

Utilizing digital technology to collect consumer data in real time: the shower experience

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ESN Workshop: The future is digital
Smart mobile devices



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Tablets in waterproof cases are being utilized in the Sensory Dimensions Home & Personal Care testing facility (Nottingham, UK) for in-use data collection utilising the EyeQuestion software application.

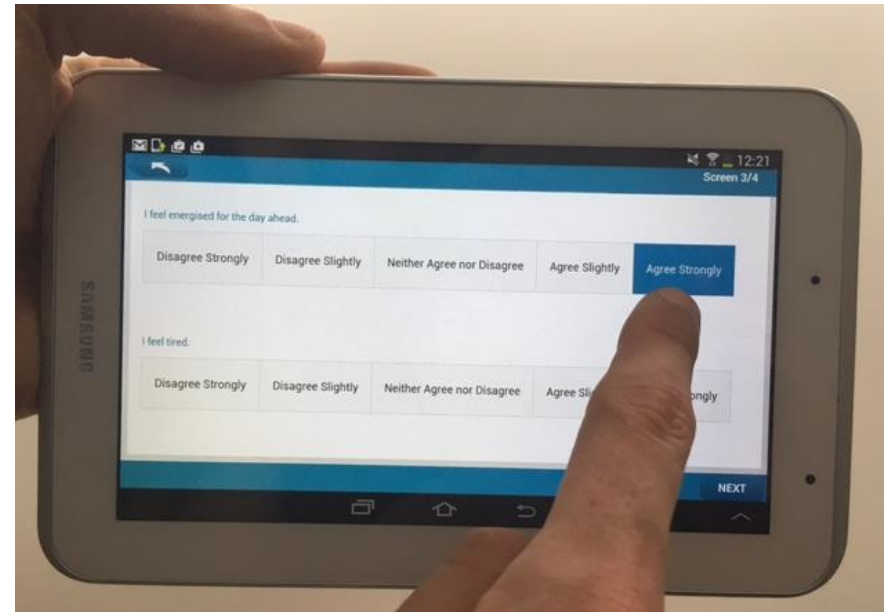


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Factors to consider when utilising technology

- Would you like instant feedback in a wet environment?
- Internet connection for data download, especially important for in-home studies
- Size of tablet –does it effect your scale?



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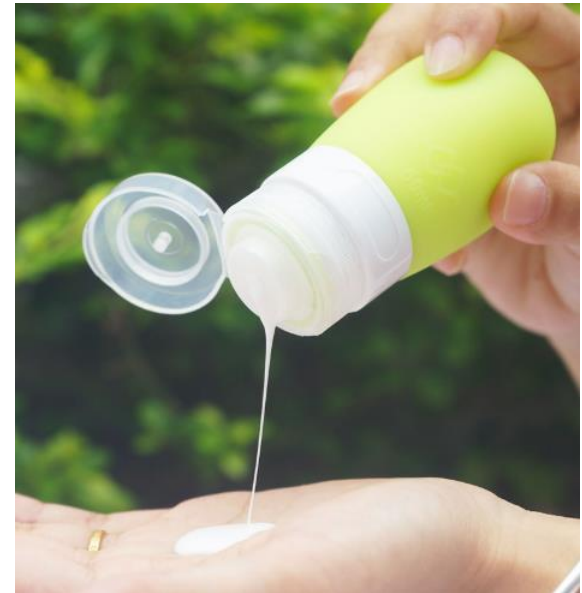
Example Case Study

A well-known personal care product manufacturer was interested in understanding and psychological responses to different shower gel scents in their range.

Data to be used to strengthen and support claims made regarding expected performance of shower products.

To assess the emotional responses associated with the use of different fragrances in shower products.

All data were recorded over 2 years ago, and contractually we are now free to share results.



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Males aged 18-55 years old were screened from SD database. They attended appointments in groups of 4 with 4 fragrance treatments. Testing was done in duplicate making 8 visits in total.

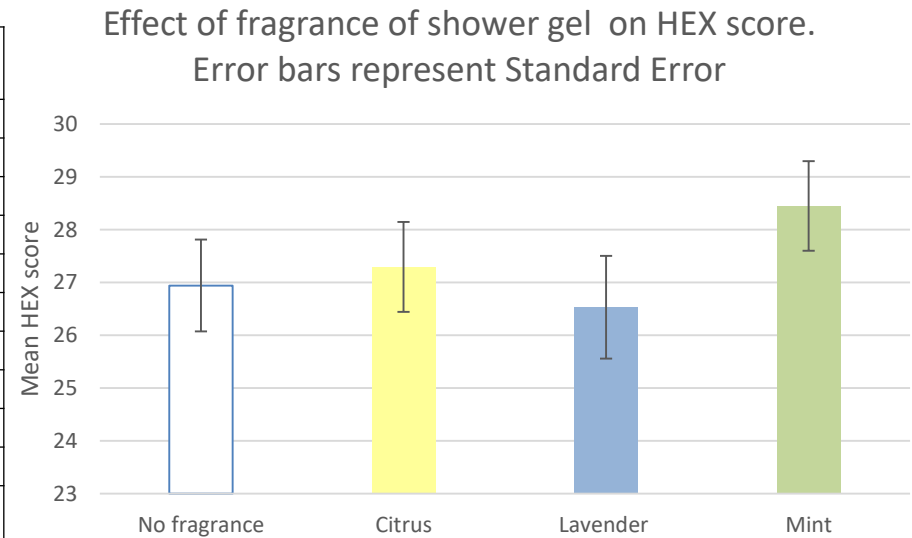
A personality questionnaire based on HEXACO model of personality (Extroversion factors) was completed after showering with a particular shower gel (all colourless: either no fragrance, mint, lavender or citrus, volume controlled).



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Subscales	No fragrance	Citrus	Lavender	Mint	P-value
Energised	3.9	3.8	3.7	4.1	<i>0.030</i>
Tired	2.2	2.0	2.1	1.8	<i>0.060</i>
Stamina	3.7	3.8	3.6	3.8	0.380
Sad	1.3	1.5	1.5	1.4	0.370
Active	3.7	3.8	3.7	4.0	0.170
Fun	3.6	3.6	3.8	3.8	0.110
Smile	3.9	3.9	3.7	3.9	0.290
Strength	3.7	3.8	3.7	3.9	0.530
Healthy	3.9	4.0	3.8	4.0	0.380
Happy	4.1	4.1	4.0	4.2	0.420
Total Hexco Personality Inventory	26.9	27.3	26.5	28.5	<i>0.080</i>



Effect of Fragrances on Liveliness (Extroversion factors):

- The total score indicated that Lavender did not reduce the level of liveliness compared to the control, however, Mint and Lemon both increased liveliness.
- This result was significant at 10% level of significance.

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Tablets are a brilliant addition to the in-shower testing 'tool-kit'!

– Advantages

- Reduced manual data entry
- Instant results without operator resource –especially important for shower studies when effect may disappear after experience has finished

– Limits

- Participants must be proficient with technology with relatively good manual dexterity and eyesight
- Waterproof case limits sensitivity of tablet (may not be necessary with new splashproof tablet models)

– Opportunities (what is next)

- Utilised for many further studies including at-home shampoo/conditioner sensory panel studies