Enculturating the Science of International Development: Beyond the WEIRD Independent Paradigm

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Abstract

Initiatives in international development and behavioral science rely predominantly on the *independent* models of the self and agency that are prevalent in individualist Western, Educated, Industrialized, Rich, and Democratic (WEIRD) cultural contexts. Programs that are guided by these independent models, explicitly or implicitly, as the default way of being and that neglect *interdependent* models can reduce the potential of development initiatives to advance poverty reduction and well-being in two ways. First, programs based solely on independent models of agency—centered on personal goals and values; self-advancement and self-expression; and autonomy—can limit the scope and effectiveness of the development science toolkit. Second, programs that are not responsive to interdependent ways of being—centered on relational goals and values; responsiveness to social norms, roles, and obligations; and social coordination—that are common in many Global South sociocultural contexts can be met with resistance or backlash. We propose that taking account of interdependent psychosocial tendencies is a promising way to diversify the behavioral science toolkit and to build a more comprehensive science of human behavior. Furthermore, culturally responsive program designs have the potential both to promote decolonized, inclusive approaches that preserve rather than override local ways of being and to enable diverse trajectories of societal development to flourish. We integrate experimental and descriptive research from psychology, economics, education, and global health to suggest how models of interdependent agency can be productively integrated into development program designs to advance quality of life in locally resonant ways.

Keywords

WEIRD, international development, behavioral science, culture, agency, motivation

The science of international development has made great strides over the past two decades in determining which aid programs and social policies are effective in improving standards of living in the Global South (Banerjee & Duflo, 2011). While this literature has documented many

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successful programs, it is also replete with examples of carefully organized, well-funded, and often empirically backed development programs that either falter or fail to capitalize on their promise (Banerjee & Duflo, 2011; Karlan & Appel, 2018). For example, studies find wide-reaching benefits of unconditional cash transfers, which give low-income individuals cash with no strings attached. Yet, villagers in Malawi refused to accept free money because some members of the village were not included on the roster of proposed beneficiaries (Hirvonen, 2019). In Sudan, individuals deemed high risk for starvation by aid organizations did not consume the food rations they were given but, instead, rerouted them to their chief to communally allocate, leading to slow starvation of whole communities (Markus & Conner, 2014). Among thousands of students in India and China, a motivational strategy of visualizing personal aspirations and making concrete goals for oneself failed to enhance students' academic engagement, although it did so robustly in the United States (Kizilcec & Cohen, 2017).

Why do some programs fail to fully benefit the communities they were designed to help? What makes a program effective or ineffective and taken up or rejected in a given low-income context? A knot of logistical challenges, as well as a constellation of historical, political, and economic considerations, are the usual culprits. Here we focus on an additional unexamined factor that we believe is highly significant and generalizable. Program designs may be limited or less effective when they fail to account for the *interdependent models of agency* that may be motivating recipients' actions, in contrast to the more *independent models of agency* that are predominant in Western, Educated, Industrialized, Rich, and Democratic (WEIRD) contexts (Henrich et al., 2010). In many current-day low-income and Global South contexts, and historically for most societies, local cultural ideas and practices construe a person not as an independent and separate entity but instead as *a part* of a larger encompassing social whole—an extended kinship structure, a village, a community (Adams et al., 2012; Markus & Kitayama, 1991). Yet, the often implicit model of agency in WEIRD-led development approaches is that of *independence.* In this model, the individual's personal needs, goals, attitudes, rights, and welfare are the program's primary focus. As such, these programs can work *against* rather than *with* predominant norms of behavioral interdependence that prioritize collective and relational needs, goals, norms, values, and welfare (Adams & Estrada-Villalta, 2017).

Development science and the multilateral policy agencies and governments that rely on this science aim to accelerate expansions of standards of living and quality of life across the Global South. Some argue that development efforts led by WEIRD nations risk countering the United Nations 1960 "decolonisation" resolution, which states that "All peoples have the right to self-determination [. . . and to] freely pursue their economic, social, and cultural development." Others contend that even the term "development" is problematic, connoting "civilizing" or "modernizing" efforts that attempt to assimilate Global South populations to Western ways of being (Shweder, 2002). While acknowledging these significant risks and considerations, we propose that high-income Western countries have an imperative to redistribute technologies and resources—some appropriated during colonization—and to support efforts to advance poverty reduction, health, and well-being. However, a crucial step in the pursuit of this goal is to identify and construct programs that are reasonably culturally matched, meaning that reflect locally resonant ways of being and psychosocial tendencies. In so doing, programs may better enable countries to develop in accordance with valued ways of being (Krys et al., 2020).

Building on Krys et al. (2020), we suggest that designing programs that respond to sociocultural variations in agency (i.e., "good," "valued," "moral" ways of acting in the world) has the potential to expand the range of possible approaches for advancing quality of life and simultaneously may mitigate some risks of current WEIRD-led development. Development science, like behavioral or social science, is not a comprehensive science. It is not yet tuned to the diversity of human ways of being and doing. More than 90% of social science research has been generated by and for White, middle-class populations in the Global North (Thalmayer et al., 2021).

Underlying much of this research is the common and comforting idea of psychic unity, or the assumption that, except for their food, festivals, and fetishes, people and their psychologies are more or less the same wherever you go (Shweder, 2003).

Beyond its potential to fuel cultural assimilation and homogenization, this hegemonic idea of the individual as an independent and free agent presents a major impediment to developing what Brady et al. (2018) term *interpretive power*—the power to situate and understand people's agency as responsive to their specific sociocultural contexts. Many programs are grounded in the WEIRD assumption that individuals are motivated to behave according to their personal preferences and beliefs and construe themselves as independent and as abstracted from their social and physical context. One consequence is that relational phenomena such as the expectations of others, obligation, reputation, face, honor, status, respect, responsiveness to social norms, solidarity, social coordination, and co-regulation, become much less apparent and when apparent are often constructed as barriers to agency.

For instance, many development programs increasingly focus on raising people's personal aspirations, self-efficacy, and grit to advance poverty reduction (Wuepper & Lybbert, 2017), building on a robust North American evidence base (e.g., Oettingen & Gollwitzer, 2010). Yet research in more collectivistic and low-income contexts suggests that a set of more interdependent factors also require consideration. For instance, Thomas et al. (2021) find in ongoing research that low-income, Muslim women in rural Niger see women's economic success as fostered primarily by their respectfulness for others and their peacefulness, both with others and within one's self, more so than by their individual goal-planning, persistence, or hard work. When these women were randomly assigned to a brief social psychological intervention that framed women's economic activities as either a process of personal initiative, goal pursuit, and self-advancement or, instead, a process of social solidarity, respectfulness, and collective advancement, only the latter led to improvements in their economic outcomes a year later. We suggest here that, with sufficient interpretive power to anticipate the context-specific implications of economic advancement in a given context and to adjust for them, it is possible for development programs to help women improve their economic opportunities in culturally informed, appropriate, and effective ways.

In this paper, we integrate frameworks from cultural psychology with examples of development approaches to illuminate ways in which understanding interdependent agency and relationality can productively enhance development science in some parts of the Global South (the current location of many development programs) as well as in low-income contexts in the Global North. Here we outline some of the features of interdependent agency fostered in many Global South and low-income sociocultural contexts and compare them with features of independent agency commonly manifest in WEIRD settings. Drawing on recent evidence from behavioral science, development economics, education, and global health, we then highlight ways that development programs might begin to center interdependent agency. Finally, we provide questions for future research on such designs.

