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Culturally Relevant Health Messaging and the Measurement of Source Specific Trust

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Abstract
A culturally relevant message and a trusted institution are different evaluation objects. This conceptual analysis examines selected literature published through 2022 and develops a framework separating source credibility, confidence in a care relationship, institutional trust and group-based medical mistrust. Existing measurement research informs construct selection, while cultural adaptation literature informs message design. The paper treats a trust effect as a hypothesis requiring a specified source, measure, comparison and observation period. The proposed assessment pairs trust measures with comprehension, behaviour and service experience without assuming these outcomes must change together. It also considers whether a partnership affects trust in the community organisation carrying the message. An evaluation design separates the message response from later delivery experience and examines missingness and comparability across language groups. The contribution is a construct-based approach to reporting trust claims. The framework does not validate a new scale, estimate an overall cultural adaptation effect or establish a causal relationship between trust and service use.

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1. Introduction

A person might consider a message understandable while doubting the institution delivering the service. The same person might trust a community organisation, have confidence in a particular clinician and still distrust parts of the healthcare system. Treating these responses as one construct conceals what the communication programme has measured and what change it is entitled to claim. [1-25]

This paper examines trust as a specified relation between a respondent and a source, organisation or system. Cultural relevance concerns the fit of a message with an audience's language, experiences and context. The paper's contribution is to connect a defined adaptation with a defined object of trust and an assessment designed for that object. [26-28]

The focus is communication evaluation rather than a claim that communities should be persuaded to trust institutions. A programme should investigate concerns about competence, intent and past experience and address service failures where identified. Accurate explanation and respectful engagement are design responsibilities even when the evaluation shows no change in trust. [29-46]

2. Research Method

2.1. Inquiry Focus and Reference Scope

This paper addresses the following question. Which object of trust should a culturally relevant health message affect, and what observation would support that claim?

The analysis draws on selected conceptual, measurement and empirical literature published no later than 2022. Sources are used according to their intervention, setting and outcome. Conceptual sources inform definitions and proposed relationships. Empirical studies inform the problem or an adjacent mechanism, with their findings kept within the evaluated intervention and population. The synthesis is interpretive and does not follow a registered systematic review protocol or provide an exhaustive study census. [47-56]

The analytical procedure separates the target construct, the observation used to represent it and the claim supported by that observation. The resulting framework specifies process records, outcome boundaries and a prospective evaluation question. Design recommendations are identified as proposals. No participant dataset, new clinical results or validated composite score is reported, and no pooled effect is estimated from unlike interventions. [28, 57-68]

The synthesis proceeds through three steps: define the communication or service task, identify the observation supported by each relevant source, and specify a comparison which would test the proposed relationship. Table 1 records construct boundaries; Table 2 operationalises a study or audit. Numerical illustrations demonstrate definitions and accounting only. They are not empirical results. [69-72]

2.2. Conceptual Synthesis and Transfer Conditions

Rose *et al*. [62] develop and test a healthcare system distrust measure; Shea *et al*. [2] revise that construct's measurement. LoCurto and Berg [74] examine trust measurement in healthcare settings. These sources demonstrate why the object and item wording matter. A campaign satisfaction question does not become a measure of institutional trust because an evaluator labels it trust. [75]

Group-based medical mistrust is a further measurement object, with validation examined by Shelton *et al*. [77]. Sanford and Clifton [52] develop the Medical Mistrust Multiformat Scale and examine relationships with health-related responses. These measures should be considered for their populations, constructs and measurement evidence. Selecting a published scale does not guarantee comparability after translation, shortened administration or application to another setting. [79-89]

Armstrong *et al*. [2] examine patterns of healthcare system distrust and relationships with prior discrimination. This literature cautions against interpreting concerns solely as a defect in message design. Sousa-Duarte *et al*. [91] examine professionals' trust in patients, showing a different direction of the relationship. Neither a provider's assessment nor a patient's satisfaction should stand in for the other person's trust. [2, 90, 92-99]

Kreuter *et al*. [35] distinguish approaches to cultural appropriateness, and Nápoles and Stewart [47] provide a community-engaged adaptation framework. Nam *et al*. [84] evaluate culturally tailored diabetes education with glycaemic control as the outcome. The diabetes evidence is relevant to adaptation, but it does not establish a trust effect for a separate health message. The present framework therefore requires the trust outcome to be measured directly. [100, 102-106]

