isi abstracts

Penalty 2.0: comparing a squared driver analysis from consumer descriptions with conventional penalty analysis from JAR evaluations.

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Background:
Analyses of JAR questions suffer from their *intensity/hedonic hybrid character,* usually resolved by categorical reduction (i.e., shares of too less and too intense). Penalty analysis needs a multi-step procedure (i.e. a cut for the shares of not-JAR; two t-tests) and a strict bivariate handling. Valence-correlated items (e.g., full, fresh, or chemical, rancid) are not appropriate as JAR questions.
Proposal:
With descriptive consumer ratings instead of the JAR a driver analysis can explain disliking of certain products. The equation (within-subject data transformation, linear and squared slope) allows the definition of an ideal intensity in consumer language. Importance of DOL are evaluated by rwa (Johnson 2000) and by summing the share of linear and squared slopes. Importance together with the slopes of the squared univariate equations allow defining tolerance versus penalty regions. We like to call this approach Penalty 2.0 and demonstrate it with a project on chocolate bars.
Application:
In a blinded CLT (n=500) 50% of participants were asked 9 JAR questions, 50% 9 descriptions with parallel wording (perceived intensities, 5-point scale: 1 not at all / 5 extremely, construed as scaled, reduced to within-subject variance). Additionally, descriptive analysis was conducted. Results of conventional JAR show Halo effects (the best product is JAR on almost all items), and counterintuitive results at valence-correlated JAR. Penalty 2.0 worked well (descriptors with valence correlated

wording behave properly and all signs of squared terms are negative). Different driver importance from rwa allow to define narrower tolerance intervals for important and wider ones for less important descriptors.

Conclusion:

Advantages of the Penalty 2.0 approach include the visualisation of the optimal curves, an ideal point and a tolerance interval for each descriptor. Issues with conventional Penalty Analysis are prevented. Translation of consumer language and panel language via Descriptive analysis is straightforward.

Understanding the dissociation between explicit and implicit consumer associations with isi ImplicitTesting at the centre: an online experiment on gender-targeted packaging.

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Background:

Implicit measures promise to deliver a fast, uncontrolled and thus unbiased assessment of spontaneous consumer associations better suited to predict impulse buying in FMCG. From psychological science, indirect RT measures from dual-tasks with congruent and incongruent trials, e.g. IAT, EAST, and GNAT are prominent. But they intent to assess a single evaluative dimension (good – bad) and focus on individual differences. Participants experience the task as artificial and annoying. A variety of simpler, straightforward, product focussed implicit procedures were and are currently developed, among them the isi ImplicitTesting (applications presented at 2017, 2015, and 2013 Pangborn Symposia). With a validation purpose we contrast isi ImplicitTesting with a slightly adapted dual task procedure (EAST, De Houwer, 2014) and a conventional explicit rating task.

Procedure:

Five product categories with two gender-targeted packages each were analysed (male variants always darker, two label the target: Nivea Men, Yogi Men's Tea). The experimental design presented two of these product pairs (4 visuals) per participant, tasks varied within subject.

Results:

Data from 254 participants (commercial online-panel) reveal an intelligible dissociation between explicit and implicit gender discrimination of packages: Explicitly, gender labels drive discrimination, but e.g. zero and light Coke were least discriminated. Implicitly (EAST), light

Coke was discriminated on the second rank, Nivea on the last. isi ImplicitTesting locates at a middle position.

Conclusions:

Methodologically, isi ImplicitTesting is clearly more unbiased than explicit ratings are. Substantially, labelling the target failed implicitly. The latter suggests checking other benefits usually claimed verbally.

Keywords: Implicit assessment, Consumer associations,

Design Decoding – from shapes, colors & materials to consumer associations …

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Product design is one of the most powerful means to bring brand strategy to life, i.e. to make the brand tangible. Based on their visual, haptic and acoustic impressions, consumers permanently decide whether products address motives that are relevant to them, if products suit them or not. Without cognitive effort and without any conscious control, consumers make sense of what they see, feel, and hear. This leads to the conclusion that good product design is much more than just being aesthetic – it is a carrier of meaning.

Against this background, designers and product developers face a severe challenge: They have a completely different perspective on design than consumers. While consumers care about subjective associations and conveyed benefits, designers can only control objective characteristics, e.g. shapes, colors, materials and finishes. A need for translation becomes evident.