The Balance of Independence and Interdependence: A Guiding Framework

People are enculturated actors, shaped by their sociocultural, historical, economic, and ecological contexts. A large body of social science research provides evidence of the dynamic effects of sociocultural contexts on people's cognition, emotion, motivation, and behavior and on the ways in which people become socioculturally shaped shapers of their many cultures (e.g., all chapters of Cohen & Kitayama, 2019; Gelfand & Kashima, 2016; Hsu et al., 2021; Markus & Hamedani, 2019; Mesquita, 2022). From this perspective, culture does not surround or overlay the universal agent but instead is a necessary input for being a person. People's communities, societies, and ecological
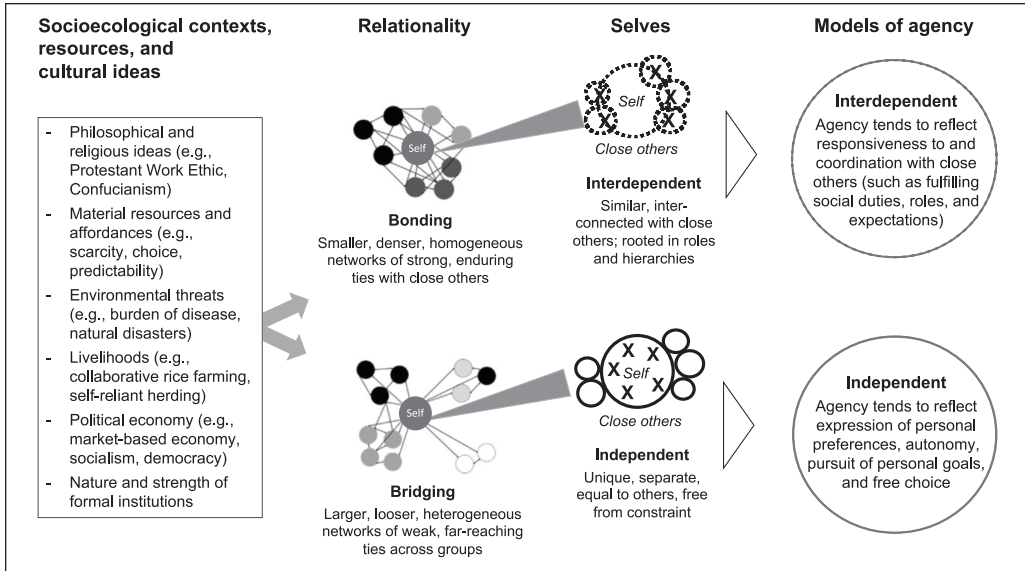
Figure 1. The sociocultural shaping of independent and interdependent relationality, selves, and agency.
Source. Adapted from Carey and Markus (2017), Gelfand et al. (2011), and Markus and Kitayama (2010).[2]
Note. The X's depicted in the self-construals refer to relatively more salient components of self and agency. These are preferences, beliefs, and goals inside the person for independent agency and relationships with close others for interdependent agency. Dotted lines indicate the inclusion of close others in one's self-construal.

contexts provide the raw materials—the images, concepts, narratives, mental frameworks, normative ideas, practices, and patterns of behavior—through which people experience themselves and the world and through which they develop particular psychosocial tendencies (see Figure 1).

One framework that organizes much of the sociocultural variation observed in human behavior—and thus serves as a productive starting place for expanding interpretive power—is the *relative* balance between interdependence and independence in a given cultural context (Markus & Kitayama, 2010). In WEIRD and more individualistic contexts that afford and promote personal choice, abundance, and self-reliance, people tend to experience themselves as *independent* agents in some or all of the following ways: as relatively separate, autonomous, unique, and influencing their social and physical environments; as free from history, place and tradition; and as equal to others (Markus & Conner, 2014). These types of selves tend to stem from and reinforce larger, looser social networks that allow people to build bridging social capital and ties across diverse social groups (Carey & Markus, 2017; Thomson et al., 2018).

When people live in societies that prioritize the individual and construe themselves as independent from others, their models of agency—that is, what is considered normatively good, moral, or valued action—will also tend to reflect and also foster this independence (Markus, 2016). With an independent model of agency, people are motivated to pursue their own goals and interests; to express personal preferences, beliefs, and attitudes; and to make choices consistent with these personal goals and preferences. In this "disjoint" model, the source of action is located within the self, in one's internal beliefs and preferences (Markus et al., 2006).

In much of the world, and particularly in more collectivist and lower income contexts, people are more likely than those in WEIRD contexts to experience themselves as *interdependent* agents in some or all of the following ways—as connected to others and adjusting to their environments; as rooted in tradition, time and place; and as ranked in hierarchies (Markus & Conner, 2014). Interdependent selves are more likely to describe themselves and others by their roles

and relationships (e.g., mother) than their personal qualities (e.g., creative) and to act to fulfill relational obligations and expectations (Henrich, 2020). These types of interdependent selves stem from and reinforce smaller, dense social networks that allow people to build bonding social capital and enduring, reciprocal relationships with in-group members (Adams, 2005; Carey & Markus, 2017; Fiske, 1992).

In an interdependent model of agency, people are more motivated to be responsive to social obligations, expectations, norms, roles, and duties; coordinate with others; and exercise relational choice and pursue relational goals that integrate and adjust one's own preferences with those of others (Markus, 2016). Such an interdependent, "conjoint" model of agency emerges from and maintains a collectivist orientation that accords priority to a person's encompassing social unit or group (Savani et al., 2008). Accordingly, and notably for development program design, the salient sources of this agency are more predominantly found in patterns of connections, relations with others, social norms, and group coordination.

Models of self and agency arise from the socioecological contexts in which people are embedded (see Figure 1). For instance, in contexts with greater resource scarcity, burden of disease, population density, and natural disasters and with weaker formal institutions, social norms are more tightly enforced and people tend to behave in more interdependent ways that facilitate social coordination, cohesion, and order (Gelfand et al., 2011). Contexts of financial scarcity in particular foster interdependent self-construals and bonding relationality compared to contexts with greater abundance and choice (Adams et al., 2012).[1]

Of course, there are many *varieties* of independent and interdependent agency that depend on how a particular context of regional culture intersects with the other significant sociocultural features that also enculturate individuals, including social class, race, ethnicity, gender, religion, colonization history, livelihood, and so on. For instance, in East Asia "saving face"— that is, particular sensitivity to the eyes of others and avoidance of public humiliation—is a primary motivational goal. In this context, interdependent agency manifests as "self-effacing interdependence" where people are driven to maintain social harmony through humility, deference, and responsiveness to group goals (Kitayama et al., 2022). However, in honor cultures in the Middle East, interdependent agency manifests as "self-assertive interdependence" in which primary motivational goals are to meet norms of appropriate behavior, reciprocity, and protection of one's in-group, particularly through self-assertiveness and sanctioning of norm deviance (San Martin et al., 2018). Furthermore, as "independence" and "interdependence" are human universal tasks of being, people everywhere are likely to reveal some mix of both depending on their particular constellations of sociocultural influences. Most of this diversity in agency has yet to be explored and examined for its antecedents and behavioral consequences (Krys et al., 2022).

People in many low-income, Global South contexts are likely to be more interdependent than those in WEIRD contexts, particularly when in contexts characterized by relatively stronger kinship structures, greater resource scarcity and environmental threats, lower relational mobility, etc. (Adams et al., 2012; Henrich, 2020; Schulz et al., 2019). Given this, we situate an understanding of interdependent psychosocial tendencies as a productive starting place for diversifying behavioral and development sciences. Table 1 briefly summarizes findings from existing research on how interdependent and independent models of agency *can* (certainly not always) reflect and promote certain psychosocial tendencies.[3,4] Further research is needed to investigate the many tendencies that are currently unlabeled and unexamined within and across diverse Global South contexts (Krys et al., 2022), to innovate new measures for tendencies, and finally to assess the extent to which development program designs are attuned to these tendencies. Toward this end, Table 1 can be an initial source of questions that researchers could use to begin to consider the relative balance and manifestation of independence and interdependence in a given context and to inform the sociocultural tailoring of development approaches and metrics.