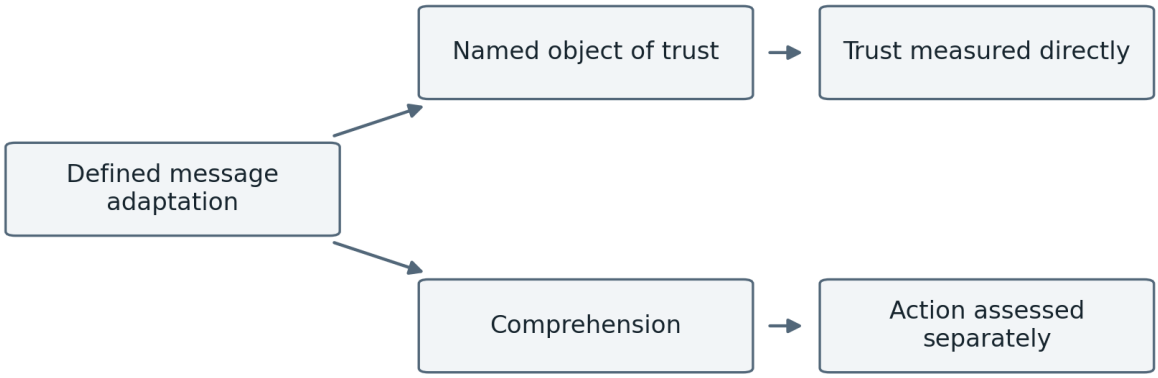
Evidence about understanding should remain separate from evidence about trust. McCaffery *et al*. [91] report cross-sectional differences in pandemic knowledge and related responses by health literacy in Australia. These associations do not establish a trust-mediated effect. The proposed trust evaluation accordingly records comprehension and trust as different constructs and investigates their relationship rather than assuming mediation. [107-110]

Belone *et al*. [74] identify trust development, capacity, mutual learning and power dynamics within a participatory research model informed by community consultation. These partnership constructs concern relationships among collaborators. A patient-facing trust measure needs a separately specified object. Confidence in the campaign team, confidence in a named clinician and confidence in the health system should not be scored as one relationship. [112-131]

Kreps and Sparks [2] discuss language, cultural and economic barriers surrounding health information in immigrant populations. Their analysis helps identify alternative explanations for an apparent change in trust: improved understanding or improved access might accompany the message. The proposed comparison should document these changes and avoid attributing every favourable response to cultural relevance. [28, 77, 132-145]

3. Results and Discussion

3.1. Trust Specification and Measurement Framework



Source: Author-developed conceptual framework. Arrows represent proposed relationships or process order, not estimated effects.

Fig 1: *Adaptation comprehension and source specific trust*

Table 1: Adaptation comprehension and source specific trust measurement boundaries

Construct	Object	Appropriate assessment	Inference to avoid
Source credibility	Named communicator	Competence and honesty items about the source	General trust in a health system
Encounter confidence	Specific service interaction	Experience and confidence after a defined encounter	A durable change in institutional distrust
Institutional distrust	Health system or institution	Established multi-item instrument with local testing	Treating one satisfaction item as trust
Willingness to act	Named health action	Behaviour-specific intention and completed action	Inferring action from favourable attitudes

Table 1 provides an analytical specification. Its entries are proposed distinctions rather than empirical ratings or validated instrument properties.

3.1.1. Construct and Source Specification

Before developing content, write the proposed trust claim in a sentence identifying the source and relationship. For example, a programme might expect its revised information to improve confidence that a named service explains eligibility honestly. This differs from expecting confidence in clinicians' technical competence or a reduction in healthcare system distrust. Figure 1 separates the constructs, and Table 1 states their measurement boundaries. [146-149]

The assessment should preserve the distinction in its items. Questions about being listened to concern an experience. Questions about confidence in a source concern an expectation or judgement. Questions about willingness to disclose personal information concern a particular decision. They might be related, but they do not necessarily form one scale or move together. A total score requires a defensible measurement model, not simply convenient aggregation. [150]

3.1.2. Adaptation and Comparison

Document what changed in the message. Translation, examples reflecting lived experience, visual representation and shared authorship are distinct adaptations. A comparison of an adapted message with its predecessor should preserve the service facts, requested action and accessibility conditions as far as possible. Otherwise, the contrast might reflect clearer language, an easier referral route or a different messenger rather than cultural adaptation itself. [151]

