



What Amplifi Multi-Level Comprehension Framework tells us:

The Comprehension Gap Model: Perception, Reality, and Need

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WHAT GOOD CONSUMER UNDERSTANDING SHOULD LOOK LIKE

Introduction

In the last article, we examined the emotional impact of disrupted comprehension: how confusion can turn into anxiety, how uncertainty can create stress, and how these feelings can drive consumers away from the very information designed to protect them. In this article, we examine the significant gap between what consumers perceive they understand after reading credit card agreements and their actual ability to apply that knowledge in practice.

Conducted in collaboration with Professor Maggie Chen and the Cardiff University research team, and funded by UKFIN+, the study uses the Amplifi Multi-Level Comprehension Framework to show that the central issue is not always a complete lack of understanding. More often, it is an illusion of familiarity: consumers may feel they recognise the language and grasp the overall meaning, while still struggling to interpret key terms, assess costs, compare options, or make informed decisions.

Our findings suggest that this gap is not only caused by individual capability. It is also shaped by the agreements themselves, including poor layout, dense jargon, incoherence, and time pressure.

By focusing on this illusion of understanding, driven by a reader's familiarity, we can show that current agreements create structural barriers. These barriers prevent users from moving from surface-level knowledge to deeper comprehension. This sets up the detailed analysis that follows.



What Users Think They Know

When consumers are asked about whether they understand credit card agreements, they often respond with confidence. Terms like credit limit, minimum payment, and interest rate are reported as being well understood, with high familiarity scores of above 4 out of 5 on average in our study. For example, minimum payment (4.15), credit limit (4.12), and fees and charges (4.09) were ranked highest in terms of readers' familiarity, suggesting that most people believe they have already had a strong grasp of these concepts before reading the agreement.

In contrast, APR, repayment terms, and regulatory disclosures were consistently ranked among the hardest sections of the agreement to understand, with Tariff of Charges scoring the lowest familiarity at 2.94 out of 5.

TERM	AVERAGE
Tariff of Charges	2.94
Cash Advance	3.09
Annual Percentage Rate (APR)	3.27
Persistent Debt	3.42
Promotional Rates	3.50
Balance Transfer	3.55
Promotional Rate	3.56
Total Payable Amount	3.91
Right to Withdraw	3.94
Interest Rates	4.06
Fees and Charges	4.09
Credit Limit	4.12
Minimum Payment	4.15

Table 1 shows a fuller list of the familiarity scores that shows how familiar these credit-related terms were to readers. However, recognition does not equal comprehension. Neither does it mean that readers can transfer their familiarity into their decision-making in all sorts of real-life scenarios. Many of these terms are commonly encountered in advertisements, bank websites, or everyday conversations, so users feel confident in saying "I know what this means." Yet the real test of understanding lies in whether a consumer can use the concept to make a financial decision. For example, knowing the definition of "minimum payment" is greatly different from understanding that paying only the minimum will extend the repayment time, increasing a borrower's total costs and potentially leading to other consequences.

Table 1. Familiarity with Credit Card Terms

Awareness of Rights and Obligations

This pattern is also visible in participants' reported awareness of their rights and obligations under a credit card agreement. This matters because rights and obligations are not peripheral information; they are the parts of the agreement that help consumers understand what they can do, what they are responsible for, and how they are protected if something goes wrong.

When asked about their awareness, most participants placed themselves in the middle category of "somewhat aware" (59%). Only 3% said they were fully aware, while none said they were completely unaware (Figure 1). On the surface, this suggests that consumers do not see themselves as uninformed. But the distribution also points to a more important issue for consumer understanding research: reported awareness may be inflated by familiarity, social desirability, or a reluctance to admit not knowing.

In other words, "somewhat aware" does not necessarily mean that consumers can apply their rights in practice. It may simply reflect enough familiarity with the language to feel partially informed. This becomes problematic where the information is protective, such as withdrawal rights, dispute processes, liability, or statutory protections.

Figure 1 reinforces this concern. No participants described themselves as "not aware," yet 77% placed themselves in the "slightly aware" or "somewhat aware" categories. This suggests a calibrated form of uncertainty: participants recognised that their knowledge was incomplete, but avoided presenting themselves as entirely uninformed. Only 3% reported being "fully aware," indicating that very few felt they had a detailed grasp of key protections, such as cooling-off rights or Section 75 protections under the Consumer Credit Act.

