Considerate	.70		
Listening	.67		
Openness	.62		
Politeness	.60		
Loyalty	.49	.27	
Morality	.43		
Gifting	-.30	.59	
Learning		.56	
Helpfulness	.32	.47	
Creativity		.45	
Mutuality	.27	.45	
Judgmental			.73
Demanding			.68
Deference			.45
Obedience		.28	.42
Decisiveness			.41

Note. Factor loadings that are equal to or lower than .25 are suppressed in this table for the readability. Model fit indices: $\chi^2(102) = 136.15, p < .001$, CFI = .935, TLI = .902, RMSEA = .049 (90% CI = .033, .065). The SS loadings (eigenvalues after rotation) were 3.86 (Factor 1), 1.76 (Factor 2), and 1.68 (Factor 3). Collectively, the three factors accounted for approximately 40.5% of the total variance in the data. The factor correlation matrix showed $r(F1-F2) = .33$, $r(F1-F3) = -.31$, and $r(F2-F3) = .21$.

The next question concerns how the conceptualization of *respect* in the United States compares to the conceptualizations of *zunzhong* and *zunjing* in China. As shown in Table 15, significant differences emerged for most features among three terms. Specifically, Judgmental³

³ Given that the translation of "Judgmental" is reversed in the English version compared to the Chinese version, I also conducted an ANOVA using the original *zunzhong* score, original *zunjing* score, and the reversed *respect* score. Results indicated significant differences again, $F(2, 640) = 26.4, p < .001$. Post-hoc analyses confirmed significant differences between *respect* and *zunzhong*, as well as between *respect* and *zunjing*.

demonstrated the strongest difference, $F(2, 640) = 663.1, p < .001, \eta^2 = .67$, followed by Deference, $F(2, 640) = 163.3, p < .001, \eta^2 = .34$, and Demanding, $F(2, 640) = 140.8, p < .001, \eta^2 = .31$, indicating substantial conceptual differences among the three terms. Obedience also showed notable differences, $F(2, 640) = 65.1, p < .001, \eta^2 = .17$. Moderate effects were observed for Mutuality, $F(2, 640) = 35.7, p < .001, \eta^2 = .10$, Acceptance, $F(2, 640) = 30.5, p < .001, \eta^2 = .09$, Considerate, $F(2, 640) = 26.8, p < .001, \eta^2 = .08$, and Decisiveness, $F(2, 640) = 23.1, p < .001, \eta^2 = .07$. Smaller but significant differences were also found for Gifting, Loyalty, Openness, Listening, Honesty, and Politeness (η^2 range: .01 to .06). Post-hoc tests reveal the similar patterns for those differences: “*respect*” in the U.S. is different from either *zunzhong* and *zunjing* and participants in China rated those items as having higher centrality to *zunzhong/zunjing* than U.S. participants to “*respect*”.

Summary of Comparisons between *zunzhong*, *zunjing* and “*respect*”

Preliminary analyses revealed fundamental incompatibilities in the factor structures of U.S. “*respect*” and Chinese *zunzhong/zunjing* that precluded multigroup CFA. First, separate EFAs for the U.S. and combined Chinese samples confirmed divergent structures: iterative removal of low-loading items yielded distinct, culturally specific solutions (e.g., U.S. factors emphasized individuated traits like decisiveness and creativity, while Chinese factors prioritized relational norms like deference and mutuality). Critically, the U.S. and Chinese samples showed differences between EFA factors, and ANOVA comparisons highlighted significant mean differences between U.S. and Chinese groups but no differences between *zunzhong* and *zunjing*. These findings suggest that (1) merging the U.S. and Chinese groups introduced measurement non-invariance, and (2) the constructs lack structural equivalence, violating multigroup CFA

assumptions. Consequently, cross-cultural comparisons were restricted to ANOVAs and separate EFA models to avoid conflating culturally distinct conceptual architectures.

Table 15. Comparison of Mean Scores (SDs) and ANOVA Results across Zunzhong, Zunjing, and Respect.