Community review should examine errors, stereotypes and questions the material leaves unanswered. Record which recommendations were incorporated and which were not, with reasons. Participation by a small advisory group does not establish representativeness for an entire population. Invite disagreement and include people whose experiences differ from those of routine service users. The review informs the design but does not substitute for outcome evaluation. [152-174]

3.1.3. Timing and Measurement Quality

Measure the specified trust construct before exposure and at a time suitable for the proposed change. Record comprehension immediately where feasible, then distinguish later service experience from the original message response. If trust changes after a helpful appointment, the evaluation should not automatically attribute the change to the earlier message. Repeated measurement itself might influence responses, so administration should be consistent across groups. [175-181]

Assess interpretation of the items in each language or format. Cognitive interviews are a useful first step for identifying different meanings. Where groups will be compared using a multi-item scale, evaluate the relevant measurement properties rather than assuming identical numerical values have identical meaning. A brief locally designed item should be labelled an exploratory item until its measurement properties are established. Changes smaller than the measurement uncertainty require cautious interpretation. [182]

3.1.4. Partnership Trust and Behavioural Outcomes

Measure confidence in the community partner separately from confidence in the service institution where the partnership is central to the message. A partner might communicate accurate information while having no control over waiting time or service availability. The partnership agreement should specify who addresses complaints and how the partner corrects a claim or withdraws its endorsement. [183]

Pair trust measurement with the action relevant to the programme, while retaining separate interpretations. Increased trust without service uptake might reflect cost, capacity, uncertainty or a considered decision to decline. Service uptake without increased trust might reflect urgent need or a lack of alternatives. Neither pattern identifies its explanation without additional evidence. Interview findings, service records and the timing of responses help assess competing explanations.

3.1.5. Testing the Trust Hypothesis Without Assuming Its Mechanism

The programme should distinguish a message effect from a source-selection effect. Replacing the institution's name with a familiar community organisation changes the communicator as well as the message's relevance. If both change, the contrast estimates their combined offering. A study seeking the effect of adapted wording should preserve the source where feasible. A study seeking the effect of endorsement should describe the endorsement and its responsibilities explicitly.

The primary trust measure should match the hypothesis in its wording and timing. Suppose the proposed change concerns confidence that a named service explains eligibility honestly. An item about satisfaction after an appointment measures a later experience and cannot serve as the sole primary outcome. A broad medical mistrust score might provide baseline context, but it should not be assumed to capture a short-term judgement about the message source. [184]

Measurement uncertainty affects change interpretation. A pre-to-post difference could reflect unstable responses, different respondents or a changed administration mode. Use a consistent procedure and describe who completed each assessment. If paired responses are required, report the paired sample and the characteristics of those without follow-up. If independent samples are used, describe their composition and avoid presenting the difference as individual change.

The programme should also examine whether the direction of change has the intended meaning. Lower confidence in an

inaccurate promise could represent better understanding. Unchanged institutional distrust alongside improved confidence in a truthful source could represent a specific communication benefit. Increased confidence followed by a mismatch between promise and service requires further follow-up. A favourable score is not a substitute for accurate information and accountable delivery. [185]

Qualitative interviews should examine explanations rather than recruit confirmation of the proposed mechanism. Ask what participants understood, which source they had in mind and what experience influenced their judgement. Preserve accounts indicating uncertainty, disagreement or a reason for declining care. These accounts clarify the construct and possible pathways, but they do not quantify the prevalence of an explanation in the whole target population. [186]

An intervention comparison should report the estimated change with uncertainty and the behavioural outcome separately. A correlation between the two does not establish that trust mediated the effect. The message could affect understanding and trust independently, while service availability influences action. Prospective timing and a credible comparison strengthen the analysis, but a mediation claim still depends on additional assumptions about the relevant relationships and unmeasured influences. [187, 188]

3.1.6. A Source Specific Trust Study and Its Interpretation

A useful trust study begins with an expectation capable of being confirmed or disappointed. For example, the proposed message might improve confidence that a named home health organisation provides an honest explanation of referral status. This expectation concerns organisational communication, not trust in every clinician or the healthcare system as a whole. Distrust measures developed by Rose and colleagues and Shea and colleagues address broader constructs, while the Medical Mistrust Multiformat Scale offers another measurement approach [1, 2, 78]. Choice of measure should follow the claim. [74, 91, 183, 189-210, 242, 245]

