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Reassessing the effect of Colour on Attitude and Behavioural Intentions in Promotional Activities: The Moderating Role of Mood and Involvement

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Abstract

The present research examines the effect of background colour on attitude and behavioural intentions in various promotional activities taking into consideration the moderating role of mood and involvement. Three experiments reflecting different promotional activities (window display, consumer trade show, guerrilla marketing) were conducted for this purpose. Overall, findings indicate that cool background colours, in contrast to warm colours, induce more positive attitudes and behavioural intentions mainly in positive mood, and low involvement conditions. Implications are also discussed.

Keywords: *background colour, promotional activities, attitude*

1. Introduction

Past research has shown that environmental cues, such as colour, provide affective information that directly influences consumers' processing strategy (e.g. Soldat, Sinclair & Mark, 1997) and, subsequently, their decision-making process. The influence of colour on psychological functioning (i.e. feelings and behaviours) is automatic, takes place without conscious intention or awareness (Elliot & Maier, 2007) and, despite individual and cultural differences, it has been found to be quite consistent. Moreover, early evidence indicates that colours have been associated with mood. Empirical evidence on the effects of colour in marketing communication exist (Gorn, Chattopadhyay, Yi & Dhal, 1997). Most studies in marketing communications support a strong influence of colour on consumer behaviour (e.g. Elliot & Maier, 2014; Kareklas, et al., 2014; Krishna & Schwarz, 2013; Wedel & Pieters, 2015). Relevant literature mainly focuses on areas like packaging, print advertising (e.g. Wedel & Pieters, 2015; Elliot & Maier, 2014; Kareklas, et al., 2014; Pantin-Sohier, 2009) and web pages (Cheng, Wu & Yen, 2009; Mandel & Johnson, 2002), while other promotional activities, like guerilla marketing, have been relatively overlooked. Still, the growing importance of tactics like guerilla marketing have become increasingly important, following a shift from traditional advertising to unconventional methods of promotion, mainly due to increased advertising clutter, media proliferation and consumer sophistication (Rizomyliotis et al., 2017).

In response to this challenge, whilst the significance of advertising in marketing communications is undeniable, businesses have also integrated a variety of other promotional tools that are relatively neglected in literature (Ots & Nyilasy, 2017; Turner, 2017). Conversely, the contribution of our research is threefold. First, we aim to address the apparent need for further investigation of promotional tools that are not widely researched. Second, we

expand existing knowledge in regards to the effect of colour on consumer behavioural intentions and attitudes towards such promotional activities. Finally, we present new evidence by examining the moderating role of mood and involvement on the relationship between colour and attitudes/behavioural intentions in promotional activities other than advertising.

2. The Current Research

The present research focuses on the background colour of a promotional activity, which is investigated with respect to its effect on consumer attitude and behavioural intention, further examining the possibly of moderating effects of consumer's mood and involvement. In this study, intention refers to "intentions to seek information". The intention to seek for further product/service information is long ago recognised as being the link between the cognitive and the emotional stages of consumers' buying process. It signposts the possibility of converting consumers' first impression to action and adds to the understanding of how to communicate with prospects effectively. According to Singh (2006), regardless of the extensive research conducted in the field of colour and its impact on human behaviour, the linkage between specific colours and specific responses is inconclusive. Moreover, in terms of marketing communications, past research has mainly focused on the use of colour in advertising, packaging and in-store atmospherics (Ettis, 2017), while other elements of marketing communication (IMC) mix in relation to colour require further investigation (McGrath, 2005). Deeper understanding of the impact of colour on a series of promotional activities will provide comprehensive insights into its significance in an IMC setting (Dresler-Hawke & Veer, 2006). Reasoning from this fact, three different types of promotional activities

that have attracted limited attention in literature were chosen, namely window displays, consumer trade shows and guerrilla marketing promotions. Research on the influences of colour on humans dates back over 100 years (Babbitt 1878 cited in Bagchi & Cheema, 2013). According to Elliot and Maier (2007) colour is not just about aesthetics; it has been shown to carry specific meanings, enhance emotions and communicate specific information. Colour, as external stimuli have an impact on humans' emotions (Cimbalo et al, 1978). Cimbalo et al. (1978) found that yellow, orange, and blue enhance happy feelings, while red, black and brown were described as sad colours. More specifically, blue seems to stimulate the sympathetic nervous system much more than red (Kido, 2000).