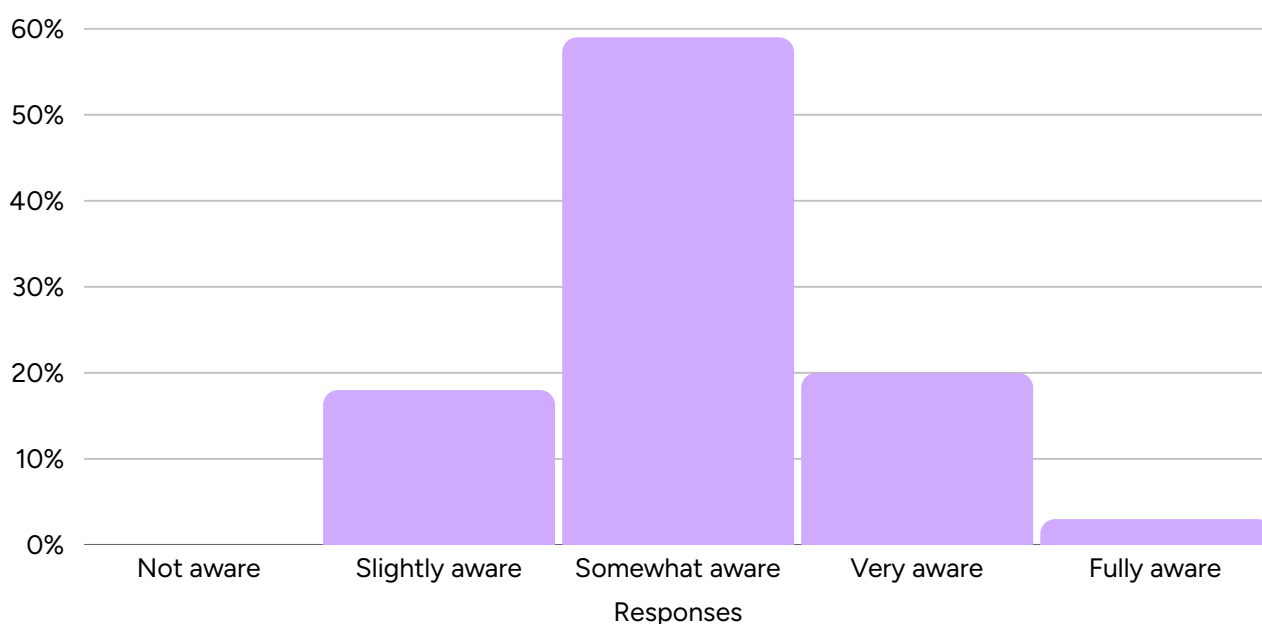


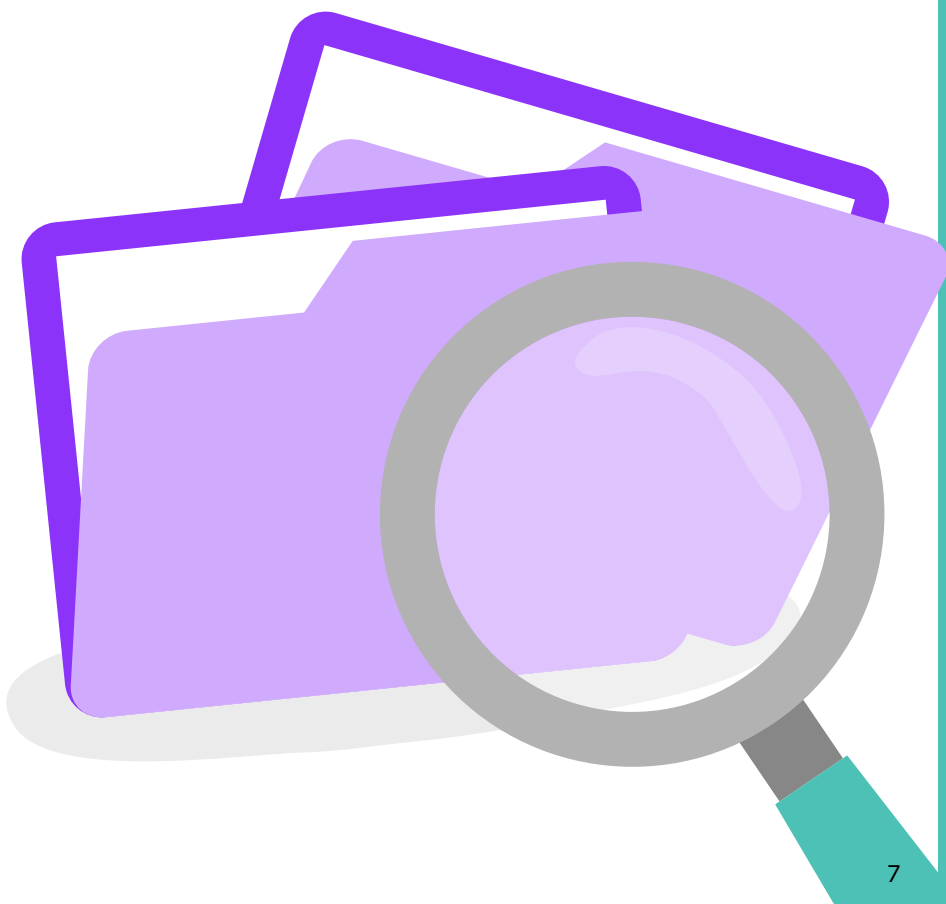
Figure 1. Awareness of Rights and Obligations Under a Credit Card Agreement