Table 2 specifies four response patterns for a proposed message comparison. Comprehension and source-specific confidence are measured separately after exposure; willingness to request assistance is a further outcome. These patterns prevent a high confidence score from becoming the sole definition of success. A truthful explanation of a genuine service limitation might improve comprehension while reducing unrealistic confidence. A respectful message might improve source confidence while leaving broader institutional mistrust unchanged. Both patterns deserve interpretation against the content actually delivered. [128]

Table 2: Interpretation of comprehension and source confidence patterns

Observed pattern	Question for follow up	Claim supported
Comprehension rises confidence rises	Were expectations accurate and later fulfilled	Two measured responses
Comprehension rises confidence falls	Did participants understand a genuine limitation	Understanding with revised expectations
Confidence rises comprehension does not	Did source familiarity replace understanding	Source response requiring content review
Neither changes	Was the message received and the measure appropriate	No measured improvement under the chosen comparison

Source: Author-developed analytical example. Numerical values, where shown, are hypothetical and do not represent study observations.

The comparison should preserve the source, clinical information and route to assistance when the question concerns adapted wording. If a community organisation endorses only the adapted version, endorsement forms part of the treatment contrast. The partnership should also assess whether the endorsement transfers reputational risk to the community organisation. Participatory research models discuss trust, learning and power in relationships among collaborators; those constructs inform partnership review rather than substitute for a patient's judgement of the service [111, 211]. [212-217]

A longitudinal design should record exposure before a later service encounter. One assessment examines the message response, and another examines confidence after delivery experience. The later assessment should ask which organisation or professional the respondent considered and what happened between assessments. If the service failed to provide promised assistance, an initial favourable score provides an incomplete account. Research relating discrimination to system distrust supplies a reason to preserve prior experience in the analysis [218]. It does not justify assigning a single historical explanation to every respondent. [82, 219-236, 243, 246]

An explicitly hypothetical example illustrates the distinction. Suppose the mean change in a source-confidence score is 0.4 scale units in the adapted-message group and 0.1 in the comparator. The difference in mean change is 0.3 units. Without a defined scale, uncertainty estimate, comparable administration and complete follow-up, this number has no interpretable magnitude. Even with those elements, the result would concern the selected source-confidence construct. A separate institutional mistrust score and service-request outcome would require their own analyses.

The proposed contribution is an interpretation rule: report the object, direction and timing of trust separately from comprehension and action. The model is falsifiable if an adaptation fails to change its specified judgement under a suitable comparison. Such a result should revise the message hypothesis rather than lead to substitution of a more favourable satisfaction item. Scale development and group-based mistrust validation support careful construct selection, while community-engaged adaptation supports transparent intervention description [73, 76, 101]. [237, 238]

Trust in health institutions and health messengers is a recurring theme in the study of health communication, and it has become more prominent as attention has turned to disparities in access and outcomes. Trust describes a willingness to rely on another party under conditions of uncertainty, and in health contexts it encompasses confidence in competence, in benevolence, in honesty and in the consistency of behaviour over time. Populations that have experienced discrimination, neglect or mistreatment in healthcare settings often hold lower trust in institutions, and this lower trust is associated with reduced willingness to seek care, to follow advice and to accept recommendations. Because trust is relational and shaped by experience, it is not

evenly distributed across a population and it is not stable over time. A communication programme that assumes a baseline of trust where none exists may design messages that are technically accurate yet practically ineffective, because the audience does not accept the messenger as a credible source.

The concept of culturally relevant messaging is distinct from trust even though the two are frequently discussed together. Cultural relevance describes the extent to which a message reflects the values, language, experiences and expectations of its intended audience. Relevance can be achieved at different levels, ranging from surface adaptation that changes language and imagery to deep adaptation that changes how a health issue is framed, which consequences are emphasised and which actions are made salient. Deep adaptation is more demanding and more consequential, because it alters the behavioural logic of the message rather than its presentation. A culturally relevant message may nevertheless be delivered by a distrusted source, and a trusted source may deliver a message that fails to connect with the audience's circumstances. Treating relevance and trust as a single quality obscures which of them a programme has achieved and therefore which of them it needs to improve.