	Zunzhong (N=206)	Zunjing (N=210)	Respect (N=227)	<i>F</i> (<i>df</i> ₁ , <i>df</i> ₂)	<i>p</i>
Acceptance***	5.81 (1.07)	5.71 (1.07)	6.41 (0.90)	30.5 (2, 640)	< .001
Considerate***	5.56 (1.15)	5.61 (1.15)	6.24 (0.97)	26.8 (2, 640)	< .001
Decisiveness***	5.03 (1.41)	5.02 (1.32)	4.24 (1.47)	23.1 (2, 640)	< .001
Demandingness ***	4.50 (1.35)	4.54 (1.48)	2.58 (1.38)	140.8 (2, 640)	< .001
Helpfulness	5.77 (1.10)	5.80 (1.12)	5.84 (1.19)	0.2 (2, 640)	.815
Honesty***	6.30 (1.02)	6.14 (1.15)	6.56 (0.89)	9.5 (2, 640)	< .001
Judgmental***	6.21 (0.96)	6.22 (0.98)	2.52 (1.60)	663.1 (2, 640)	< .001
Listening***	6.09 (1.06)	6.02 (1.04)	6.48 (0.99)	12.7 (2, 640)	< .001
Openness***	5.82 (1.07)	5.70 (1.15)	6.21 (1.06)	13.1 (2, 640)	< .001
Loyalty***	5.70 (1.29)	5.81 (1.17)	6.30 (1.14)	15.3 (2, 640)	< .001
Morality	6.23 (1.07)	6.18 (1.09)	5.99 (1.19)	3.0 (2, 640)	.053
Mutuality***	6.48 (0.90)	6.33 (0.97)	5.64 (1.37)	35.7 (2, 640)	< .001
Obedience****	5.33 (1.39)	5.42 (1.30)	3.93 (1.86)	65.1 (2, 640)	< .001
Creativity	4.47 (1.73)	4.50 (1.64)	4.45 (1.55)	0.1 (2, 640)	.955
Politeness*	5.89 (1.11)	5.92 (1.16)	6.17 (1.09)	4.2 (2, 640)	.015
Deference***	5.74 (1.13)	5.63 (1.18)	3.70 (1.61)	163.3 (2, 640)	< .001
Learning	5.73 (1.25)	5.76 (1.18)	5.59 (1.26)	1.2 (2, 640)	.313
Gifting***	3.83 (1.54)	3.97 (1.62)	3.12 (1.49)	19.0 (2, 640)	< .001

Note. Range was 1 (“least central”) to 7 (“most central”). Items with significant ANOVA results were **bolded**. *** $p < .001$. ** $p < .01$. * $p < .05$. For significant results, post-hoc tests show no significant differences between *zunzhong* and *zunjing*.

DISCUSSION

To better understand how respect is conceptualized under the lens of culture, I surveyed college students in two cultures (i.e., China and U.S.) regarding the central features of respect. I first examined how Chinese participants distinguished between *zunzhong* and *zunjing*, then compared these findings to U.S. participants' perspectives on “*respect*” to examine potential cross-cultural similarities and differences. Descriptive analyses and exploratory factor analyses revealed substantial overlap between *zunzhong* and *zunjing*, highlighting their shared emphasis on relational harmony and ethical integrity. Multigroup CFAs further confirmed measurement invariance between *zunzhong* and *zunjing*, indicating that both terms share an underlying conceptual structure. Nevertheless, there were also some nuanced but important differences. In striking contrast, however, were the substantial differences which emerged between the Chinese concepts and U.S. respect. These distinctions suggest culturally distinct developmental pathways in conceptualizing respect. Below, I elaborate on these patterns in the context of my research aims.

Aim 1: Within the Chinese Cultural Context, What Is Central to Each of the Two Respect Concepts (*Zunzhong*, *Zunjing*)?

I initially hypothesized clear divergence between the two Chinese respect terms, *zunzhong* and *zunjing*, given that language encodes nuances of respect. Historically and conceptually, *zunzhong* (尊重) has been associated with moral obligation and mutual recognition, whereas *zunjing* (尊敬) conveys hierarchy, reverence, and emotional deference (Li & Fischer, 2007). Contrary to that expectation, my findings indicate substantial convergence rather than distinctiveness between these concepts among college-educated urban young adults: mutuality, honesty, morality, non-judgmental attitudes, and listening emerged as central to both terms,

emphasizing relational connectedness and moral integrity as foundational developmental values in Chinese socialization.