In relation to marketing research, colour is documented to alter consumers' attitudes towards products; it is also reported to influence behavioural intentions (e.g. Visser et al., 2015; Ghaderi et al., 2015;) as well as behaviour itself (Sokolik et al., 2014). Colour has also been found to contribute to the perception of products. For example, dull colours are associated with unhealthy products (Karnal et al, 2016), while green backgrounds in advertising is found to assist products being perceived as natural and organic (e.g. Schuldt & Schwarz, 2010; Schuldt, 2013). Finally, level naming or atypical colour naming (e.g. friendly green vs. pine green) has been found to influence consumers' product perceptions and purchase intentions; ambiguous colour names are preferred to common colour names (Miller & Kahn, 2005).

Colour attributes and their impact on consumer attitudes and perceptions have also attracted research attention. Labrecque and Milne (2012) focused on colour attributes; specifically hue, saturation and lightness value. Their results supported a significant impact of all three attributes on brand image. Several studies explored the attribute of saturation and most of them suggest that highly saturate colours (i.e. vivid colours) enhance consumer

preferences and recall rate in advertising (e.g. Sabate et al., 2014; Kim Sin & He, 2013). Vivid colours were also found to positively influence feelings and emotions towards the brand (Duffett, 2015). Looking into advertising processing, Coyle and Thorson (2001) suggest that in advertising, text usually has the lowest level of saturation if compared to other background colour cues that stimulate the vision. As saturation rises, both attention and processing of the advertising increase as well; successively, this enhances attitudes towards the brand (Lee, 2012) and increases consumers' behavioural intentions (De Vries et al., 2012).

The current study focuses on the colour attribute of hue as the attributes of saturation and value have been receiving more attention lately (Bagchi & Cheema, 2013). Looking particularly into this attribute, Labrecque Patrick and Milne (2013) suggest that colour hue enhances brand engagement and attachment. Early studies identified consumers' preferences with specific colours. Blue has been reported as the most attractive colour, followed by green, purple, red and yellow. Crowley (1993) suggested that presence of colour (like red and to a lesser extent blue) as opposed to absence of colour (black and white) stimulate the processing of an advertising message and, thus, result in higher message recall.

Researchers have attempted to classify colours in order to generalise their findings. Prior research makes a distinction between "warm" colours (i.e. red) and "cool" colours (i.e. blue), suggesting that they have different "psychological meanings" and evoke different associated themes (Ettis, 2017; Cheng, Wu & Yen, 2009). Warm colours are conceived as being physically stimulating (Bellizzi & Hite, 1992); they have strong excitation potential and high arousal qualities (Schaie & Heiss, 1964; Bellizzi, Crowley & Hasty, 1983). In a web environment, users tend to interact and engage more with web communications that contain red cues than with those that contain blue cues (Ettis, 2017; Cheng et al., 2009). In contrast, cool colours seem to have an adverse effect and are perceived as more relaxing and restful

(Bellizzi & Hite, 1992; Sharpe, 1974). Past research consistently suggests that cool colours (e.g. blue) evoke more positive evaluations than warm colours (e.g. red). According to Crowley (1993), this result is significant both in cases where subjects stated their colour preferences directly, as well as in cases where affective reactions were measured instead; in the latter, colours were used as a peripheral cue (Middlestadt, 1990). Crowley (1993) also suggests that blue enhances evaluative reactions to the advertisements. Moreover, Middlestadt (1990) posits that blue (i.e. cool) in comparison to red (i.e. warm) background colour leads to more positive purchase intentions for specific categories, such as pens. These results were confirmed in online stores, where blue environment was found to arouse joy and enhance online purchase intentions (Etti, 2017). Finally, blue facilitates information processing and consideration (e.g. Madden, Hewitt & Roth, 2000; Etti, 2017), and this is expected to positively influence information seeking. Thus:

H1: Cool background colours (i.e. blue) used in promotional activities induce more positive attitudes and intentions to seek information than warm background colours (i.e. red).