Message design sits between relevance and trust and translates both into content. Effective messages for health behaviour typically state a clear recommended action, make that action seem feasible and worthwhile, address the audience's likely concerns, and avoid unnecessary complexity. Where the audience does not trust the source, however, message design cannot compensate, because the content will be discounted regardless of its quality. Where the audience trusts the source but the message is poorly matched to their circumstances, the trust is spent without producing the intended effect. This interaction means that message design and source strategy must be considered together rather than in sequence. A programme operating through a distrusted institution may benefit more from working through a trusted intermediary than from refining its wording, while a programme with strong community relationships may obtain greater returns from improving message clarity and specificity than from further investment in trust building.

Source credibility is a related but narrower concept than trust. Credibility describes the audience's perception that a source is competent and motivated to provide accurate information, and it varies by topic as well as by source. A clinician may be highly credible on clinical questions and less so on costs or logistics; a community organisation may be credible on local services and less so on clinical detail. Health communication programmes frequently combine sources to draw on different forms of credibility, using clinical authorities for medical content and community messengers for practical guidance. This combination can strengthen a programme, but it also creates the risk that audiences attribute the whole message to whichever source they judge most credible, including on topics where that source has no special standing. A programme that specifies which source is responsible for which content, and that presents that division clearly to the audience, reduces this risk and supports accurate interpretation.

Measuring trust presents methodological difficulties that deserve explicit attention. Trust is typically assessed through survey instruments that ask respondents to agree or disagree with statements about a named institution, and responses are sensitive to the wording of those statements, the identity of the institution named and the context in which the question is asked. A single global trust score averages across institutions and settings that audiences may regard very differently, producing a figure that is difficult to interpret and difficult to act on. Measures that ask about trust in specific sources, such as a local clinic, a health system, a public agency or a community organisation, yield more actionable information because they identify where credibility lies and where it is lacking. Repeated measurement over time reveals whether trust is stable or shifting, and it can detect the effects of events that alter public confidence. Reporting the source, the wording and the timing of trust measures is therefore essential if results are to be comparable and interpretable.

Cultural adaptation also requires a position on whether culture is a property of groups or of individuals. Approaches that treat culture as a fixed attribute of a population risk reinforcing stereotypes and overlooking variation within communities, while approaches that treat it as entirely personal lose the shared meanings that make communication resonant. A defensible middle position recognises that groups share histories, languages and expectations while individuals differ in their attachment to those patterns and in the aspects of identity that matter most to them. This position has practical implications: it argues for thoughtful segmentation rather than crude categorisation, for pre-testing adapted content with representative audiences, and for treating adaptation as a hypothesis to be tested rather than an assumption to be relied upon. Where adaptation is based on genuine community input, it is more likely to reflect meanings that matter locally and less likely to reproduce the assumptions of the programme team.

Equity considerations connect trust and cultural relevance to the wider goal of reducing disparities. Populations that experience lower trust in institutions are often those with the greatest unmet health needs, so a programme that fails to secure trust may widen rather than narrow disparities even if its messages are well designed. Similarly, a programme that achieves relevance for the majority while overlooking the experiences of minority groups within its audience may improve average outcomes while leaving the least served behind. Addressing these risks requires measuring trust and relevance across population segments rather than in aggregate, attending to the experiences that shape trust in each segment, and being willing to change the sources and content through which communication is delivered. It also requires patience, since trust is built gradually and can be lost quickly, and a programme that treats trust building as a short-term task will likely find its gains fragile.

Taken together, these considerations suggest that health communication programmes should treat message reception and source trust as separate evaluation objects and should measure both in relation to specific sources and specific population segments. Doing so allows a programme to diagnose whether a shortfall lies in how a message is designed or in the credibility of the source delivering it, and to select an intervention that matches the actual constraint. It also supports a more honest account of what a programme has achieved, since improvements in message comprehension are not evidence of improved trust and improvements in trust are not evidence of behaviour change. The framework developed in this paper is offered in that spirit, as a way of organising measurement so that each element of the communication system can be assessed in terms appropriate to it rather than combined into a score that conceals more than it reveals.