Recent qualitative research echoes this convergence, documenting how contemporary Chinese youth blend traditional filial respect (*zunjing*) with more egalitarian attitudes (*zunzhong*), resulting in fluid and context-dependent interpretations of respect (Cheng et al., 2024).

Emerging-adulthood theory (Arnett, 2004) provides a developmental lens for this convergence. College students who are “in between” adolescence and full adulthood represent a unique developmental period in which individuals need to reconcile inherited cultural scripts with new individual ideals (Nelson & Chen, 2007). This period is marked by five core features: identity exploration, instability, self-focus, a sense of being "in-between", and a perception of abundant possibilities (Arnett, 2004). These features are fundamentally shaped by culture and create distinct developmental pathways for concepts such as respect (Arnett, 2004; Nelson & Chen, 2007).

Broader societal shifts may also underlie the present convergence. Although historically distinct, *zunzhong* and *zunjing* may have become largely interchangeable over time due to shifting cultural attitudes. Younger cohorts in China, especially those born after the 1980s, increasingly embrace individualism and egalitarianism (Ge, 2023; Shuai et al., 2015). Public discourse, particularly on social media, increasingly advocates for respect as an earned attribute rather than an automatic right conferred by status or age (Yeh & Bedford, 2003) and everyday language shows a weakening of hierarchical distinctions between these terms. Such shifts reflect Bronfenbrenner’s concept of chronosystem effects, highlighting how historical changes in

cultural values intersect dynamically with individual development, especially the balance between filial obligations with autonomy and reciprocity during emerging adulthood.

In China, those rapid social changes encourage young adults to integrate notions of respect rather than differentiating them, as is more common in Western contexts that prioritize identity differentiation and personal authenticity. Supporting this view, in one study 59% of Chinese students reported feeling they have reached adulthood, compared with only 28% of their U.S. peers (Nelson & Chen, 2007). Earlier acceptance of an adult role, such as caring for aging parents, may accelerate Chinese emerging adults' incorporation of both *zunzhong* and *zunjing* into a single, integrated respect framework.

Social domain theory further clarifies why *zunzhong* and *zunjing* are perceived as morally significant, particularly within family and academic contexts: respectful obligations are internalized as moral imperatives rather than optional courtesies. Thus, moral integrity and emotional deference are viewed as complementary, not conflicting, components of a unified conceptualization of respect.

Nevertheless, *zunzhong* and *zunjing* still seem to show some subtle distinctions remaining from historical usage, and this is clarified by the qualitative insights from my study. When asked “what is missing” from the list of central characteristics, students continued to orient *zunzhong* towards cooperation and emotional connectedness, whereas they emphasized for *zunjing* various aspects indicating formal etiquette, hierarchical awareness, and prescribed respectful behaviors. Recent mixed-method studies further illustrate how Chinese families continue negotiating these subtle distinctions, balancing traditional expectations of hierarchical obedience with modern ideals of mutual respect and personal agency (Yamamoto et al., 2025).

The dialectic between the distinctions and shared values of *zunzhong* and *zunjing* in modern culture is reflected in the multigroup CFA analyses which provided further empirical validation of the three common latent factors shared by *zunzhong* and *zunjing*: (1) Moral Integrity, (2) Assertiveness, and (3) Open Courtesy. Although the measurement weights model demonstrated invariance between the two concepts, indicating that participants similarly understood these underlying factors, structural covariances differed significantly. Specifically, *zunjing* demonstrated stronger correlations between moral-relational traits and open-minded courtesy than *zunzhong*, emphasizing a harmonious interplay between ethical integrity and polite interpersonal exchanges.