This gap can be connected to the concept of the **illusion of explanatory depth (IOED)** (Rozenblit & Keil, 2002), which shows that people often believe they understand complex concepts more deeply than they actually do. In the context of credit cards, consumers recognise the terms and assume comprehension, but when required to explain, calculate, or apply, their understanding is exposed as shallow.

The term was first introduced by Rozenblit and Keil (2002), who showed that people often rate their knowledge of everyday mechanisms, such as how zippers or bicycles work very highly. But when pressed to explain the steps in detail, their confidence drops sharply, because their mental model is incomplete. Furthermore, they are often surprised by their limited explanations.

Accessibility of Mathematical Concepts

Math concepts show this gap between reported familiarity and applicable understanding even more clearly



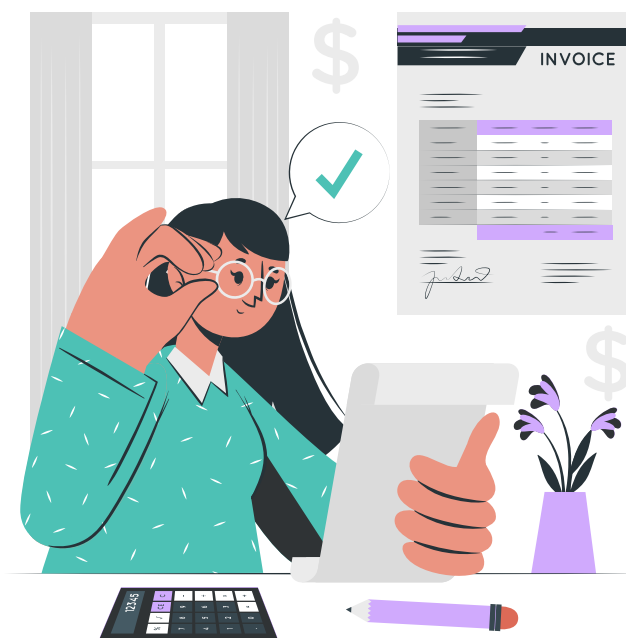
While 41% of users said the mathematical concepts were “mostly understandable,” only 6% reported finding them “very easy to understand,” and 21% admitted to struggling with most of them.

Response	Percentage
Very easy to understand – explanations clear and straightforward	6%
Mostly understandable – occasionally needed to review	41%
Somewhat understandable – some parts confusing	32%
Difficult to understand – struggled with most concepts	21%

Table 2. Accessibility and Understanding of Mathematical Concepts in Credit Agreements

This difficulty with financial maths is consistent with broader evidence of **low financial numeracy** in consumer populations. Research on financial literacy has shown that many adults struggle with concepts like compound interest, debt accumulation, and risk diversification. Credit card agreements require users to apply exactly these skills, yet the study demonstrates that only a minority are capable of doing so.

What this tells us is that consumers often rate themselves highly on familiarity because they recognise the language, not because they understand the mechanics