The measurement of trust has developed along several lines that are not always reconciled. Some instruments assess generalised trust in the healthcare system, others assess trust in a specific clinician or institution, and others assess mistrust as a distinct construct rather than the absence of trust. These choices matter because mistrust and trust are not simple opposites; a person may distrust the system as a whole while trusting a particular clinician, or may trust the system in general while distrusting the specific institution with which they are asked to interact. Instruments that force a single global judgement average across these distinctions and produce a figure that is difficult to interpret. For programme evaluation, measures that name the source and the domain of trust yield more actionable information, because they indicate where credibility resides and where interventions should focus. Reporting the instrument, the source and the timing of measurement allows results to be compared across studies and interpreted in context.

Cultural relevance is sometimes treated as a quality of content and sometimes as a feature of the relationship between a programme and a community. When treated purely as content, relevance is achieved by adapting language, imagery and examples to the audience. When treated as relational, relevance includes the community's participation in defining the problem, its influence over how the programme is designed and its involvement in interpreting results. The relational interpretation is more demanding but potentially more durable, because content that is adapted without community involvement may still miss the meanings that matter locally, and may be experienced as a programme speaking about a community rather than with it. Programmes should therefore consider not only whether their content reflects the audience but also whether the audience has a hand in shaping it, and they should be prepared to adjust content in response to what community participants identify as important. This engagement also builds the trust that content alone cannot create.

Message pre-testing is a practical mechanism for connecting design intent to audience response, and it deserves more systematic use than it often receives. Pre-testing with representative audiences can reveal whether a message is understood as intended, whether it raises concerns the designers did not anticipate, and whether it inadvertently signals meanings the designers did not intend. It can also identify the segments for which a message works and those for which it does not, allowing refinement before distribution. Pre-testing is not a substitute for outcome evaluation, because comprehension in a test setting does not establish behaviour change, but it prevents the avoidable error of distributing a message that fails on its own terms. Programmes should document what was tested, with whom, and what was changed as a result, so that the relationship between design decisions and audience response is visible. This record also supports accountability, since it shows that the programme examined its assumptions rather than relying on them.

Source strategy is a decision about which messengers a programme uses and how their contributions are combined. Clinicians, community health workers, peer educators, faith leaders and entertainment figures each carry different forms of credibility with different audiences, and a programme that uses several should be clear about which source speaks to which content. Combining a trusted community messenger with clinical content reviewed by qualified professionals can capture both local credibility and technical accuracy, but it requires coordination so that the audience receives a coherent message rather than competing signals. Where sources disagree, whether in substance or in emphasis, the audience may discount the whole communication. Programmes should therefore establish clear roles, agree on content before delivery and monitor whether audiences experience the communication as consistent. Investing in the messengers' preparation, including their understanding of the health content and of the boundaries of their role, improves consistency and reduces the risk of unintended inaccuracy.

Equity runs through the measurement of trust and relevance because both are unevenly distributed and both are shaped by histories that differ across communities. A programme that measures trust in aggregate may find an acceptable overall level while some segments hold very low trust, and it may then design a universal approach that fails precisely where it is most needed. Disaggregating measures by population segment exposes these differences and allows communication to be targeted where trust is weakest and needs are greatest. It also allows a programme to see whether its own activities are improving trust over time or leaving it unchanged. Because trust influences whether people seek care, use services and follow advice, disparities in trust contribute to disparities in outcomes, and addressing them is not merely a matter of communication quality but of equitable service. Programmes should therefore treat trust measurement as an equity instrument and should be prepared to change their sources, content and delivery when the evidence shows that some segments remain unreached.

Community engagement is a practical route to both relevance and trust, and its effects are often underestimated because they are difficult to quantify. Engagement can take many forms, from consultation on content to participation in governance, and its depth determines its value. Consultation may improve a message without altering the programme's approach, while participation in governance may change which problems are addressed and how success is defined. Deeper engagement is more demanding and slower, but it is more likely to produce communication that a community experiences as its own rather than as something done to it. It also builds the relationships and confidence that sustain a programme through difficulty. Programmes should therefore choose the depth of engagement that their objectives require, resource it realistically and be prepared to act on what they learn rather than treating engagement as a formality to be completed before delivery begins.

Feedback mechanisms allow a programme to detect problems that its formal measures may miss. Complaints, questions that recur, confusion about eligibility, reports of misinformation and accounts of poor experience all carry information about how a programme is received and where its communication is failing. These signals are often treated as operational nuisances rather than as data, and they are frequently not collected systematically. A programme that records and reviews them can identify issues before they become entrenched and can adjust its communication accordingly. The framework recommends that feedback channels be accessible, that responses be timely and that recurring themes be examined to determine whether they reflect a communication problem or a service problem. Distinguishing between the two matters, because the remedies differ, and conflating them may lead a programme to revise its messages when the real difficulty lies in the service the messages describe.