Importantly, the emergence of *Assertiveness* and *Open Courtesy* as distinct factors across both respect terms reflects evolving developmental orientations among Chinese youth. Assertiveness—traditionally less emphasized in collectivistic cultures—was more strongly linked with moral integrity in *zunzhong*, suggesting that ethical conduct is now seen as compatible with clear self-expression and interpersonal decisiveness (Li & Fischer, 2007). Open Courtesy was more tightly associated with Moral Integrity in *zunjing* than in *zunzhong*, suggesting that among participants, *zunjing*—though historically grounded in deference—now increasingly reflects a relational ethic grounded in sincerity and polite engagement.

This is consistent with prior literature: *zunzhong* emphasizes fundamental principles such as obeying social rules, honoring others' rights, and showing tolerance in everyday interactions (Li & Fischer, 2007). For example, *zunzhong* encompasses recognizing and adhering to laws and norms, valuing others' basic rights, and accepting different viewpoints (Li & Fischer, 2007). In contrast, *zunjing* is grounded in admiration and deference particularly towards individuals of higher status or virtue (Li & Fischer, 2007). It involves a felt sense of esteem or reverence,

traditionally extended to those deemed respect-worthy by virtue of their moral character, knowledge, elder status or authority position. This includes categories such as elders and ancestors, teachers and mentors, leaders or officials, and individuals of outstanding ability or virtue. As children grow up, children noted behaviors like standing up when an elder enters, using respectful language (e.g., addressing someone as *Nín* (您) instead of *Nǐ* (你) in Chinese), or internal feelings of esteem – indicating an emotional component of reverence. Thus, the central prototype of *zunzhong* for Chinese involves *universal respect* (grounded in morality and social convention), whereas the prototype of *zunjing* involves *particularized respect* (grounded in emotion and hierarchy). Both are considered important virtues, and Chinese children learn to navigate when each of these is appropriate. Thus, despite sharing core dimensions, *zunzhong* and *zunjing* may continue to differ subtly in how these dimensions interrelate, reflecting nuanced developmental emphases in Chinese socialization.

Aim 2: Across Chinese and U.S. Cultural Contexts, How Are *Zunzhong*, *Zunjing*, and “*Respect*” Similar or Different?

The substantial differences between Chinese and U.S. conceptualizations of respect become particularly meaningful when situated within the developmental context of emerging adulthood. During this period, young adults across cultures deal with fundamental questions about identity, relationships, and moral values, yet the pathways through which these developmental tasks unfold differ dramatically based on cultural context.

Examination of the conceptualization of respect in two cultures invites a deeper interpretation of how and why cultural values shape the understanding of respect. Consistent with Western individualistic values and independent self-construal (Markus & Kitayama, 1991), EFA of the U.S. students’ responses as well as the resulting correlation matrices revealed that the

U.S. concept emphasized relationships among openness, acceptance, and honesty, highlighting personal authenticity and egalitarian interactions. Recent quantitative analyses confirm these patterns, finding that Americans prioritize individual dignity, equality, and mutual acknowledgment in their understanding of respect (Young & Zeigler-Hill, 2023). In contrast, Chinese concepts reveal an interplay between mutual moral obligations (*zunzhong*) and formal etiquette (*zunjing*), reflecting interdependent socialization practices and hierarchical sensitivity within Chinese culture (Triandis, 1995). Recent qualitative insights reinforce this finding, as Chinese participants report frequently expressing respect through concrete actions and relational adjustments, valuing social harmony and adherence to communal norms above personal preference or autonomy (Cheng et al., 2024; Yamamoto et al., 2025). Such distinctions highlight the underlying cultural logic: Chinese social contexts emphasize adjusting one's behavior to align with age, status, and relational roles, thereby fostering group harmony and role-appropriate interactions, whereas U.S. contexts focus on acknowledging autonomy and personal rights through honesty and self-expression.