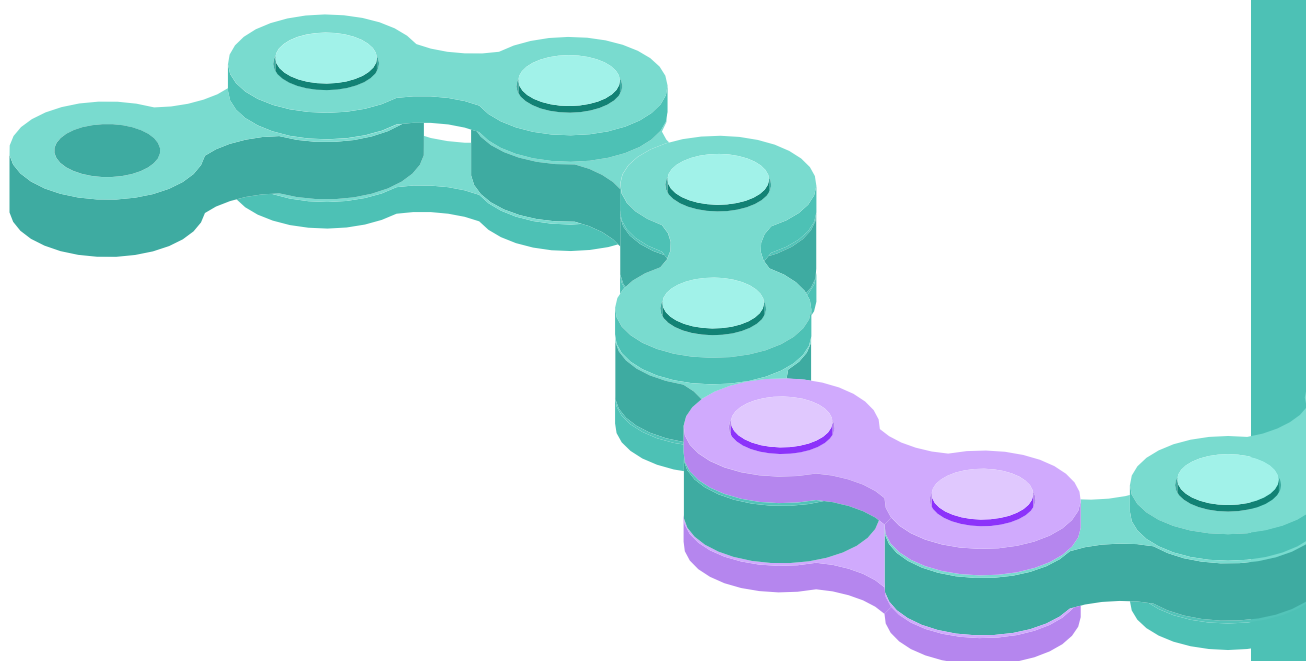
Why is this a problem?

This creates a dangerous illusion: users feel confident enough to proceed with credit products but lack the deeper comprehension needed to anticipate consequences, compare options, or protect their rights.

High self-reported familiarity, combined with low regulatory awareness and poor mathematical comprehension, creates a false sense of security. Consumers may believe they understand agreements well enough, when in fact their understanding is often partial and insufficient for sound decision-making. This illusion of familiarity can lead to misunderstanding such as the consequences of minimum payments, failing to act on consumer rights such as withdrawal, misjudging regulatory protections in disputes, and underestimating the true cost of credit.

This problem also carries important implications for businesses and regulators. For businesses, it complicates risk management by introducing a layer of uncertainty that is rarely captured in conventional compliance processes: customers may appear informed while still lacking the understanding needed to make robust decisions. This can increase complaints, disputes, remediation burdens, and regulatory exposure. For regulators, it suggests that disclosure alone is not enough.

If agreements do not support genuine comprehension, then transparency in form may still fail in practice.



What the Amplifi Comprehension Framework Tells Us

This study used the Amplifi Multi-Level Comprehension Framework®, a model also used by the FCA in its own consumer testing research. This framework is customised to assess comprehension across six levels :

1. **Main (Purpose Recognition):** Could the participant identify the overall purpose of the agreement?
2. **Basic Recall:** Could they remember specific facts (such as the APR or billing cycle)?
3. **Inference:** Could they interpret meaning, for example, why a clause exists or what it implies?
4. **Applied:** Could they apply the information to a practical scenario, such as calculating interest or understanding the cost of missed payments?
5. **Reflection:** Could they think critically about the relevance, fairness, or clarity of terms?
6. **Action:** Could they demonstrate confidence in making a financial decision based on the agreement?



Testing Credit Agreements – what do users understand?

Each participant completed comprehension questions mapped to these six levels. Scores were then expressed as the percentage of participants who answered correctly or appropriately at each level.

To test how consumers engage with real-world credit documentation, we selected two publicly available credit card agreements: Nationwide and Jaja. These agreements were chosen because they represent live market-facing documents that consumers may encounter in practice, rather than simplified or artificial test materials. This allowed us to assess whether current credit agreements support understanding not just at the level of recognition, but also at the more demanding levels of interpretation, application, and action.

The results revealed a consistent pattern across both agreements. Participants performed strongly at the higher-level recognition and recall stages. For example, 88.24% of participants reviewing the Nationwide agreement correctly identified the main purpose of the document. However, performance declined sharply once users were required to interpret the information, apply it to practical scenarios, or use it to make decisions

