The Neurocognitive and Social Impact of Accent Familiarity: An Investigation Into Memory Recall and Perceptual Bias

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Over 47 million non-native English speakers navigate American institutions, facing an invisible barrier beyond legislation: unconscious, neurologically-driven accent bias. Listener judgments across clarity, intelligence, credibility, friendliness, and comfort shape ESL speakers' employability, social acceptance, justice, and mental health. This study is novel in unifying the cognitive and social dimensions of this bias within a single empirical framework, testing if both scale with phonetic distance. The hypothesis is: lower accent familiarity leads to lower recall and harsher evaluations across all competence and affective domains, in a dose-response pattern.100 native English speakers were randomly assigned to standardized, identical American, Spanish, or Japanese-accented audio groups. Memory recall was measured with 10 multiple-choice questions; social perception was rated across 6 Likert-scale dimensions of competence and affective composites. The accent condition explained 59% of the variance in memory recall and was highly statistically significant. Credibility dropped 50%, intelligence ratings fell 1.5 points per accent step, and affective judgments, including friendliness and comfort, declined significantly for identical content. All competence and affective domains significantly deteriorated with accent unfamiliarity. As familiarity shows the steepest devaluation, perceived phonetic distance is the primary driver of memory and social outcomes. The hypothesis was supported. These findings establish that accent bias operates automatically and unconsciously; this research is a call to action for institutions, educators, and policymakers to dismantle the cognitive barrier that silently shapes the livelihoods, justice, and dignity of millions.

Awards Won:
Fourth Award of $600
American Psychological Association: Complimentary student affiliate memberships
American Psychological Association: Third Award of $500