These differences are especially meaningful when considered in the context of emerging adulthood, where the developmental tasks of identity formation intersect with culturally specific pathways toward adult status. For U.S. students, the concepts of giving and receiving respect, may be a key component of identity exploration and self-definition, aligning with Erikson's identity versus role confusion stage, where authenticity and boundary-setting are critical developmental tasks. This developmental emphasis on individual exploration reflects the American pattern of emerging adulthood characterized by extended self-focus and delayed assumption of adult responsibilities, where young people have extensive opportunities to explore personal values and relationship styles (Nelson & Chen, 2007). By contrast, Chinese students in

this life stage may be reconciling the intimacy versus isolation task with cultural norms of filial responsibility and role-appropriate conduct, embedding respect within moral commitments to family and society. This integration reflects the Chinese pattern of emerging adulthood in which individual development occurs within, rather than separate from, collective obligations and where adult criteria explicitly include capability to support parents financially—a marker endorsed by 89% of Chinese emerging adults compared to only 16% of Americans (Nelson & Chen, 2007). Social domain theory supports this interpretation: whereas American youth may engage in extensive exploration of personal values and individual identity and interpret respect-related behaviors in the personal domain (as expressions of self and voluntary regard), Chinese youth often interpret them through the moral or conventional domains, where respect signifies moral, social and familial obligation and expectation fulfillment. This developmental constraint helps explain why U.S. respect concepts prioritize personal authenticity and individual rights, while Chinese concepts integrate both personal moral development and relational role fulfillment.

Although moderation in Likert-type responding is common among East Asian populations (Chen et al., 1995; Hui & Triandis, 1989), the fact that Chinese participants in this study consistently rated moral and interpersonal traits (e.g., honesty, mutuality, politeness) highly suggests these attributes are deeply valued. In other words, despite a general tendency toward mid-scale responses—rooted in cultural norms emphasizing modesty, harmony, and the avoidance of extreme expressions—participants’ strong endorsement of ethical and relational items underscores a core moral orientation. Developmentally, this preference likely emerges early in life, with children first absorbing foundational moral expectations (e.g., kindness, fairness) before progressively adopting more complex hierarchical norms (e.g., deference, filial

piety) as they navigate diverse social contexts (Luo et al., 2013; Malti et al., 2020). The enduring importance of both ethical and formal behavioral elements in Chinese conceptions of respect thus likely reflects a dual developmental trajectory: one rooted in moral reasoning, the other guided by culturally prescribed role expectations.

These cultural differences have tangible implications for developmental trajectories throughout childhood and into emerging adulthood. In the Chinese cultural context, children may learn early on to gauge contextual cues—who is higher in status, who merits formal courtesies—and adapt their behavior (e.g., using more deferential language with elders). These early socialization experiences likely create developmental continuities that persist into emerging adulthood, when Chinese college students continue to emphasize relational harmony and hierarchical awareness even as they navigate identity formation and increasing autonomy. This can reinforce self-control, empathy for others' roles, and social awareness of group norms.

Chinese children may come to understand respect through emotional experiences involving group harmony, relational roles, and family obligations—developing emotional sensitivity not only to their own actions but also to how others close to them behave (Stipek, 1998). This aligns with Bronfenbrenner's perspective, highlighting how nested environmental context- from immediate family interactions to broader cultural expectations- shape developmental outcomes across multiple time scales, from immediate situations to historical changes in cultural values (Bronfenbrenner, 1994). The rapid social changes in contemporary China create what Bronfenbrenner would term "chronosystem" effects, where emerging adults must integrate traditional respect concepts with evolving cultural norms during this critical developmental period. On the other hand, U.S. children may perceive respect as something expressed primarily through honesty, fairness, and equality, as well as achievement and

accomplishment, supporting the development of assertiveness and personal identity (Malti et al., 2021; Khalaila et al., 2023). Turiel's social domain theory (1983) further clarifies this distinction by illustrating that children in both cultures navigate respect across moral and conventional domains yet prioritize these differently due to cultural norms. Neither approach is inherently superior; each, rather, fosters a unique skill set—be it Chinese youths' capacity for hierarchical role-management or American youths' inclination toward self-advocacy and transparency. Much like in the same ways that pride and shame may be experienced differently depending on the cultural model of self (Stipek, 1998), respect too may be internalized through culturally distinct pathways—one rooted in relational interdependence and one in autonomy that continue to evolve and consolidate during the emerging adulthood period.