Amplifi Multi-Level Comprehension Result

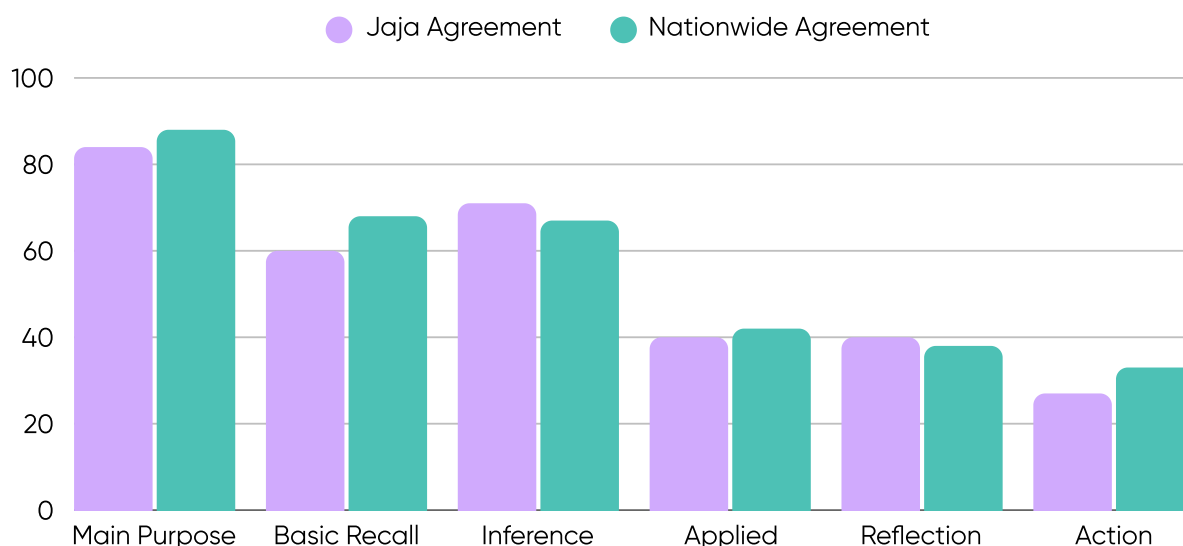


Figure 2. Comprehension by Level

Results

1. Basic-Level Recall is Common but Not Enough

This pattern reveals the problem of surface-level understanding. Users can restate a clause, for example, “the APR is 24.9%”, but cannot explain what that means for their monthly balance, or whether it is fair compared to competitors. The ability for readers to remember key facts is enhanced by design features such as familiar fonts, well-structured sections, or repeated terms that make documents easier to scan. But, while this improves recall, it does not improve comprehension. In fact, it can give consumers the impression that they understand more than they really do.

2. Major issues at the Applied Level: The Maths Problem

The steepest decline appears at the applied level where comprehension requires using numbers. Participants consistently struggled with tasks such as calculating monthly interest, estimating the effect of making only the minimum payment, or understanding how promotional balance transfers work. Many users misunderstood critical mechanisms, including how behaviour like minimum payments or missed due dates impacted long-term financial health.

Without clear worked examples or scenario-based illustrations, consumers are unable to carry out the calculations that determine their financial outcomes. This creates a significant risk: people sign contracts they cannot use to predict real costs.

This connects directly to the **illusion of explanatory depth** in cognitive psychology: people believe they understand a concept because they can remember or repeat it, but their knowledge breaks down when asked to apply or explain it.

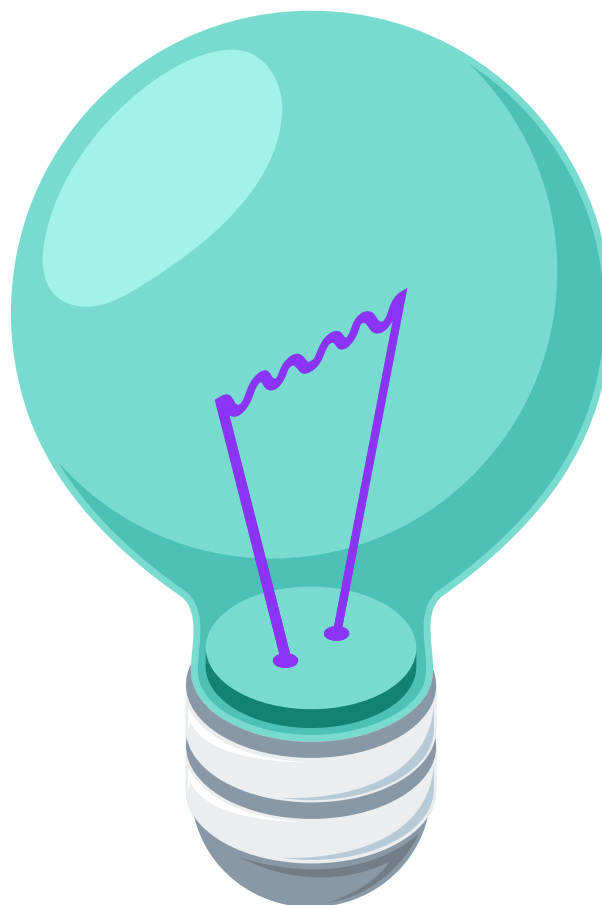


3. Comprehension Declined with Increased Complexity

True comprehension requires more than remembering facts; it enables reflection and action. Our results show that less than half of participants were able to correctly reflect and act on the information:

