
Climbing the Cool Wall: Exploring Teenage Preferences of Cool

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Abstract

Cool is an essential characteristic when designing technologies that appeal to teenagers, but is very challenging to understand and design for. This paper describes a study that investigated cool with teenagers using a specially constructed 'Cool Wall' that allows items to be rated using a simple scale. We present the design of the Cool Wall prototype then the findings from two field studies in which it was used. The studies found that expensive mobile technologies were considered the most cool by teenagers participating in the studies, while items that are gender or age specific often divided opinion. This suggests that HCI practitioners wishing to 'design for cool' need to carefully understand their user groups, also that the cool wall described in this paper is one low-cost tool for providing insights into this understanding.

Keywords

Cool; Communities; Culture; Design; Evaluation; Heuristics;

ACM Classification Keywords

H.1.2 [Models and Principles]: User/Machine Systems – Human Factors;

Introduction

In much the same way that there is little work on designing with teenagers, there is also a shortage of published work on designing for teenagers. Designers and developers often design products based on a set of guidelines or heuristics; the HCI literature is littered with papers that provide guidelines – some of these are very specific, for example [7], and others are very general, for example [3], [9]. When designing a product there is often a complex set of requirements that span multiple domains; for example a product might be required that is mobile and engaging for teenagers. The designer will go in search of guidelines for mobile design [8] and will then look for guidance on designing for teenagers – here the designer may come unstuck.

To design engaging technologies for teenagers it is necessary to understand what, specifically, will engage the target users. One approach to addressing this problem is of teenage engagement with technologies is the perspective of 'cool'. Cool is, in their own words, 'owned' by the teenage communities [1]. Cool is what teenagers are and is what adults are not; in understanding what cool is from the perspective of teenagers it may be possible to distil guidelines for the design of engaging products and technologies for this population.

There is much written about what it is to 'be cool' e.g. [4], [2]. Within 'cool' communities such as a teenager's peer group, it is assumed that people can identify that certain things and certain people are 'cool'. Cool has been described in terms of adjectives by many different commentators – some take a view of cool as being very much about consuming, others focus on cool as it

applies to behaviours [4], [11]. The authors of this paper have established already that there are several categories of cool [6] as described in Table 1.

CODE	Explanation and References
REB	Rebellious and / or illicit (probably has some socially or morally unacceptable line to it) [5].
AS	Anti social (encourages anti social behaviours – maybe avoiding the need to mix with others or encouraging anti social behaviours like bullying and violence) [5].
RET	Retro (clearly from a previous era) [2].
AUTH	Authentic – the real thing (more about items that are 'the must have' brands – and maybe are 'hip' or trendy at the moment) [2], [10].
RICH	Many desire – affordability issues – big money (probably less about brands and more about features – where having this item would mainly signify you have a lot of money to spend) [4].
INN	Innovative – original (something that is really a bit of a surprise – where – on encountering this thing – people would be impressed by it for its unusualness rather than for any of the other items above) [4].

Table 1 – The essential characteristics of cool

The Cool Wall as a Research Tool

The 'Cool Wall' was developed to collect insights into cool preferences in a simple and low-cost manner. The Cool Wall provides an interactive visual tool for allowing pictures to be sorted into four categories ('seriously uncool', 'uncool', 'cool', 'subzero') using a touchscreen (Figure 1). The idea was inspired by a feature of the same name from the popular BBC 'Top Gear' motoring

TV programme where photographs of cars are placed on a physical wall with the same categories of cool. The wall concept was chosen as it provides a simple and visually engaging way of classifying the coolness of objects whilst also supporting collaboration. The interactive cool wall prototype used in this work presents an image at the bottom of a touchscreen interface which is then dragged to the desired category; a new image then appears at the foot of the screen and is positioned – this process continues until all the images are done. A 'Finished' button is then shown which saves the classifications of the images. At any point before the 'Finished' button is selected an image can be repositioned.



Figure 1 – Cool Wall Prototype (left) and screen capture of Cool Wall Application (right)

The Role of Teen Informants

While the design of the cool wall was uncomplicated, the selection of the images to be classified by the users required careful consideration. A list of possible images for the wall was constructed after discussions with teen informants of what they thought was cool and uncool, this list was then extended after identification of recurring themes from a follow on study. A second group of teen informants were then asked to use their camera phones to take pictures of things (objects,

Rank	Item	Mean Score	Std. Dev.
1	iPhone	1.47	1.07
2	Apple	1.47	1.09
3	iPad	1.42	1.22
4	BlackBerry	1.21	1.12
5	Haribo sweets	1.07	1.24
6	Fast food	0.98	1.22
7	Jellybeans	0.78	1.33
8	Sports car	0.77	1.51
9	PS3	0.63	1.45
10	Adidas	0.47	1.34
11	Jeans	0.41	1.42
12	Super Mario	0.39	1.46
13	Football	0.17	1.59
14	Cat	0.10	1.60
15	Exercise	0.02	1.36
16	Call of Duty	-0.03	1.56
17	Recycling	-0.14	1.43
18	GHDs	-0.21	1.69
19	Books	-0.22	1.47
20	VW Campervan	-0.23	1.55
21	Supermarkets	-0.24	1.36
22	Thomas the Tank	-0.47	1.78
23	Police	-0.57	1.35
24	Banjo	-0.59	1.52
25	Chess	-0.84	1.26
26	Justion Bieber	-1.47	1.27

Table 2: Items from Cool Wall Prototype order by cool score

locations, behaviours, etc.) they encountered in their environments that they considered to be cool or uncool.