These cultural variations mirror broader cognitive styles. The Chinese tendency to integrate multiple or even contradictory elements under “respect” (e.g., sincerity coexisting with deference to authority, hierarchical obligation and open-mindedness) aligns with dialectical thinking (Peng & Nisbett, 1999), whereas the U.S. version—anchored in personal freedom and authenticity—conforms more to linear thinking that separates hierarchy from individuality. Moreover, the nuanced differentiation between *zunzhong* and *zunjing* within Chinese culture suggests a hyper-cognitive conceptualization—where of respect and one in which culturally embedded emotional constructs are richly articulated. In contrast, the broader and more generalized American conceptualization of respect, captured by a single term encompassing multiple relational domains, might indicate a more hypo-cognitive orientation (Levy, 1984; Mesquita & Frijda, 1992). Such cognitive orientations not only influence how respect is conceptualized but also experienced—for example, whether individuals see hierarchical deference and open-mindedness as complementary or at odds.

Finally, these findings remind us that mutuality, though present in all three concepts of respect, may carry very different moral and relational meanings across cultures. In the U.S., mutuality often evokes the Golden Rule, emphasizing the equality of personal rights and reciprocal courtesy; in the Chinese tradition, mutuality is underpinned by Confucian ideas of social role fulfillment, maintaining face, and the collective good. Although the principle of mutuality is less explicitly articulated in traditional Chinese philosophies, it nonetheless emerged as a highly central feature in both *zunzhong* and *zunjing*. In the Chinese context, mutuality (*huxiang zunzhong*, 互相尊重) often reflects an implicit understanding of reciprocal obligations within relationships, grounded in Confucian ideals of role-based harmony and social balance (Li, 2002; Yeh & Bedford, 2004). Mutuality in Chinese conceptions of respect might not be merely about interpersonal equality but reflects a deeper moral commitment to reciprocal responsibility and harmony in hierarchical and communal relationships.

Limitations and Future Directions.

Although this study sheds light on potential shifts in how Chinese students think about *zunzhong* and *zunjing*, and how the concepts of *zunzhong* and *zunjing* differ from the U.S. conception of *respect*, several limitations should be noted.

First, the methodological approach to introducing *zunzhong* and *zunjing* could have influenced participants' perceptions. In the sections preceding the centrality measure, *zunzhong* was primarily used in contexts emphasizing basic respect and hierarchical dynamics (eight instances), whereas *zunjing* appeared in scenarios involving peer interactions or those lower in hierarchy (three instances). Additionally, in two instances, the terms were presented jointly (“尊

重/尊敬”), potentially implying similarity. Although this mirrors their everyday interchangeable usage (thus maintaining ecological validity), the lack of explicit differentiation in initial sections may have blurred conceptual distinctions. Despite careful efforts by five Mandarin-speaking language experts ((i.e., a linguistics professor specializing in Mandarin & English, and four researchers whose native language is Mandarin) to ensure accurate translation and nuanced differentiation, it remains possible that the initial interchangeable usage shaped participants’ conceptualizations. Consequently, it is challenging to determine whether earlier usage in the questionnaire invited students to view *zunzhong* and *zunjing* as more similar or more distinct than their genuine perceptions, which likely vary contextually.

Second, the cross-language translation underscores inherent challenges within cross-cultural psychology research. The Chinese questionnaire items, developed after the English version, were perceived as clearer, more concrete, and better developed because the research objectives had become more refined during the process. Although this sequence aimed to enhance conceptual clarity, it illustrates the inherent difficulty of translating culturally embedded constructs. Despite efforts to balance conceptual equivalence and linguistic authenticity, certain compromises were unavoidable. This observation underscores the importance of scientific humility: researchers should recognize that culturally embedded concepts may resist perfect translation. Future investigations might therefore prioritize developing culturally indigenous measures first and subsequently comparing them to identify points of convergence and divergence. Although the current translation approach adhered to best practices—including expert panels and back-translation—limitations inherent to translating deeply cultural concepts persist. This limitation underscores the importance of mixed-method approaches combining quantitative and qualitative methods for richer cultural understanding.