Table 1. Some Points of Relative Difference Between Interdependent and Independent Models of Agency and Associated Psychosocial Tendencies That May Be Applied Toward the Enculturation of Development Science.

	Psychosocial tendencies often associated with independent models of agency	Psychosocial tendencies often associated with interdependent models of agency
Drivers of behavior	**Personal, internal:** Agency comes from within the person. Behavior and decision-making derive from expression of personal preferences, attitudes, autonomy, free choice, pursuit of personal goals, and influence over others and one's environment.	**Relational, contextual:** Agency derives from attunement to one's social context. Behavior and decision-making entail responsiveness to important others, pursuit of relational choice and goals, and the meeting of social norms, obligations, expectations, and duties.
Desirable attributes	**Socially differentiating**: People tend to strive toward socially differentiating attributes (e.g., uniqueness, high personal achievement and high self-esteem) that make them stand out.	**Socially integrating**: People tend to strive toward socially integrating attributes (e.g., loyal, pious, and dependable) that strengthen or maintain relationships and help them fit in.
Values	**Individualizing**: People tend to act in line with individualizing, universalizing moral foundations that prioritize rights of the individual, that is, equality and autonomy.	**Binding**: People tend to act in line with binding, communal moral foundations that prioritize group cohesion, that is, communalism, loyalty, respect for authority, purity, and divinity.
Regulatory focus	**Promotion-oriented:** Given a promotion orientation, people often aspire to realize changes from the status quo and disruptive innovations.	**Prevention-oriented**: Given a prevention and security orientation, people often aim to preserve traditions and continuation of a lineage.
Social networks and relationship models	**Dispersed, weaker ties:** Social networks tend to be dispersed and composed of weaker ties with more impersonal exchange relationships. Relationships are volitional, freely chosen; relational mobility is high.	**Dense, stronger ties:** Social networks tend to be dense and composed of strong, enduring ties among close others. Relationships emphasize loyalty; relational mobility is low.
Social capital	**Bridging**: People seek out information from individuals across diverse social groups.	**Bonding**: People rely on and trust close others for information, in line with reciprocity and sharing norms.
Social structures	**Equality emphasizing**: In social structures where people are situated as free and equal, people act to influence others and the world.	**Hierarchy emphasizing:** In hierarchical social structures, people act by adjusting their behavior to meet their social roles and rank and to maintain social order and harmony.
Norms	**Loose**: In looser societies, some norms are not as strongly enforced, and individual deviance is tolerated, often encouraged.	**Tight**: In tighter societies, norms are more strongly enforced and individual deviance is less tolerated, occurring when authorized.

Note. Although many tendencies categorized here as reflecting independence or interdependence will cluster together, not all of them will.[5]

Countering the WEIRD Bias in Development Science: Adding the Interpretive Power of Interdependence

The independence–interdependence framework can be used to expand interpretive power to understand how culture matters in the design of development programs and in their successes or failures. We argue that development science designs that reflect, whether explicitly or implicitly, the WEIRD model of an independent self are inherently limited. The *range* of possible program designs that are considered to improve standards of living and wellbeing will likely be constrained by leveraging only independent models of agency and their associated psychosocial tendencies (the "Independent" column of Table 1) without attention to the possible relevance of interdependent models and their associated tendencies ("Interdependent" column of Table 1). Furthermore, development initiatives may fail, experience barriers to take-up, or, in the worst case, cause harm to communities because of "cultural mismatches." Mismatches can occur when programs are designed with a focus on the independence emphasized in individualist contexts but are targeted to contexts where there is a greater emphasis on interdependence.

In the following section, we show examples of how achieving some degree of cultural match (Markus, 2016; Stephens et al., 2012) between a program's design and its participants' psychosocial tendencies supports the success of development programs in low-income and Global South contexts. We first illustrate how the design of development initiatives often rely upon assumptions of WEIRD, independent psychosocial tendencies and, in some cases, can lead to ineffectiveness or backlash if they actively clash with or affront interdependent tendencies. We then illustrate how embedding more features of interdependent psychosocial tendencies in development programs might productively enhance their effectiveness. Here we choose examples from a growing evidence base of randomized experiments in development economics, behavioral science, education, global health, and related fields. We focus on independent versus interdependent styles of motivation, behavioral drivers, and relationality.

Personal Versus Relational Motives

Personal versus relational goals. Many motivational approaches in WEIRD contexts rely on an implicit assumption of independent, disjoint agency driven by individual willpower, mindsets, and self-regulation (Adams et al., 2019). One such motivational strategy engages individuals in visualizing their personal aspirations and making specific contingency plans to overcome setbacks (e.g., "*if* I feel too tired after the next lecture, *then* I will make myself coffee to stay awake"; called MCII for *mental contrasting and implementation intentions*; Oettingen & Gollwitzer, 2010). However, a multinational study with thousands of online learners found this strategy to be a mismatch for students more familiar and practiced with interdependence. In this study, Kizilcec and Cohen (2017) found positive results among U.S. students on academic persistence, consistent with past research. Yet, this motivational strategy showed null results among students in India and China. The authors found that the variable that best moderated intervention effectiveness was individualism versus collectivism. To understand how this cultural factor may have influenced the effectiveness of MCII, we consider the roles of personal versus relational goals. MCII asks students to prioritize their personal goals and exert personal control over their situations, yet in collectivist contexts personal goals are often secondary to fulfilling social obligations and being responsive to the, often unpredictable, needs of others. Indeed, in follow-up surveys, the authors found that Indian students were more likely than U.S. students to be academically motivated by a desire not to disappoint friends and family, revealing a stronger role of social responsiveness in fueling motivation in India compared with the United States.

A series of other studies point to potential solutions to promote motivation through intentional alignment with interdependent agency, grounded in the pursuit of conjoint goals, social responsiveness and obligation. In the United States, Stephens et al. (2012) assessed how

communication about a university's student life and values affected entering freshmen from both middle-class and working-class sociocultural backgrounds, who, respectively, put greater emphasis on independence and interdependence. The researchers randomized students to read a university welcome letter that emphasized independent motives for education—centered on students' personal initiative, leadership, and assertiveness—or instead interdependent motives—centered on students' social connection, collaboration, and community contributions. They found that students from working-class backgrounds who read the letter highlighting independent motives showed lower performance than middle-class students on a series of verbal and nonverbal tasks. This performance gap closed, however, when students were assigned to read the letter highlighting interdependent motives, driven by performance improvements among students from working-class backgrounds. Related research in the United States showed that framing donations to charity as a communal, collaborative action ("Let's save a life together," "Join your community") motivated more interdependent, lower income people to donate more compared with when it was framed as an independent, individual action ("You=life-saver," "Take individual action"); the opposite pattern held true for higher-income people (Whillans et al., 2017).

These findings suggest that development initiatives might productively consider leveraging interdependent motives and values in program communications. For example, Thomas et al. (2020) assessed the effects of the narratives accompanying small cash transfers given to individuals living in informal settlements in Nairobi, Kenya. They compared an Individual Empowerment narrative of the aid organization focused on financial independence and self-advancement ("helping individuals become more independent and pursue personal goals") and a Community Empowerment narrative of the organization focused on collective growth and mutual support ("helping communities grow together") to a default Poverty Alleviation narrative. While both empowerment messages improved recipients' sense of self-efficacy and anticipated mobility, only the Community Empowerment narrative significantly mitigated recipients' perceived social stigma after receiving the aid and also increased recipients' willingness to build business skills, a behavioral indicator of empowerment.