These informant images were included in the final cool wall along with a selection of images from the original list that represented key themes. Priority was given to the themes that recurred most often, for example images for both BlackBerry phone and iPhone were included separately (as opposed to a generic representation of a smartphone). The images were selected for visual clarity but were open to some level of interpretation: for example, the picture of a football could be interpreted to mean a football (the object), playing football (the activity), or even supporting a football team. The images did not have any description.

The Studies in Schools

The prototype Cool Wall (as shown in Figure 1) was trialed with a class of 25 Year 7 (age 12) children in a high school in the North West of the UK. From the initial trial it was clear that the range of items included on the wall showed some general trends and that some items proved contentious. The prototype was then deployed over the course of 2 school days in another High School (again in the North West of the UK) in a communal area accessible to all students (from Year 7 to year 11, ages 12-15).

Analysis of Findings

From these two deployments the Cool Wall was completed 125 times, a weighted scoring mechanism was then applied (seriously uncool scored -2, uncool scored -1, cool scored 1, subzero scored 2).

We were interested in identifying the images that gave insights into a shared understanding of cool things (translating into a high mean score, with low standard deviation) and images over which there was disagreement (mean score close to 0, high standard deviation).

Image	Item	Cool Type	Cool Categories
1		Having	RICH, AUTH
2		Having	RICH, AUTH
3		Having	RICH, AUTH
4		Having	AUTH, RICH
5		Having	AUTH
6		Having	REB

Table 3: Analysis of images with highest cool scores.

Results

The complete list of 26 items from the Cool Wall ordered by mean score is shown in Table 2 (space prohibited us showing all the images). The fourth column is the standard deviation of scores. As the results in Table 2 show, the top six items with the highest mean cool scores (between 0.98 and 1.47) were also the six with the smallest standard deviation values (between 1.07 and 1.24). From this we can infer

that the overwhelming opinion of the participants in the study is that these items are cool. More generally, from any image with a mean > 0 an inference can be drawn that overall these items contained elements of cool. The images that divided opinion tended to have a negative or a very low cool score; those with the top six highest standard deviation values are discussed in the next section as being particularly interesting. In order to assist in understanding the discussion that follows; the images for these items are shown in Table 3 and 4.

Image	Item	Cool Type	Cool Categories
22		Having / Doing	RET
18		Having	AUTH
14		Having	AUTH
12		Doing	AUTH, RET
10		Doing	REB, ANTI, AUTH
20		Having	RET

Table 4: Analysis of images with highest standard deviation in scores.

Discussion and Conclusions

The results from the study were analysed by a team of HCI experts who further categorized the items in Table

3 and 4 using the hierarchy of cool (Figure 2) and characteristics of cool [6] defined by the authors.

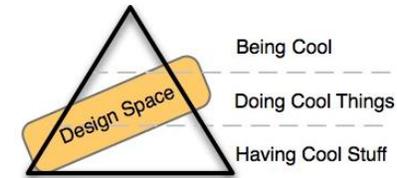


Figure 2 - The Hierarchy of Cool

The top six items with the highest cool scores as shown in Table 3 all fall into the 'Having Cool Stuff' category of the Hierarchy of Cool. This implies that the possessions are extremely important to teenagers when deciding what is cool more so than doing cool things. It is not surprising that no item in either table has been categorized as 'Being Cool' as it is harder to show this in a visual form. The top four items are all related to expensive mobile technologies showing that these items are highly sought after and liked by teenagers. Items pertaining to food such as sweets and fast food scored well which appears to be due to the enjoyable taste and slightly rebellious nature of this type of food.

Table 4 highlights items that can provide us with interesting insights with these items having the highest standard deviations. Items such as GHDS and Adidas tend to be gender orientated items, with GHDS mainly being used by girls and boys tending to show more interest in sports wear. This is perhaps why opinions of these items are so divided. Retro items such as Thomas the Tank Engine, VW Campervans and Super Mario seem to also divide opinion; all have large standard deviations highlighting the differing personal opinions in regard to items from our past. Age could

have played an issue in the results of these items as it was observed that older teens tended to find these retro items cool whereas younger teens did not; however this was not investigated further. Super Mario was the only one of these three to achieve a positive mean score which is likely to be due to Super Mario computer games still being a popular. The cat is possibly the most interesting item in Table 4 as this is the hardest to find a reason for such a diverse range of scores. It could be associated to a gender difference although it would be unfair to say that either sex are more likely to prefer cats. The most feasible reason appears to be a teenagers personal affection toward pets and caring for animals.

The development of the Cool Wall has allowed us to better understand and unpick the characteristics of cool. It allows us insights into the lives of current teenagers and their views on what is, and is not, cool. It has also allowed the authors to revisit the characteristics of cool and further define these. Retro appears to have two distinct sub categories being unfamiliar retro which includes items from past generations and familiar retro which includes items that provide fond childhood memories. The innovative (INN) category featured very little in these studies, indicating that this kind of cool is not relevant or not understood by the teenagers. A new potential new category of cool was mentioned by several different researchers when analysing the images, that being a type of cool that gave membership of a peer group or fostered an identity due to their likes and dislikes.

Further Work

Further studies will be carried out to look at methods of populating the Cool Wall for use in different contexts

such as the design of specific teen technologies or software. Work will also be carried out looking to extend the use of the Cool Wall as an evaluation tool.

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