Correction processes are necessary because health information changes and because inaccurate claims circulate regardless of a programme's care. Guidance on recommended behaviours, eligibility for services and the risks associated with treatments are revised over time, and content produced earlier may become outdated. A programme should therefore have a means of identifying inaccurate or superseded content, correcting it across the channels through which it has circulated, and informing audiences that have acted on it. This is more difficult than producing content in the first place, because it requires reaching people who encountered the earlier version and addressing the confidence they placed in it. Where a programme has built trust, correction is easier because audiences are more willing to accept a revised message. Where it has not, correction may be treated with suspicion, which is one reason why investing in trust is not merely a matter of message effectiveness but of resilience when errors occur.

Capacity and sustainability shape what a communication programme can achieve over time. Trust building, relationship maintenance and quality content production all require ongoing investment rather than one-off funding, and programmes that are resourced as short projects often find that their gains dissipate when the project ends. Sustainability requires that the activities be embedded in the organisations that will continue them, that the staff who carry out the work be supported, and that the relationships built with communities be maintained rather than abandoned when funding cycles change. It also requires that programmes be honest about what they can sustain, so that communities are not promised services that will disappear. Where sustainability is planned from the outset, a programme can build capabilities and relationships that outlast any single funding period, and its contribution to trust and relevance can accumulate rather than resetting with each new initiative.

Comparative learning across programmes is limited by inconsistent measurement, and consistency would allow the field to accumulate evidence rather than repeat it. Where programmes measure trust and relevance differently, their results cannot be compared and lessons cannot be transferred. The framework recommends that programmes report the instruments, sources, timing and methods used in measuring trust and relevance, so that their findings can be interpreted in relation to others even where the instruments differ. It also recommends that commonly used measures be considered where they are appropriate, since shared measures facilitate comparison. Consistency is not a constraint on local adaptation; programmes can use shared measures alongside measures that reflect their particular context. Reporting both allows a programme to serve its own learning needs while contributing to a body of evidence that others can use, which is how knowledge about health communication advances over time.

The framework's central recommendation is that programmes state, before they begin, which element of the communication system they intend to improve, and that they choose measures that can detect change at that element. A programme seeking better comprehension should not claim improved trust, and one seeking improved trust should not claim changed behaviour. Maintaining these distinctions is not merely a matter of academic precision; it determines whether a programme's learning can guide its next step and whether its claims can withstand later scrutiny.

3.2. Findings, Evaluation Boundaries, and Limitations

The contribution is a rule for identifying what a trust claim refers to, rather than a universal threshold for declaring trust building. A message could improve one source-specific judgement while broader institutional distrust remains unchanged. Reporting that narrower result accurately is more informative than labelling the programme successful or unsuccessful on an undefined trust outcome. [248-267]

A comparative evaluation should state the primary construct, effect measure and observation period in advance. Report response rates and missing follow-up by group, including who lacked an opportunity to receive the message. A selected sample of satisfied service users is insufficient for a population-wide claim. Where respondents express concern about a specific service failure, the evaluation should record the concern without treating disagreement as measurement error. [239]

The framework has not been validated, and selected sources do not represent every population or trust relation. Published scales require further assessment when adapted. The proposed relationships among relevance, source confidence and action remain hypotheses. Future work should compare a defined adaptation, preserve service conditions where possible and examine trust in both the service source and the community partner. [240]

The framework clarifies why culturally relevant messaging and institutional trust must be treated as separate measurement objects. A message can resonate with an audience's cultural expectations while the institution delivering it remains distrusted, and an institution can enjoy general confidence while its specific messages fail to connect. Combining these into a single satisfaction or engagement score conceals which of them the programme has actually influenced. By separating message reception from source trust, the framework allows evaluators to diagnose the source of a problem and to select an intervention that matches it. Where trust is the binding constraint, refining wording will not help; the programme must address credibility, representation and prior experience of care. Where message design is the constraint, trust-building alone will not improve comprehension or intent. This diagnostic clarity is the framework's principal practical contribution and is directly relevant to programmes operating in communities with a legitimate history of mistreatment.