Building on this research in Niger, Thomas et al. (2021) tested an "Independent Initiative" and "Interdependent Initiative" approach to enhancing the economic outcomes of low-income, rural households. Here, women participants of a national safety net program were randomized to a pure control condition or one of two brief interventions. The "Independent Initiative" intervention included a film in which the protagonist, Amina, became a standout entrepreneur by being proactive in planning her business goals, innovative in her choice of products, and strategic and competitive in the marketplace. Then, participants completed a motivational exercise that was adapted from mental contrasting and implementation intentions, in which they were asked, for instance, "What changes would you like to see for your future?," "What could stand in the way of your goals?," and "How could these obstacles be overcome?" (Oettingen & Gollwitzer, 2010) The "Interdependent Initiative" intervention included a film in which the protagonist became a respected entrepreneur in her community by actively seeking counsel from her elders on developing her businesses, being collaborative with her husband in decision-making, and being generous with other women in her community by sharing her financial knowledge. Participants then completed a similar motivational exercise but one adapted to focus on relational goals and social strategies. For instance, after being asked about their goals for their future, women were asked, "How would these goals help your family and village?," "How do women help each other in this community?," and "If you experienced conflicts with others, who could you talk to for advice and encouragement?." A year later, only those who received the "Interdependent Initiative" intervention saw enhanced economic outcomes (e.g., greater food security and business performance) compared with the control while those who received the "Independent Initiative" condition did not differ from the control. In other words, an intervention reflecting locally resonant interdependent motives enhanced economic security.

Individualizing versus binding values. Moral action in WEIRD, and particularly politically liberal, contexts means adherence to universal principles of equality and autonomy. Related to independent agency's focus on the self, these European Enlightenment-era ethics are the "individualizing" moral foundations that treat individuals as separate and equal, and they are inscribed in most foundational Western texts of politics and ethics (Graham et al., 2011). Individualizing ethics underlie, for instance, a Western focus on promoting human rights and equality in the Global South. What it means to be moral in more interdependent contexts often means being loyal to one's in-group, showing communalism, deferring to authority, and preserving purity and religious ideals—so-called "binding" or communal moral foundations that are more oriented toward the group than the individual (Fiske et al., 1998).

Reflecting these differences in value systems, what the West calls nepotism and cronyism are practices millennia-old and reflect a binding value system of prioritizing commitment and loyalty to close others over abstract ideas of impersonal fairness and equal treatment (Markus & Conner, 2014). A failure to attend to binding values, particularly respect for authority and communalism, may have accounted for the seemingly "irrational" behavior described in the introduction of the Sudanese rerouting food rations to be redistributed across their community.

Beyond avoiding cultural mismatches, intentionally matching the values of a group can be a powerful motivational force. Recent advances in behavioral science find that moral reframing or values harnessing, which situates particular programs or policies as being in line with important values, are effective persuasive and behavior change strategies. For instance, Feinberg and Willer (2019) find in the United States that framing a policy advanced by one party in terms of the opposing party's individualizing (liberal) or binding (conservative) moral foundations can effectively increase support and reduce polarization. For example, conservatives are more likely to support an economically progressive candidate when described as someone who respects the traditions of loyalty, hard work, and patriotism, compared with someone who stands against injustice and unfairness. Future research may assess whether programs that communicate binding over individualizing values may more effectively enhance program take up, engagement, and support or otherwise mitigate resistance or backlash among more interdependent populations.[6]

Drivers of Behavior: Self-Expression Versus Social Responsiveness

A large body of research shows that in WEIRD contexts, individuals' personal attitudes and preferences often motivate behavior and decision-making. Indeed, "pursue your passion" is a common motivational exhortation in WEIRD contexts for choosing educational and career paths (Li et al., 2021). WEIRD societies are often characterized as "loose," having relatively weaker social norms and higher tolerance of personal deviance from normative behavior, and foster the expression of personal preferences, choice, and unique identities (Fiske et al., 1998). As U.S. respondents make decisions around consumer choices, marriage plans, or career moves, they report their primary considerations to entail their own preferences and personal fit whereas East and South Asian respondents report greater social considerations, such as the preferences of close others and social status implications (Markus, 2016).

In contrast, in more collectivistic and normatively driven societies like East and South Asia that are characterized as "tight," having strong social norms and enforcement of these norms (Gelfand et al., 2011), the link between personal preferences, attitudes, or attributes and behavior is much weaker (Riemer et al., 2014; Savani et al., 2008).

For instance, while individual passion for achievement is indeed a strong predictor of academic achievement in Western contexts, that correlation is significantly lower in more collectivistic East Asian contexts (Li et al., 2021). Furthermore, Eom et al. (2016) finds that, while a person's self-reported concern for the environment predicted their choice of environmentally friendly products among European Americans, this correlation was not observed among Japanese

participants. The factor that predicted pro-environmental product choice among Japanese participants was perceptions of social norms, that is, of how many other people in their society engaged in pro-environmental behavior.

This collection of research suggests that, in more tight and interdependent cultural contexts, development approaches that engage collective decision-making, allow social coordination, and address social norms may outperform those that target individual attitudes and preferences alone.

Adherence to personal preferences and beliefs versus social norms. One well-researched approach to change behavior at the community level is social norms marketing, which entails campaigns to shift community-wide perceptions of social norms in a coordinated way through, for example, mass media, face-to-face conversations, and community actions. Across diverse development issues (e.g., intergroup cooperation, intimate partner violence, corruption mitigation), researchers have found social marketing programs in the Global South to be effective approaches to changing behavior and norms, and, in many cases, to do so despite not altering individual attitudes or beliefs (Tankard & Paluck, 2016). For example, SASA! is a community mobilization program for reducing violence against women and children in Uganda. In addition to other program components, local activists engage community members in discussions on power, power inequalities, and their relationship to violence against women through interactive drama skits, discussions of posters, film viewings, and door-to-door visits. Critically, these interactive activities engage and mobilize many community members at once in both single- and mixed-gender groups. In the final phase of the program, local leaders in the community, police, and health care institutions are encouraged to implement new policies and practices that directly address gender inequality (Abramsky et al., 2014).

Another study in Saudi Arabia demonstrates the strategy of shifting social norms by directly correcting misperceptions. In this context where husbands typically dictate women's economic activities, Bursztyn and colleagues (2020) found that men in their study consistently underestimated the extent to which their peers supported, rather than opposed, women working outside the home. The researchers ran an experiment in which they randomly assigned some men to receive correct information on social norms, revealing to husbands how most of their male peers on average in fact supported women working outside the home. They found, among these men who learned the correct social norms information, that their wives were more likely to have applied and interviewed for jobs outside the home in the subsequent months. This indirect targeting of important relationships in women's social contexts (i.e., their husbands) and of social norms presents an important supplement to programs that seek to advance women's empowerment by targeting women's personal skills, self-beliefs, and attitudes.

Social norms campaigns may be effective behavior change strategies across the globe. Yet, especially in cultural contexts where a person's behavior derives primarily from attunement to social norms and expectations, successful programs may simultaneously target individual and community-level change and thus allow people to go with, rather than against, the social grain.

Individual action versus social coordination. In addition to shifting perceived social norms, programs can intentionally leverage social coordination and peer effects to increase their effectiveness. Given the importance of norm adherence and social responsiveness in tight and interdependent cultural contexts, people in those contexts may be more willing to adopt new norms when those new norms are seen, validated, and licensed by their peers. Indeed, one study in Mexico found that a soap opera that modeled opposition to violence against women was effective when delivered in a community setting but ineffective when individuals were given CDs to listen to alone (Tankard & Paluck, 2016). Relatedly, in rural Ethiopia researchers conducted an

experiment to assess the effects of role models shown in brief documentaries on parents' spending on children's education. They randomly assigned households in villages to attend a screening of the treatment documentary, but in some villages, they also invited a greater number of peers to attend as well. They found a peer-mediated treatment effect, such that households who watched the documentary with a larger share of their peers showed greater investments in their children's education (Bernard et al., 2015).