Third, cross-cultural reporting biases may have influenced responses: Chinese participants' higher overall ratings may have reflected cross-cultural response styles—rooted in norms of harmony and modesty (Chen et al., 1995; Hui & Triandis, 1989). Notably, items deemed less central (e.g., creativity, learning) did not differ significantly by culture, indicating that these biases did not uniformly inflate all responses. Furthermore, differences emerged in precisely the areas predicted by theoretical frameworks emphasizing relational harmony and hierarchical sensitivity, implying that genuine cultural distinctions were still captured and may still remain in the cultural understanding of respect. Future research might incorporate balanced response scales or statistical methods (e.g., anchoring vignettes) to mitigate these biases.

Fourth, exploratory factor analysis (EFA) examining *zunzhong* and *zunjing* separately revealed relatively low TLI values and instances of cross-loadings, highlighting areas where item coverage may be insufficient. Although a three-factor solution appears to be the most parsimonious arrangement under current data, given that it is typically recommended to include at least 3–4 robust items per factor (Costello & Osborne, 2005), respect is likely more multifaceted. Addressing these issues in future research could involve: (1) beginning with qualitative approaches and expanding the item pool to better define underrepresented constructs within the specific cultural contexts, (2) systematically testing measurement invariance across subgroups to identify and control group-level effects, and (3) refining or removing items with poor discriminant validity to minimize cross-loadings. Such iterative refinement will enhance scale robustness and more clearly align the measure with the intended theoretical constructs.

Fifth, although my qualitative results offer substantial insights, the thematic coding was performed by a single coder, potentially limiting the reliability of the interpretation.

Incorporating inter-rater reliability checks in future research would strengthen the robustness and validity of the thematic findings.

Sixth, although my sample consisted solely of college students, it is important to recognize that this group is not monolithic. College students vary considerably in terms of education level, urbanization, and socio-economic background. Urban and well-educated students may adopt attitudes that differ from those in rural settings, and older individuals might exhibit greater differentiation between *zunjing* and *zunzhong* than younger college students. As mentioned in Nelson & Chen (2007), we still lack insights from the sample excluded — the "missing majority" of non-college-attending Chinese youth (Nelson & Chen, 2007), who potentially uphold more traditional views. Conceptualizations of respect are also likely to vary across interpersonal contexts (e.g., workplace, family, friendships), and also age-related contexts, with children displaying more unidirectional respect toward elders, and older adults potentially emphasizing varied aspects in accordance with socioemotional selectivity theory. These potential differences underscore the need for future studies to sample more diverse populations to better understand how respect is conceptualized across various subgroups and ages, as well as in diverse social settings within Chinese culture. Longitudinal studies tracking respect concepts from late adolescence through emerging adulthood and into established adulthood could illuminate whether the patterns observed here represent developmental stages or stable cultural differences

Despite these constraints, the study contributes important insights into culturally nuanced interpretations of respect and suggests concrete directions for future research. First, researchers should integrate culturally specific items into measurement tools to better capture nuanced conceptualizations of respect—encompassing behaviors, emotions, and attitudinal beliefs—

across different levels of social closeness and hierarchy. For instance, incorporating constructs such as filial piety or 面子 (Mianzi /Face) in Chinese contexts, or the Golden Rule in U.S. contexts, can enhance both the relevance and validity of these measures. Although my measures relied on previously validated items to ensure comparability, my study's results also highlight areas for tailored adaptation.

Second, qualitative methodologies (e.g., in-depth interviews, focus groups, or open-ended surveys) may be particularly invaluable for developing culturally appropriate measures to uncover the subtle and culture-bound nuances that may not emerge from standardized questionnaires alone. For example, by allowing participants to discuss respect in their own words, researchers can glean fresh insights into the lived experiences, relational dynamics, and language use that shape respect concepts within a particular culture. This bottom-up exploration can then inform the development or refinement of quantitative measures, ensuring that item wording, domains, and response scales resonate with cultural norms and linguistic nuances. In my work, the use of open-ended “what-is-missing” items illustrates how qualitative data can supplement structured measures.