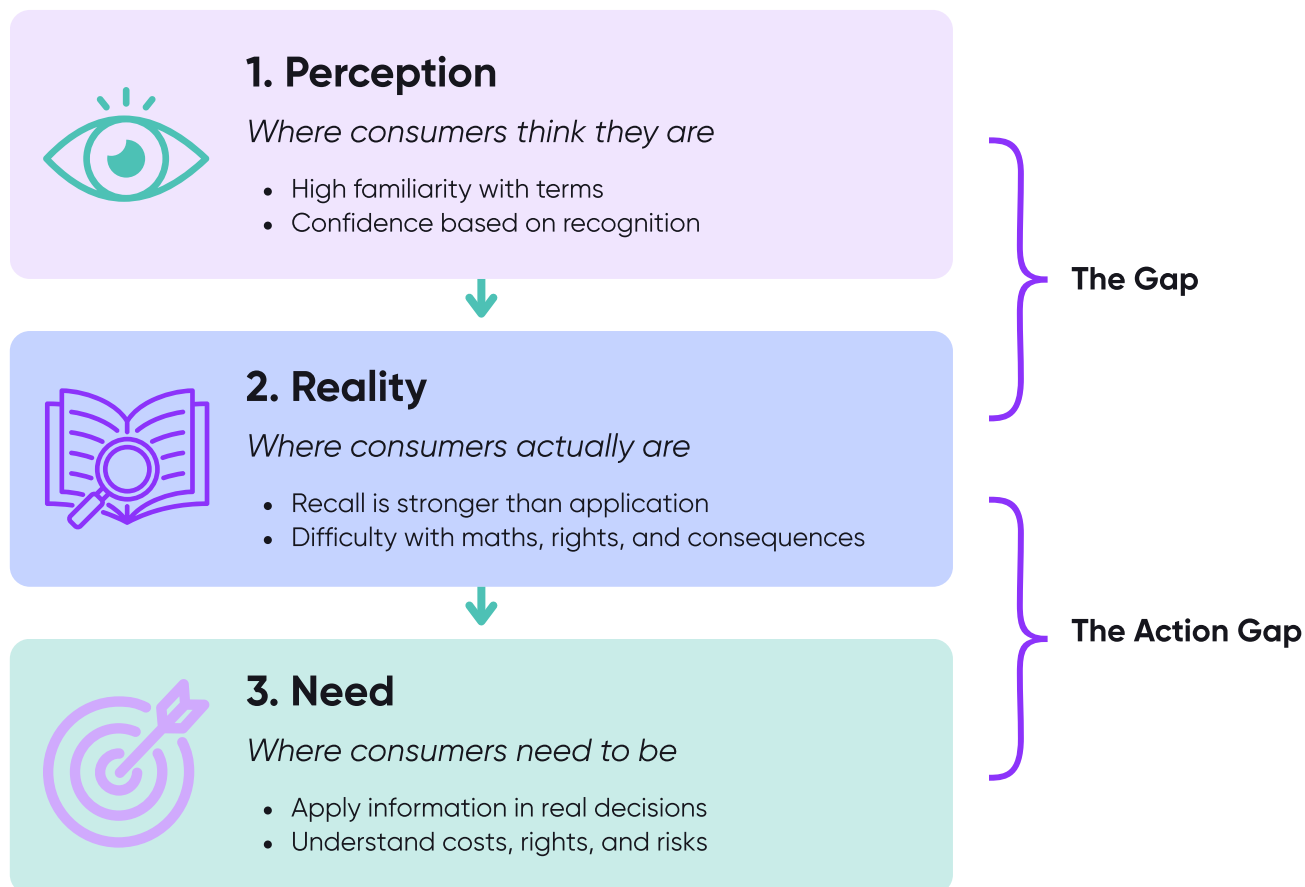
- As tasks progressed from basic recall to inference, applied, and reflection, comprehension deteriorated significantly.
- While most users could restate a clause (e.g., “interest is 24.9%”), few could explain its practical implications or predict outcomes.
- When asked about consequences such as persistent debt or compounding interest, correct answers fell to 15–20%.
- On judgment-based questions, fewer than 30% of participants provided complete and accurate responses.

This means that most users are passive readers rather than active decision-makers. They follow the rules of the agreement but do not use the agreement to guide their choices or protect their own financial interests. Both agreements we tested seem to have similar levels of self-efficacy scores, indicating that the currently prevalent contracts may be common across the industry. The lowest score across all documents was: “I feel confident that I can explain the terms to someone else if needed”, with a mean score of 2.29 for the Nationwide credit card agreement and 2.31 for the Jaja credit card agreement.