An experiment in Niger found that adding a village-level screening and discussion of a film about a female entrepreneurial role model, plus life skills trainings, increased the impacts of an anti-poverty program on household business revenues and poverty reduction as well as increased women's social capital (Bossuroy et al., 2022).

A study on women's business activity in India provides further evidence that peer effects are particularly important in more normatively tight sociocultural contexts. Field et al. (2016) conducted an experiment in which they invited Indian women to participate in business counseling sessions to help them advance their businesses. A randomly selected half of those women were additionally invited to bring along a friend. Four months later, compared with a control group the researchers found that the counseling sessions improved women's economic outcomes (including business behavior, demand for loans, and household income) only among the women who attended the sessions with a friend but not among those who attended the sessions alone. Furthermore, these gains of attending the sessions with a friend were particularly strong among women facing stronger gender norms.

An important distinction in the cultural psychological literature is that of horizontal versus vertical individualism and collectivism (Triandis & Gelfand, 1998). While horizontal collectivism emphasizes equality and similarity with peers, vertical collectivism emphasizes hierarchy and obedience to authority within an in-group. Behavioral and development sciences have not sufficiently examined nor compared interventions that build on this distinction. Future research should assess whether, for instance, horizontal collectivist societies may be more motivated by interventions that leverage peer effects and shared experiences whereas vertical collectivist societies may be more motivated by those leveraging top-down messages or role modeling from authority figures. Overall, evidence suggests that, in more collectivist societies, behavior change strategies that enable individuals to consider and revise norms together with others, whether peers or authority figures, maybe more promising than those that target particular individuals and their beliefs alone.

Loose, Bridging Versus Dense, Bonding Relationality

In higher income WEIRD, and especially urban contexts, people often live in looser social networks characterized by weaker social ties where they voluntarily enter and exit relationships. People in these types of networks are able to build "bridging" social capital and to access information from strangers or less well-known others. In contrast, in many lower-income and Global South contexts, and especially in rural contexts, people are more likely to be embedded in dense social networks characterized by enduring social ties. In these types of networks, people build "bonding" social capital that allows them to rely upon support, information, and opportunities from close members of their in-group, according to strong norms of reciprocity and sharing, especially of scarce resources (see Figure 1 and Table 1).

Research in West Africa, for example, finds that embedded, fixed relationality gives rise to strong and trusting relationships but also to enemyship—a phenomenon in which relationships become tainted by perceived malice and hatred. Where relationships are understood as the source of action, tangled relationships are a likely source of difficulties, sickness, and negative events (Adams, 2005). The amulets common in African and Arabic contexts, for example, are used to protect against perceived malice, envy, and sabotage from others.

The acceptability and effectiveness of the ways in which development programs are targeted to individuals, groups within communities, or entire communities may be affected by the forms of relationality in that context. While targeting programs to the most high-risk individuals is a common practice in WEIRD contexts, programs that deliver aid to select individuals in interdependent contexts can be met with resistance, especially if they present a threat to embedded and hierarchical social structures and norms of reciprocity. For instance, in many parts of Africa, individuals who accumulate wealth, resources, and opportunities and fail to redistribute or share with close others can be accused of witchcraft and greed (Akyeampong et al., 2014). The villagers in Malawi described in the intro may have refused to accept free money when certain individuals were excluded from the list to avoid such a fate, knowing that unequal allocations of money could induce resentment, jealousy, accusations of greed, and conflict and, in turn, could undermine reciprocal networks of support.

In Indonesia, protests erupted when a public cash assistance program allocated benefits to certain low-income households and not others within communities (Sumarto, 2020). Research by Sumarto (2020) found that, among nonrecipients, the program generated jealousy toward recipients and animosity toward local leaders, resulting in protests, demonstrations, and physical injuries. Locally driven adaptations to the program further illuminate the heart of the problem: local leaders resolved these conflicts by overriding the program's targeted design and setting up informal systems that redistributed the cash more broadly within the communities, an informal redistributive system similar to that seen for the targeted food rations among the community in Sudan. Sumarto (2020) explains that the problem with this program in Indonesia was that it "instructed all community members to respect the rule of selectivism by sacrificing their logic of collectivism" (p. 15). In other words, imposing selective over collective targeting in the program's design led to disruptions in local community relationships and social cohesion and, as a consequence, the program was resisted and overruled.

Programs might avoid such backlash by ensuring that entire communities are beneficiaries of programs through universal targeting, as the villagers in Malawi demanded from the nonprofit that was giving out cash transfers (Hirvonen, 2019). Another option is to design parts of a program for the whole community. In Northern Nigeria, Cullen et al. (2020) conducted a cluster randomized controlled trial in which they assigned villages to receive a community-wide livelihoods program or not and, within villages, individual women to receive cash transfers or not. One year later, they found that in the arm that only gave cash transfers to individual women, reports of sexual intimate partner violence *increased* by 6 percentage points, reflecting a pattern of backlash. However, when the cash transfers were accompanied by a community-wide livelihoods program, reports of sexual violence *decreased* by 13 percentage points. As with the social norms approaches described in the section above, programs that account for the social fabric in which people live may not only be preferred but also more effective approaches in contexts with dense and/or hierarchical social structures.

Given the importance of strong social ties in sociocultural contexts with bonding relational structures, programs should seek to understand the preferences of communities for selecting beneficiaries for a program, resource, or service. For instance, they may assess the perceived legitimacy and fairness of different targeting approaches among community members (e.g., Premand & Schnitzer, 2021). Research on development programs should also routinely assess whether a program strengthens or strains social cohesion, social support, and existing networks.

Future Directions

We propose three future directions for research that would advance an enculturation of development science. First is an expansion of the behavioral science toolkit by attending to cultural

match in the design of development policy and programs. Second is further research to build interpretive power to understand varieties of independence and interdependence both between and within countries and particularly in understudied populations. Third is an examination of the potential for the unintended imposition of Western socio-cultural and psychosocial tendencies on non-Western populations via Western-led development programs, which would pose a threat to the goals of diversity, equity, and inclusion.

Expansion of the Behavioral Science Toolkit to Incorporate Cultural Match

A limitation of the current empirical literature base is that, with notable exceptions, there have been few direct comparisons of program designs grounded in independence versus interdependence and comparisons of these designs across more independent versus interdependent cultural contexts. To advance theory and empiricism around culture match in development, future studies would, first, identify the assumptive psychological foundations of different development designs in relation to independence versus interdependence. Second, they would directly compare such program designs on behavior and development-related outcomes, ideally across more independent versus interdependent sociocultural contexts.

To guide this research direction, Table 2 presents examples of the grounding of certain development approaches in the independent and interdependent psychosocial tendencies detailed in Table 1. Future research may compare independence-grounded and interdependence-grounded program designs both on their benefits (e.g., improved quality of life) and risks (e.g., community tensions) for program participants and their communities, as well as to test whether such approaches may be fruitfully combined to maximize benefits and mitigate risks.

Building Interpretive Power to Understand Varieties of Independence and Interdependence Between and Within Countries

Much of the research on independent and interdependent psychosocial tendencies has been limited to samples from Western and East Asian contexts (Krys et al., 2022). More broadly, 93% of samples in top psychology journals published between 2014 and 2018 were from high-income, Western and English-speaking countries while approximately just 1% of samples each were from Latin America, Africa, and the Middle East (Thalmayer et al., 2021). More research is needed to contribute to the small but growing number of studies that examine varieties of independence and interdependence among understudied populations in Latin America, Africa, and the Middle East (Krys et al., 2022; San Martin et al., 2018).