Design decoding is a highly innovative method that for the first time approaches this need for translation. It reveals the secret relationships between design attributes and the meaning consumers make of these attributes and their overall composition ('Gestalt').

To analyze these relationships, subjective consumer data (liking and instant associations) are linked to objective design descriptions from a trained sensory expert panel. In a case study on electric home appliances, 15 kettle designs were systematically decoded: Triggered consumer associations were measured in a quantitative CLT via forced-choice tasks under time pressure. Kettle designs were objectively described using more than 60 attributes. Finally, a PLS regression model revealed clear relationships between design parameters and the psychological motives the products address.

The results give guidance to designers when translating brand positioning into industrial design. Tools like 'Design Code Frameworks' and 'Sensory Target Zones' facilitate design-related discussions in cross-functional teams (e.g., between brand management, marketing, designers and engineers) and help to optimally align design development with brand strategy.

How "new" is too new for innovations? – Finding the right level of difference for successful product differentiations

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About 70-80% of new product introductions in retail grocery industry fail. The industry's prevalent focus regarding innovation often lies mainly on the novelty aspect: innovations should significantly differentiate from competitors and deliver a new benefit. However, recent research in adjacent areas shows that besides providing a novel aspect, the incorporation of a high level of prototypicality (representativeness of category members) into a product design is key for success, as this creates processing fluency. This psychological concept states that the perception of ease or difficulty in one's mental processing determines the emotions towards the object that triggered the mental process. Hence, something that is easy to process evokes a positive hedonic response on a gut-level. Considering a sensory product profile as product "design", this study investigates for the first time the relevance of prototypicality for successful food innovations.

Three food innovations from different product categories with a proven record of success in the market were selected to assess their level of differentiation and grade of prototypicality from a sensory point of view and to compare them with niche and benchmark products of these categories. Using the prototype theory by Rosch (1971) as theoretical framework, descriptive sensory analysis and implicit association tests were conducted to develop a classification system that determines the grade of prototypicality/ novelty within a sensory profile.

Results reveal a common pattern: successful innovations show indeed a high level of prototypicality and differentiate from competitors mainly in terms of intensity differences. The few novel attributes create "flavour complexity", which can be regarded as another key aspect for a promising product design. Successful products manage to be sophisticated without leaving the conceptual frame of what consumers associate with a given category. This suggest that considering these uncovered patterns during recipe formulation could be of great value in product development.

The influence of simulated context and room temperature – consumer evaluation of non-alcoholic beers

Over the past decade, the non-alcoholic beer market share has expanded at an exceptional pace in Europe. However, producers often struggle with consumers' prejudice that non-alcoholic beers are tasteless. Furthermore, consumer product evaluation obtained in CLT may only have little relevance for real-life situations. Thus, the overall aim of this study is to test non-alcoholic beers in a controlled situation that is as close to real-life as possible.

We created two multisensory experiences (Park30 vs. Bar20) for consumers by manipulating the consumption context using 360-degrees VR videos (*Park: daytime & sunny vs. Bar: evening & dark*), variations in room temperature (*Park: 30 degrees vs. Bar: 20 degrees*) and seating (*Park: garden chair vs. Bar: bar chair*). Both simulated contexts were compared to two lab conditions varying in

temperature only (*Lab30: 30 degrees vs. Lab20: 20 degrees*). Hence, 70 consumers (66% women, mean age = 35 years, 76% non-user of non-alcoholic beers) attended one VR and one lab condition per day across two days. Each time they tasted the same 4 non-alcoholic beers.

Overall, the multisensory experiences made product testing more engaging and differences were found between conditions. The non-alcoholic beers were more liked in the multisensory contexts (Park & Bar) and consumers found them generally more refreshing compared to the lab conditions. Also, consumers evaluated the beers more refreshing in both 30-degree conditions (vs. 20-degree). However, even though the 4 beers were evaluated significantly different in liking, no interaction effects of beer variant and room temperature, context, user type, or gender were found.

To conclude, VR created more realistic and engaging test environment influencing the consumer evaluation of the non-alcoholic beers. However, the choice of VR context is critical for the outcome as the VR context might be related to a real-life situation but not to the consumers preferred consumption context.

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