The framework also encourages source-specific rather than global measures of trust. Communities often distinguish between a trusted local clinic, a distant health system, a government agency and a community organisation, and they may hold sharply different views of each. A single trust score averages these differences away and hides the very relationships a programme can influence. Measuring trust in each relevant source allows a programme to identify which intermediary carries credibility with the intended audience and to route communication accordingly. Community health workers and faith-based organisations frequently occupy this bridging role, and their standing is not captured by trust in the formal health system. The framework therefore treats trust as a relationship among specific actors rather than a general attitude, and it recommends that measures name the source. This positions trust measurement as an actionable input to partnership decisions rather than a diffuse indicator reported for its own sake.

Cultural relevance introduces a further complication because

adaptation can occur at different levels and with different degrees of fidelity. Surface adaptations, such as language and imagery, affect accessibility without altering the underlying behavioural logic, while deep adaptations change how a health issue is framed, which consequences are emphasised and which actions are made salient. A programme must decide which level its objective requires and must select measures that can detect change at that level. Using a shallow instrument to evaluate deep adaptation, or the opposite, produces misleading conclusions about effectiveness. The framework consequently recommends that cultural adaptation be specified before measurement, that the expected mechanism be named, and that the comparison hold constant everything the adaptation is not intended to change. This rigour preserves the value of cultural tailoring as a deliberate design strategy rather than a decorative adjustment.

Finally, the framework acknowledges that trust and cultural relevance are relational and dynamic rather than fixed attributes of a message. Confidence in a source can rise or fall in response to specific events, media coverage or personal encounters, and the meaning of cultural symbols can shift over time. Measures applied once therefore provide a snapshot rather than a durable finding. Programmes should repeat measurement, track shifts in the trust profile of the sources they rely on, and be prepared to adjust their communication strategy when the relational context changes. This responsiveness is especially important in communities with recent negative experiences of institutions. Combining repeated source-specific trust measures with clearly specified cultural adaptation yields an evaluation that is both interpretable and usable. The framework thus offers a disciplined way to link message design and source strategy, and it directs attention to the relationships that ultimately determine whether health communication is believed and acted upon.

A further implication concerns the relationship between trust, relevance and behaviour over time. Trust is not a fixed attribute of a source, and relevance is not a permanent property of a message; both are shaped by experience, events and the wider information environment. A programme that measures them once and treats the result as durable risks acting on a picture that has already changed. The framework therefore recommends repeated measurement at intervals that reflect the pace at which the relevant relationships evolve, and it advises that changes in the trust profile of a relied-upon source prompt a review of the communication strategy rather than a routine continuation. It also suggests that programmes document the assumptions they hold about why a source is trusted or why content is considered relevant, so that those assumptions can be tested rather than presumed. Where measurement shows that improved message design has not translated into greater willingness to act, the framework directs attention to the relational conditions that message design cannot alter. This keeps evaluation focused on the binding constraint rather than on the component that is easiest to modify.

Taken together, the framework's recommendations describe a communication practice that is measured as carefully as it is designed. Separating message reception from source trust, naming the source in trust measures, specifying the level of cultural adaptation, and reviewing both over time together produce an evaluation capable of diagnosing where a programme is failing and why. Programmes that adopt this discipline will be better placed to allocate effort between message refinement and relationship building, and better able to explain their results to funders and communities alike. The framework does not claim that these measures are easy to implement, only that using them yields a more defensible account of what health communication has achieved and a clearer basis for improving it.

4. Conclusion

This paper has developed a framework that treats culturally relevant messaging and source-specific trust as distinct evaluation objects rather than components of a single engagement measure. Message reception and institutional trust can move independently, and a programme that combines them into one score cannot tell which of them requires attention. By separating the two, the framework allows evaluators to diagnose whether a shortfall lies in how a message is designed or in the credibility of the source delivering it, and to select an intervention that matches the actual constraint. It further recommends that trust be measured in relation to named sources, since communities distinguish sharply between local clinics, health systems, public agencies and community organisations, and since intermediaries such as community health workers often carry credibility that formal systems lack. The framework also specifies that cultural adaptation be defined in advance, whether shallow or deep, so that measurement targets the level at which change is intended. Finally, it emphasises that trust and relevance shift over time and should be monitored repeatedly. Applied together, these elements produce communication that is believed as well as understood. Repeating these measures over time, and acting on what they reveal, will determine whether the framework improves communication in practice.

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