To build interpretive power in understudied sociocultural contexts, researchers may use exploratory methods to test and make adjustments to psychosocial tendencies that have been well-researched and operationalized within the existing cultural psychological literature (see Table 1) as well as to explore new psychosocial tendencies not yet identified and investigated. Such methods include conducting descriptive primary or secondary research on implicit and explicit self-construals, motivation, cognition, emotion, relationality, and values; collaborating on theory building with local co-authors, program implementers and participants; conducting qualitative research such as in-depth interviews, focus groups, observation, or daily diaries; and analyzing local cultural products (e.g., movies, community billboards, sermons, proverbs, popular social media) (Morling & Lamoreaux, 2008; Paluck & Cialdini, 2014).[7] Preliminary quantitative surveys may also be an opportunity to identify community priorities for quality-of-life indicators.

Another way to build an understanding of the key features of the cultural match in a given context is to identify what constitutes cultural mismatch. In Figure 2, we have outlined a set of questions to help scientists and practitioners begin to understand whether a program is at risk of

Table 2. Elaboration of the Assumptive Psychological Foundations of Example Development Programs.

Target issue of program	Independence-grounded designs		Interdependence-grounded designs	
	Assumption (descriptive and prescriptive)	Potential development strategy	Assumption (descriptive and prescriptive)	Potential development strategy
Women's economic empowerment	Women derive empowerment from proactively planning to achieve personal goals	Frame business expansion as a way to exert personal initiative and to pursue personal goals	Women derive empowerment from acting in line with religious values and being responsive to social roles	Frame business as a way for women to support their children and community, as well as themselves; enable religious practices within business
Low savings rates	People should make financial decisions to maximize their personal security and resources and proactively plan for adverse personal outcomes	Provide financial literacy training to individuals; create personal savings devices for individuals	People adhere to strong norms of reciprocity; individual monetary accumulation can be seen as selfish and as not sharing with others	Provide training that situate savings as a means of providing collective security; simultaneously create emergency funds for both individuals and communities
High rates of intimate partner violence against women	People should care about principles of gender equality and women's rights	Teach the importance of individual rights; teach that women and men are the same and should have similar roles	People care about acting in accordance with context-specific gender roles and social norms	Engage whole communities to shift norms of masculinity and femininity and collective practices such that women are safe and can experience well-being
High food insecurity among select households	People have loose, bridging relationships in which people feel primarily responsible only for themselves and their nuclear family	Nonprofit targets food assistance only to certain disadvantaged, high-risk households	People have dense, bonding relationships in which individuals feel responsible for and reciprocally depend on in-group members	Work with village leaders to determine if providing food assistance to the entire community is important or otherwise to achieve community buy-in for targeted assistance

experiencing a cultural mismatch between a program's design and recipients' values, motives, and relationality. Program designers may determine answers to these questions in collaboration with the intended users or participants of a program, local co-authors and experts, and program implementers using a variety of qualitative (e.g., interviews, focus groups, sorting exercises) and quantitative (e.g., surveys, experiments) methods. In addition, the ideas behind these questions could be used to construct context-specific measurements and metrics for assessing whether a program is culturally responsive, that is, supports versus disrupts local ways of being.

Implications of Cultural Mismatch for Diversity, Equity, and Inclusion

Cultural responsiveness is important for its potential to advance the effectiveness of development initiatives but also for supporting the goals of diversity, equity, and inclusion. Actively attending to and incorporating culturally resonant psychosocial tendencies in the design of development programs may promote feelings of inclusion and respect among low-income and Global South populations when they interact with mainstream development initiatives. At a higher level, such respect for local practices and ways of being may be a step toward leveling social inequities and power imbalances across the Global North and Global South.

Currently, given the skew of the social sciences toward WEIRD populations, development initiatives are likely to reflect WEIRD priorities, ways of being, practices, and values. Moreover, they may situate these ways of being as the default standard to attain and, in this way, risk imposing an assimilationist approach to development (Adams & Estrada-Villalta, 2017; Shweder, 2002). As a consequence, non-WEIRD ways of being may be either overlooked or the differences may be interpreted as deficits when compared with WEIRD ways of being. This deficit orientation can reinforce downward social constitution, a process in which people of a certain identity—here low-income individuals and those from the Global South—are subject to socially devaluating representations, stereotypes, treatment, and narratives. This process is not often intentional but, rather, can result from low interpretive power, specifically from misunderstandings or incomplete understandings of people's behavior as being responsive to sociocultural and ecological contexts (Gelfand & Kashima, 2016). Future research may explore how development designs reflect WEIRD over local ways of being and the implications of such designs for the perpetuation of social inequality and social devaluation across the Global North and South.

Furthermore, if development scientists and designers fail to attend to the culturally specific values, motives, and goals of recipients, they risk designing programs and policies that have unintended yet undesired externalities on existing ways of being. For instance, development programs are increasingly teaching noncognitive, socio-emotional, and entrepreneurial skills. Many of these trainings focus on self-focused skills, including personal initiative, self-esteem, self-confidence, personal control, assertiveness, self-promotion, and personal goal setting (Campos et al., 2017), which reflect WEIRD, independent psychosocial tendencies (see Table 1). Does teaching such self-focused skills lead to concomitant reductions in other-oriented behaviors (e.g., networks of reciprocity and cooperation) and beliefs (e.g., situational over dispositional attributions; Madan et al., 2019; Somville et al., 2020)? Do financial products and programs that encourage individuals to save rather than share their resources shrink long-standing networks of informal support, disrupt redistributive norms, or increase tolerance for inequality (Banerjee et al., 2021; Madan et al., 2019)? While these programs can effectively improve the economic situations of certain individuals, do they lead countries toward more unequal growth trajectories and thinner safety nets (Adams & Estrada-Villalta, 2017)? Such negative, group-level impacts may outweigh positive, individual-level benefits, depending on a certain culture's preferred development trajectory. In addition to determining *a priori* which program designs are preferred by recipients, researchers may also evaluate whether existing development initiatives that show a bias toward the WEIRD independent ways of being are undermining indigenously valued ways

- **Relational goals and decision-making**: Is the program responsive to the goals and preferences of a person's significant in-groups or does the program ask participants to prioritize their personal interests, rights and goals over the interests of their in-group?
- **Norms, social coordination, and social cohesion:** Will this program maintain cohesion among a community or will it cause conflict, jealousy or envy? Will a participant be fitting in with their peers or will they be standing out if they participate in or benefit from the program?
- **Hierarchy, status, and authority**: Do people with authority, such as village chiefs, religious leaders and elders, approve of the program or disapprove of it? Are participants being asked to act with humility and deference to others or with hubris?
- **Social roles**: Will participants be able to fulfill important social roles, duties, responsibilities, and obligations if they participate in the program or will they be asked to neglect or violate them?
- **Loyalty**: Will the program strengthen participants' relationships with close others or threaten them? Will participants be enhancing their networks of support to cope with future challenges or shrinking them?
- **Honor and reputation:** If they participate in the program, will participants be seen as honoring or dishonoring, respecting or disrespecting their family and/or social unit? Is the program honoring or overriding a community's collective values and practices?*
- **Respect for religion and purity:** Will participants be able to act in accordance with their religious beliefs and practices or will they be asked to go against them? Will important places and practices be kept sacred?
- **Respect of tradition and lineage:** Will participants be able to respect and preserve their lineage, history, and time-honored traditions in valued ways or will they be asked to disrupt and disrespect them?

*All questions in this list but especially this one may be particularly important for colonized and Indigenous groups.

Figure 2. Initial questions to help build interpretive power, inform culturally responsive program designs, and develop metrics to assess cultural responsiveness.

of being, such as overriding valued norms of behavioral interdependence, embedded systems of support and trust, and other-oriented preferences.

Conclusion

The science of international development confronts one of the most important tasks of our time—to improve the standards of living of the most vulnerable around the globe. As such, development programs present a substantial opportunity cost if they are ineffective and waste limited aid dollars that could otherwise be used to effectively reduce poverty and improve health and well-being. Furthermore, development initiatives represent more than an opportunity to improve individuals' standards of living. They also influence a society's cultural trajectory based on the outcomes they actively pursue or otherwise create. Both of these considerations call for greater cultural responsivity in the design of development initiatives, specifically with respect to the psychosocial tendencies, practices, and values in a given sociocultural context.