The Comprehension Gap Model: Perception, Reality, and Need

The findings from this study can be best understood through a three-part gap model that captures the distance between consumer perception, consumer reality, and the level of comprehension that is genuinely required to manage credit responsibly



Risk created by the gap

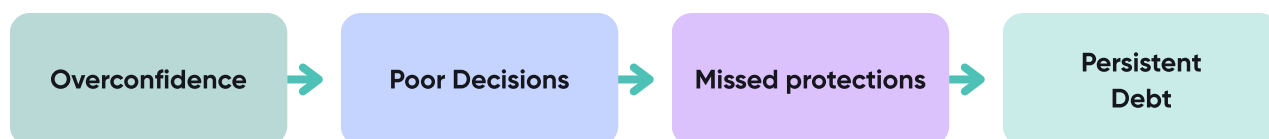


Figure 3. Comprehension Gap Model



1. Where Consumers *Think* They Are

At the **perception level**, consumers believe they already understand credit card agreements. Before reading the documents, participants rated themselves highly familiar with terms such as minimum payment (4.15), credit limit (4.12), and interest rate (4.06). Nearly 60% described themselves as “somewhat aware” of their rights and obligations, with another 21% saying they were “very aware.”

In other words, most consumers enter into agreements confident that they have enough knowledge to manage them effectively. This perception is not surprising: these terms are frequently used in advertising, financial apps, and media, which makes them feel familiar.

But as cognitive research reminds us, familiarity creates the illusion of knowledge and recognition is mistaken for understanding. This creates a perception of confidence: people believe they understand enough to manage a credit card. This is mostly surface recognition. They are familiar with some of the terms, but not the mechanics.

2. Where Consumers *Actually* Are

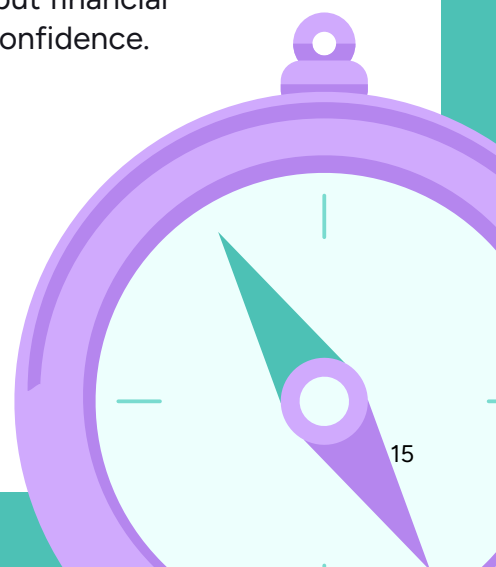
The **reality level** tells a very different story. When comprehension was tested, recall was fairly strong, with 69% of Nationwide users and 59% of Jaja users able to remember factual details. But the scores collapsed when tasks required application or reflection. Fewer than half could calculate the effect of interest or penalties.

The reality, then, is that consumers are operating at a much lower level than they perceive, often unable to use the very agreements they believe they understand.

3. Where Consumers *Need* to Be

The **need level** represents where consumers must be if credit card agreements are to work as intended.

At this stage, users are not only recalling terms but applying them in practice, reflecting on their meaning, and making informed decisions. They can calculate repayment timelines, recognise how minimum payments drive persistent debt, compare offers across providers, and act on their rights such as the ability to withdraw or dispute charges. In short, the need level reflects not just comprehension but financial competence, the ability to manage credit safely, fairly, and with confidence.



Why This Matters

The gap model highlights a troubling double gap. Consumers are behind where they think they are, because their confidence rests on recognition rather than use. They are also behind where they need to be in order to act effectively. This leads to misplaced confidence, poor financial decisions, and missed protections. A consumer who thinks they understand “minimum payments” may unknowingly fall into persistent debt. Someone who recognises the term “APR” may still misjudge the cost of borrowing. And without regulatory awareness, many do not know how to protect themselves when problems arise.

This gap creates several risks:

- **Overconfidence:** Believing they know enough, users don’t seek advice or clarity.
- **Poor Decisions:** Users can’t evaluate whether a promotional offer or balance transfer is truly beneficial.
- **Missed Protections:** Weak awareness of rights (withdrawal, dispute resolution) leaves them vulnerable.
- **Persistent Debt:** People who think they understand “minimum payment” don’t realise it prolongs debt.

The two-level gap between what they think they know and what they actually know creates real risks: overconfidence, poor product choices, underestimation of costs, and missed protections.

The gap model offers a clear lens on the problem of financial literacy. It shows that the issue is not only that users lack knowledge, but that they misjudge their own competence.

For credit card agreements, the implication is equally clear. Plain language is not sufficient as users need additional support such as worked examples, scenario-based explanations, and clearer pathways to action.