Third, adopting a prototype approach (similar to Frei & Shaver, 2002) specifically for Chinese contexts might clarify nuanced conceptual distinctions, facilitating more integrated cross-cultural analyses of respect development. In practice, this means identifying the most prototypical elements (e.g., mutual consideration, moral integrity) that consistently emerge across participants and distinguishing them from attributes that are context-specific or peripheral (e.g., ritualized deference). Although these orientations converge on the importance of treating others well, they diverge in how and why this treatment manifests—through sincere expression of the self, or conscientious adherence to relational expectations. My study's findings provide a

groundwork for such an approach, underscoring both the overlap and distinctiveness of Chinese respect terms *zunzhong* and *zunjing* under modern societal shifts.

Focusing on emerging adults provides important insights for understanding how cultural concepts evolve during periods of rapid personal and social change. The developmental characteristics of emerging adulthood—including identity exploration, instability, and possibilities—may create unique conditions for cultural concept transformation. Understanding these developmental dynamics is crucial for interpreting cross-cultural differences in respect concepts and their implications for intercultural communication and understanding.

Overall, the present findings significantly advance understanding of the literature by clarifying culturally nuanced interpretations of respect. Specifically, within the Chinese context, *zunzhong* emphasizes relational ethics, mutual cooperation, and subtle hierarchical awareness, whereas *zunjing* explicitly integrates formal etiquette, defined interpersonal roles, and pragmatic relational care. Although these terms were shown to be fairly similar for college students in China, the subtle nuances identified here underscore the importance of caution when discussing respect in Chinese contexts—particularly in personal versus professional settings or when socializing children to “show respect”. By contrast, the U.S. concept of respect foregrounds authenticity, individualism, and mutual openness, explicitly minimizing hierarchical obligations. An integration of this study with recent research (Cheng et al., 2024; Yamamoto et al., 2025; Young & Zeigler-Hill, 2023) suggests divergent but equally valuable pathways in moral and relational development. Such differences point to divergent developmental pathways in how children and adults internalize respect, suggesting that what “counts” as respectful behavior may vary significantly across cultural, relational, and institutional contexts.

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APPENDICES

Administration

Participants were instructed to rate each of the 18 items in terms of how central it is to a relationship characterized by “a lot of respect.” Example prompt:

“How central is ‘flexibility’ in a relationship that involves a lot of respect?”

Responses were made on a **7-point Likert scale** (1 = *Not central*, 7 = *Very central*). The items were presented in random order, and participants could specify whether they had a particular relationship in mind (e.g., parent, romantic partner, friend) or considered a general scenario. This procedure was intended to capture the perceived importance of each feature to the concept of respect, rather than the reasons why one might personally respect another.

Below is the list of the **31 original features** from Frei and Shaver (2002). Items **in bold** were ultimately retained, reflecting both theoretical relevance and expert consensus regarding cross-cultural applicability:

- Accepting other
- Admirable talents/skills
- Understanding and empathic
- **Considerate**
- Sensitive to feelings
- Caring
- Appreciation
- Comfortable
- Friendship
- Loving
- **Helpful**
- Altruistic
- **Honest**
- **Mutual care / Mutuality**
- **Loyal**
- **Listening**
- Open communication
- **Respecting other’s views / Openness**
- Sharing ideas and feelings
- **Having moral qualities / Behaving morally**
- **Trustworthy and reliable**
- Not judgmental
- Not abusive
- Decisiveness
- Demandingness
- Member of a respect-worthy social category
- Personal qualities (appearance)
- Follows the Golden Rule
- Forgiving

- Inspiring

From these original items, we arrived at 12 core items and incorporated 6 new ones (gift-giving, obedience, politeness/courtesy, deference, learning from others, creativity) to reach the **final 18-item measure**. In this way, the instrument encompasses both **universal** respect features (e.g., mutuality, openness) and **culturally specific** aspects (e.g., obedience, gift-giving).

An example item prompt was:

“How central is ‘flexibility’ in a relationship that involves a lot of respect?”

Participants were instructed to respond on a **7-point Likert scale** (1 = *Not central*, 7 = *Very central*). A score of 7 would indicate that “flexibility” is among the most crucial features of a respectful relationship, whereas 1 would suggest that it is irrelevant. The 18 items were **randomly ordered** to minimize potential order effects, and participants could optionally note whether they had thought of a specific relationship or a general scenari