We recommend a greater focus on interdependent psychosocial tendencies as a starting place to advance the enculturation of development science. For example, programs may boost motivation, self-confidence, and self-efficacy related to development outcomes (e.g., educational attainment and health-seeking behaviors) through recognizing that the self (the agent) who will become more efficacious may be an interdependent one and that a sense of efficacy may entail the effective realization of expectations, obligations, and support of close others. Women's empowerment programs may enable women to pursue new opportunities while simultaneously building normative support from their family and community. Economic empowerment programs may promote household financial security while also maintaining local norms of sharing as well as ensuring that malice and envy within a community are kept at bay.

In outlining interdependent models of agency, we intend to shed light on certain key cultural differences from WEIRD contexts, but notably, we do not intend to imply that agency comes in only two forms, that one form is superior to the other or that the two are mutually exclusive. Human agency doubtlessly takes a vast array of forms—as variable as the contexts that give rise to it—and different forms and combinations are productive for different contexts and goals. However, a consideration of agency through the lens of interdependence affords a substantial increase in the set of theoretical, methodological, and practical tools for understanding and improving poverty reduction, health, and well-being across diverse settings, beyond those established in the existing social science literature.

In addition to advancing program effectiveness, culturally sensitive development approaches can advance the goals of equity, inclusion, and decolonization more broadly. If development initiatives fail to take a cultural lens, they risk attempting to "modernize" the cultural ways of being of diverse communities in the Global South. Through expanding models of behavior to include interdependence and building greater interpretive power in specific contexts, development science may contribute to a more comprehensive account of human behavior, better expand access to health, wellbeing, and prosperity in the Global South, and, critically, do so in ways that allow a diversity of societal development trajectories to flourish.

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Notes

1. See SM for additional information on the influence of livelihoods on psychosocial tendencies.
2. See SM for supporting references.
3. See SM for supporting references.
4. See SM for additional information on cultural differences in cognition and emotion.
5. For instance, tightness/looseness is only moderately correlated with individualism/collectivism, which is related to independence/interdependence. However, many low-income, Global South contexts experience resource scarcity, a factor associated with both tightness and interdependence (Adams et al., 2012; Gelfand et al., 2011).
6. Such research must carefully consider which are the relevant groups and relationships in a given interdependent context and where the boundary of what constitutes a meaningful community lies (e.g., close family vs. village versus nation). See SM for more on this point.
7. See SM for additional citations and resources.

References

Abramsky, T., Devries, K., Kiss, L., Nakuti, J., Kyegombe, N., Starmann, E., . . . Watts, C. (2014). Findings from the SASA! study: A cluster randomized controlled trial to assess the impact of a community mobilization intervention to prevent violence against women and reduce HIV risk in Kampala, Uganda. *BMC Medicine*, *12*, 122.

Adams, G. (2005). The cultural grounding of personal relationship: Enemyship in North American and West African worlds. *Journal of Personality and Social Psychology*, *88*(6), 948–968.

Adams, G., Bruckmüller, S., & Decker, S. (2012). Self and agency in context: Ecologies of abundance and scarcity. *International Perspectives in Psychology: Research, Practice, Consultation*, *1*(3), 141–153.

Adams, G., & Estrada-Villalta, S. (2017). Theory from the South: A decolonial approach to the psychology of global inequality. *Current Opinion in Psychology*, *18*, 37–42.

Adams, G., Estrada-Villalta, S., Sullivan, D., & Markus, H. R. (2019). The psychology of neoliberalism and the neoliberalism of psychology. *Journal of Social Issues*, *75*(1), 189–216.

Akyeampong, E., Bates, R. H., Nunn, N., & Robinson, J. (2014). *Africa's development in historical perspective*. Cambridge University Press.

Banerjee, A. V., Breza, E., Chandrasekhar, A., Duflo, E., Jackson, M., & Kinnan, C. (2021). *Changes in social network structure in response to exposure to formal credit markets* (No. w28365; p. w28365). National Bureau of Economic Research.

Banerjee, A. V., & Duflo, E. (2011). *Poor economics: A radical rethinking of the way to fight global poverty* (1st ed.). Public Affairs.

Bernard, T., Dercon, S., Orkin, K., & Seyoum Taffesse, A. (2015). Will video kill the radio star? Assessing the potential of targeted exposure to role models through video. *The World Bank Economic Review*, *29*, S226–S237.

Bossuroy, T., Goldstein, M., Karimou, B., Karlan, D., Kazianga, H., Parienté, W., ... & Wright, K. A. (2022). Tackling psychosocial and capital constraints to alleviate poverty. Nature, 605(7909), 291–297.

Brady, L. M., Fryberg, S. A., & Shoda, Y. (2018). Expanding the interpretive power of psychological science by attending to culture. *Proceedings of the National Academy of Sciences*, *115*(45), 11406–11413.

Bursztyn, L., González, A. L., & Yanagizawa-Drott, D. (2020). Misperceived social norms: Women working outside the home in Saudi Arabia. *American Economic Review*, *110*(10), 2997–3029.

Campos, F., Frese, M., Goldstein, M., Iacovone, L., Johnson, H. C., McKenzie, D., & Mensmann, M. (2017). Teaching personal initiative beats traditional training in boosting small business in West Africa. *Science*, *357*(6357), 1287–1290.

Carey, R. M., & Markus, H. R. (2017). Social class shapes the form and function of relationships and selves. *Current Opinion in Psychology*, *18*, 123–130.

Cohen, D., & Kitayama, S. (Eds.). (2019). *Handbook of cultural psychology* (2nd ed.). Guilford Press.

Cullen, C., Martinez, P. G., & Papineni, S. (2020). *Empowering women without backlash? Experimental evidence on the impacts of a cash transfer and community livelihoods program on intimate partner violence in Northern Nigeria*. https://www.semanticscholar.org/paper/Empowering-women-without-backlash-Experimental-on-a-Cullen-Mart%C3%ADnez/c31abef66825f8b304d274274ba159cd953794b9

Eom, K., Kim, H. S., Sherman, D. K., & Ishii, K. (2016). Cultural variability in the link between environmental concern and support for environmental action. *Psychological Science*, *27*(10), 1331–1339.

Feinberg, M., & Willer, R. (2019). Moral reframing: A technique for effective and persuasive communication across political divides. *Social and Personality Psychology Compass*, *13*(12), e12501.

Field, E., Jayachandran, S., Pande, R., & Rigol, N. (2016). Friendship at work: Can peer effects catalyze female entrepreneurship? *American Economic Journal: Economic Policy*, *8*(2), 125–153.

Fiske, A. P. (1992). The four elementary forms of sociality: Framework for a unified theory of social relations. *Psychological Review*, *99*(4), 689.

Fiske, A. P., Kitayama, S., Markus, H. R., & Nisbett, R. E. (1998). The cultural matrix of social psychology. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (Vol. 1, pp. 915–981). McGraw-Hill.

Gelfand, M. J., & Kashima, Y. (2016). Editorial overview: Culture: Advances in the science of culture and psychology. In *Current opinion in psychology*, *8*, iv–x.

Gelfand, M. J., Raver, J. L., Nishii, L., Leslie, L. M., Lun, J., Lim, B. C., . . . Arnadottir, J. (2011). Differences between tight and loose cultures: A 33-nation study. *Science*, *332*(6033), 1100–1104.

Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Koleva, S., & Ditto, P. H. (2011). Mapping the moral domain. *Journal of Personality and Social Psychology*, *101*(2), 366.

Henrich, J. (2020). *The WEIRDest people in the world: How the West became psychologically peculiar and particularly prosperous*. Farrar, Straus and Giroux.

Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences*, *33*(2–3), 61–83.

Hirvonen, H. (2019, October 24). *Why one village refused funds*. GiveDirectly. https://www.givedirectly.org/why-one-village-refused-funds/

Hsu, T. W., Niiya, Y., Thelwall, M., Ko, M., Knutson, B., & Tsai, J. L. (2021). Social media users produce more affect that supports cultural values, but are more influenced by affect that violates cultural values. *Journal of Personality and Social Psychology*, *121*(5), 969–983.

Karlan, D., & Appel, J. (2018). *Failing in the field: What we can learn when field research goes wrong*. Princeton University Press.

Kitayama, S., Salvador, C., Nanakdewa, K., Rossmaier, A., San Martin, A., & Savani, K. (2022). *Varieties of interdependence and the emergence of the modern West: Toward globalizing of psychology* [Manuscript in preparation]. Department of Psychology, University of Michigan.

Kizilcec, R. F., & Cohen, G. L. (2017). Eight-minute self-regulation intervention raises educational attainment at scale in individualist but not collectivist cultures. *Proceedings of the National Academy of Sciences*, *114*(17), 4348–4353.

Krys, K., Capaldi, C. A., Lun, V. M.-C., Vauclair, C.-M., Bond, M. H., Domínguez-Espinosa, A., & Uchida, Y. (2020). Psychologizing indexes of societal progress: Accounting for cultural diversity in preferred developmental pathways. *Culture & Psychology*, *26*(3), 303–319.

Krys, K., Vignoles, V. L., de Almeida, I., & Uchida, Y. (2022). Outside the "Cultural Binary": Understanding why Latin American collectivist societies foster independent selves. *Perspectives on Psychological Science*, *17*(4), 1166–1187

Li, X., Han, M., Cohen, G. L., & Markus, H. R. (2021). Passion matters but not equally everywhere: Predicting achievement from interest, enjoyment, and efficacy in 59 societies. *Proceedings of the National Academy of Sciences*, *118*(11), Article e2016964118.

Madan, S., Nanakdewa, K., Savani, K., & Markus, H. R. (2019). The paradoxical consequences of choice: Often good for the individual, perhaps less so for society? *Current Directions in Psychological Science*, *29*(1), 80–85

Markus, H. R. (2016). What moves people to action? Culture and motivation. *Current Opinion in Psychology*, *8*, 161–166.

Markus, H. R., & Conner, A. (2014). *Clash! How to thrive in a multicultural world*. Penguin.

Markus, H. R., & Hamedani, M. (2019). People are culturally-shaped shapers: The psychological science of culture and culture change. In D. Cohen & S. Kitayama (Eds.), *Handbook of cultural psychology* (pp. 11–52). Guilford Press.

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, *98*(2), 224.

Markus, H. R., & Kitayama, S. (2010). Cultures and selves: A cycle of mutual constitution. *Perspectives on Psychological Science*, *5*(4), 420–430.

Markus, H. R., Uchida, Y., Omoregie, H., Townsend, S. S. M., & Kitayama, S. (2006). Going for the Gold: Models of Agency in Japanese and American Contexts. *Psychological Science*, *17*(2), 103–112. https://doi.org/10.1111/j.1467-9280.2006.01672.x.

Mesquita, B. (2022). *Between Us: How Cultures Create Emotions*. W. W. Norton & Company.

Morling, B., & Lamoreaux, M. (2008). Measuring culture outside the head: A meta-analysis of individualism—Collectivism in cultural products. *Personality and Social Psychology Review*, *12*(3), 199–221.

Oettingen, G., & Gollwitzer, P. M. (2010). Strategies of setting and implementing goals: Mental contrasting and implementation intentions. In *Social psychological foundations of clinical psychology* (pp. 114–135). The Guilford Press.

Paluck, E. L., & Cialdini, R. B. (2014). Field research methods. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social and personality psychology* (pp. 81–97). Cambridge University Press.

Premand, P., & Schnitzer, P. (2021). Efficiency, legitimacy, and impacts of targeting methods: Evidence from an experiment in Niger. *The World Bank Economic Review*, *35*(4), 892–920.

Riemer, H., Shavitt, S., Koo, M., & Markus, H. R. (2014). Preferences don't have to be personal: Expanding attitude theorizing with a cross-cultural perspective. *Psychological Review*, *121*(4), 619–648.

San Martin, A., Sinaceur, M., Madi, A., Tompson, S., Maddux, W. W., & Kitayama, S. (2018). Self-assertive interdependence in Arab culture. *Nature Human Behaviour*, *2*(11), 830–837.

Savani, K., Markus, H. R., & Conner, A. L. (2008). Let your preference be your guide? Preferences and choices are more tightly linked for North Americans than for Indians. *Journal of Personality and Social Psychology*, *95*(4), 861–876.

Schulz, J. F., Bahrami-Rad, D., Beauchamp, J. P., & Henrich, J. (2019). The Church, intensive kinship, and global psychological variation. *Science*, *366*(6466), Article eaau5141.

Shweder, R. A. (2002). On the return of the "Civilizing Project." *Daedalus*, *131*(3), 117–121.

Shweder, R. A. (2003). *Why do men barbecue? Recipes for cultural psychology*. Harvard University Press.

Andersen, A., Franklin, S., Getahun, T., Kotsadam, A., Somville, V., & Villanger, E. (2020). Does wealth reduce support for redistribution? Evidence from an Ethiopian housing lottery. *NHH Dept. of Economics Discussion Paper (18)*.

Stephens, N. M., Fryberg, S. A., Markus, H. R., Johnson, C. S., & Covarrubias, R. (2012). Unseen disadvantage: How American universities' focus on independence undermines the academic performance of first-generation college students. *Journal of Personality and Social Psychology*, *102*(6), 1178.

Sumarto, M. (2020). Welfare and conflict: Policy failure in the Indonesian cash transfer. *Journal of Social Policy*, *50*(3), 533–551.

Tankard, M. E., & Paluck, E. L. (2016). Norm perception as a vehicle for social change. *Social Issues and Policy Review*, *10*(1), 181–211.

Thalmayer, A. G., Toscanelli, C., & Arnett, J. J. (2021). The neglected 95% revisited: Is American psychology becoming less American? *American Psychologist*, *76*(1), 116–129.

Thomas, C. C., Otis, N. G., Abraham, J. R., Markus, H. R., & Walton, G. M. (2020). Toward a science of delivering aid with dignity: Experimental evidence and local forecasts from Kenya. *Proceedings of the National Academy of Sciences*, *117*(27), 15546–15553. http://www.pnas.org/lookup/doi/10.1073/pnas.1917046117

Thomas, C. C., Walton, G. M., Soumaila, A. S., & Markus, H. R. (2021, February 11). *Leveraging interdependence to advance economic development in West Africa*. Society for Personality and Social Psychology 2021 Annual Convention, Virtual.

Thomson, R., Yuki, M., Talhelm, T., Schug, J., Kito, M., Ayanian, A. H., . . . Choi, H.-S. (2018). Relational mobility predicts social behaviors in 39 countries and is tied to historical farming and threat. *Proceedings of the National Academy of Sciences*, *115*(29), 7521–7526.

Triandis, H. C., & Gelfand, M. J. (1998). Converging measurement of horizontal and vertical individualism and collectivism. *Journal of Personality and Social Psychology*, *74*(1), 118–128.

Whillans, A. V., Caruso, E. M., & Dunn, E. W. (2017). Both selfishness and selflessness start with the self: How wealth shapes responses to charitable appeals. *Journal of Experimental Social Psychology*, *70*, 242–250.

Wuepper, D., & Lybbert, T. J. (2017). Perceived self-efficacy, poverty, and economic development. *Annual Review of Resource Economics*, *9*(1), 383–404.