They must actively support the user’s progression up the gap model which requires these documents to be intelligible.

Until agreements are designed to close this gap, consumers will remain confident but underprepared. They will continue to sign contracts they can recite but cannot truly use, exposing themselves to persistent debt and missed opportunities for protection

For both providers and regulators, the gap model underscores that credit card agreements require more than just clear wording. They must actively bridge the gap between perception, reality, and consumer needs by offering truly supportive measures.

What Good Consumer Understanding Should Look Like

The FCA's Consumer Duty rightly treats consumer understanding as a key outcome. The harder question is what "good" understanding actually looks like, and how firms should evidence it. What matters is proportionate, evidence-based understanding that reflects how people actually read, interpret, and use information in decisions.

Why single metrics fall short

No single measure can capture understanding well. This matters because the FCA does not simply expect firms to publish clear communications. Under Consumer Duty, firms are required to test whether communications are likely to be understood, then monitor, test, and evidence whether good consumer understanding is being achieved in practice. The FCA's guidance is explicit that firms must "assess, test, understand and evidence" the outcomes their customers receive, including whether communications support informed decisions.

Quiz scores, self-reported confidence, or journey completion rates each reveal only part of the picture. A customer may know what APR means but still apply it wrongly in practice. Another may answer test questions correctly but make poor decisions when fees, timing, or trade-offs become real.

Relying on one metric therefore creates false assurance. It can mask where understanding breaks down, whether in recall, interpretation, application, or decision-making. It also weakens diagnosis, because firms cannot tell whether the problem lies in the language, structure, context, timing, format, or consumers' prior knowledge. Just as importantly, single metrics can hide differences across vulnerable groups, literacy levels, and language backgrounds. This is why firms need richer, multi-method evidence: not only to show that communications are clear in principle, but to demonstrate that consumers can understand and use them in practice.



The case for a composite, dynamic threshold

A more credible approach is a composite threshold built from multiple measures. It should be:

- **Dynamic:** responsive to product complexity, consumer capability, and context
- **Multidimensional:** covering awareness, interpretation, application, and decision-use
- **Diagnostic:** showing not just whether understanding is weak, but where and why it fails

In practice, this means combining comprehension tasks, scenario-based decision tests, behavioural indicators, confidence calibration, equity checks across consumer groups, and document-level intelligibility measures.

Applying the Amplifi Multi-Level Comprehension Framework

The Amplifi Multi-Level Comprehension Framework© provides a practical basis for this approach. It treats understanding not as a single score, but as a progression: from recognition, to applied reasoning, to reflective and informed action.

This gives firms two advantages. First, it improves diagnosis by showing where comprehension fails, such as strong recall but weak application. Second, it supports proportionate benchmarking by linking thresholds to the purpose and risk of the document. For instance, a repayment schedule may require strong applied understanding; a general rights notice may require basic awareness.

A firm might, for example, expect:

- 70% to demonstrate awareness or recognition
- 60% to interpret information correctly in applied questions
- 50% to use it successfully in a realistic decision scenario

These benchmarks should evolve over time and hold across relevant consumer groups, not just the average reader.



Why this matters

This shifts assurance away from box-ticking and towards evidence-based improvement. That shift is increasingly aligned with the FCA's direction under Consumer Duty, where firms are expected to monitor, test, understand, and evidence the outcomes customers receive, rather than simply demonstrate that information was disclosed. The FCA's recent work on consumer understanding also points to the need for communication design, testing, monitoring, and governance to operate as a coherent end-to-end process, supported by richer evidence about where consumers struggle and why.

For firms, this means good consumer understanding cannot be evidenced by a single quiz score, readability metric, or self-reported confidence measure. It requires a broader evidence base that shows what consumers can actually do with information, at a level proportionate to the risk and importance of the decision. This provides a clearer basis for testing, benchmarking, redesigning, and improving communications over time.

Towards regulatory practice

Rather than asking, "What percentage is enough?", firms and regulators should ask:

- Where does comprehension failure create harm for this product and audience?
- What mix of measures best captures understanding in context?
- How should thresholds vary by document purpose, decision significance, and consumer diversity?
- Where are the breakdowns, and what interventions address them?
- Do results hold across vulnerable and lower-literacy groups?
- How will findings feed into redesign, monitoring, and continuous improvement?

Bottom line: The bottom line is that good consumer understanding cannot be reduced to a single percentage or one-off test. It requires a composite, context-sensitive evidence base that shows where understanding fails, why it fails, and what firms are doing to improve outcomes.

This is consistent with the FCA's broader move towards richer outcomes monitoring, where firms are expected to use data and insight to identify risks, act on poor outcomes, and evidence that their communications are working in practice.