According to Mehta and Zhu (2009), the effect of colour on cognitive processes (e.g. attitude formation) and behaviour (e.g. seeking further information) could be moderated and/or mediated, when different types of motivations are activated. A main motivator of consumers' cognitive and behavioral activities is involvement (e.g. Petty & Cacioppo, 1979, 1981; Zaichkowsky, 1985). In high involvement conditions, consumers engage in extended information search and processing, as opposed to low involvement conditions (e.g. Zaichkowsky, 1985). Moreover, it is widely accepted that regardless of the purchase decision, consumers will ultimately develop some level of involvement (Engel & Blackwell, 1982). Low involved consumers are often "cognitive misers" who don't engage in extensive information search and processing and use simple heuristics to make their decisions (e.g. Alba

& Hutchinson, 1987). Specifically, in such involvement conditions, consumers often employ a variety of judgmental biases such as heuristic processing strategies (e.g. Chaiken, 1980). Elaboration Likelihood Model (ELM) is one of marketing communication's most-cited models that explores involvement in relation to message processing (Petty and Cacioppo, 1986; Pasadeos et al., 2008). Petty and Cacioppo (1981, 1986) suggest that there are two routes to persuasion, namely the central route (arguments and information are used), which is usually employed in high involvement conditions, and the peripheral route (visual cues are used), which is usually employed in low involvement conditions. Colours are basic visual cues that tend to be persuasive in low involvement conditions, as highly involved consumers do not limit processing on visual cues and are willing to put effort into cognitively process complex information and arguments (Kitchen et al, 2014). Colour is also expected to have a greater impact on attitude and behaviour in low involvement conditions, as their impact occurs outside consumers 'consciousness' (Mehta & Zhue, 2009); this mainly represents the low involvement- peripheral route to persuasion. Thus, it is expected that the effect of colour on attitude and respectively on intentions to seek further information is stronger in low involvement conditions where colour plays a vital role in persuasion. What's more, according to research findings in the extant literature, cool colours (e.g. blue) are expected to produce more positive evaluations than warm colours (e.g. red). Thus we posit:

H2: Background colour in promotional activities will have a stronger effect on attitudes and intentions to seek information in low involvement than in high involvement conditions. Attitudes formed on the basis of blue versus red background colours, are going to be even more positive in low involvement conditions as opposed to high involvement conditions. Intentions to seek information in blue versus red background colours are going to be even greater in low involvement as opposed to high involvement conditions.

Mood affects consumer behaviour in a plethora of ways (e.g. Gorn, Goldberg & Basu, 1993), from information processing, attitude toward brand (e.g. Batra & Ray 1986), purchase

intention (e.g. Alpert & Alpert, 1990), to influencing reactions to commercials (e.g. Goldberg & Gorn 1987). Specifically, early research suggests that consumers use different ways to process communication messages, form different attitudes (Batra & ray, 1986) and have different behavioural intentions (Alpert & Alpert, 1990) when in a good mood than when in a bad mood. Additionally, Bower (1991) claims that mood influences consumers' encoding or time of learning. Past research suggests that when making evaluative judgments, especially when the task is complex or demanding, consumers observe their feelings, using them as a direct source of information to draw conclusions on the basis of the "how do I feel" heuristic (e.g. Gorn, Goldberg & Basu, 1993; Schwarz, 1990). According to Clore (1985), positive feelings lead to positive evaluations. Further, Soldat, Sinclair and Mark (1997) suggest that environmental cues, such as colour, provide affective information that directly influences a consumer's processing strategy. In particular, positively valenced (e.g., happy) cues lead to non-systematic processing, and negatively valenced (e.g., sad) cues lead to systematic processing. Given that colour is considered as an environmental element (e.g. Petty & Cacioppo, 1986) that mainly affects non-systematic processing, the effect of colour on attitudes and intentions is expected to be stronger in positive mood conditions. Moreover, as previously discussed, prior research suggests that cool colours (e.g. blue) induce more positive consumer attitudes and behavioural intentions than warm colours (e.g. red). Thus:

H3: The effect of background colour used in promotional activities on attitudes and on intentions to seek information is stronger in positive rather than in negative mood states. Attitudes formed on the basis of blue versus red background colours, are going to be even more positive in positive mood as opposed to negative mood conditions. Intentions to seek information in blue versus red background colours are going to be even greater in positive mood as opposed to negative mood conditions.

Three empirical studies were conducted to examine the hypotheses of the research. Study 1 explored the relations in the window display context, while Studies 2 and 3 examined them in consumer trade shows and guerrilla promotional activities respectively.

2.1 Study 1

Colour constitutes 80% of the evaluation of the visual stimuli in consumers' surroundings (Morton, 1990). This is of particular importance in retailing (e.g. Bellizzi, Crowley & Hasty, 1983). In Study 1, the effect of colour, purchase involvement and mood on the attitude towards window displays and intention to seek further information in store were explored. As the current research focuses on the colour attribute of hue, both saturation and value were kept constant in order to be consistent with previous studies and to reduce confounds (Mehta & Zhu, 2009). Following prior literature, red was used as a warm colour and blue as a cool colour (e.g. Mehta & Zhu, 2009; Bagchi & Cheema, 2013; Sokolik, Magee, & Ivory, 2014; Crowley, 1993). In order to neutralise any remaining emotions or other psychological effects of the first colour condition, a black and white scheme was used as a neutral condition (Mehta & Zhu, 2009) between the two colour conditions. Black, white and gray are considered neutral colours and are weak in evoking emotions (e.g. Singh, 2006). Additionally, consumers perceive black and white visuals as temporally distant (Hyojin, Deng, Unnava and Fujita, 2014) and thus engage weakly.

Participants and experimental design. A total of 192 students (93 men and 99 women, $M_{\text{age}} = 22.40$, $SD = 2.67$) were randomly assigned to the twelve conditions of the following mixed experimental design: 2 (purchase involvement: high or low) x 2 (mood: positive or negative) x 3 (colour of display background: warm or cool or black & white background-control condition). The colour of the background was approached as a within subject variable while involvement and mood were approached as between subjects variables.

Product selection and Procedure. On the basis of the results of a preliminary study ($n = 25$), the product category that was selected to test the hypotheses was transparent glass home furniture. This category was chosen as it has limited associations with specific colours which could interact with our findings. Specifically, 25 participants were given a list of 35 product categories (e.g. cd, bottle of water, pair of glasses) and were asked about the colour that first comes to their mind for each the product categories. "No colour" was also a possible answer. According to the participants' responses, the product category with the least associations with any colour was transparent glass home furniture, as 24 out of 25 participants (96%) responded "No colour". The main questionnaire consisted of three sections. In the first section, participants were briefed, and following Strayer and Johnston (2001) they were given the Ishihara colour blindness test to test their ability to distinguish various colours (Ishihara, 1993). This test was selected as it is one of the most well known and broadly used colour-blindness tests that is used in consumer and psychology research (Strayer and Johnston (2001). Thirty-eight plates containing either a number or lines are presented to the participant, and according to what can be seen and what cannot, a feedback score is calculated. In the second section, the manipulation of mood and purchase involvement took place. Finally, in the third section participants were shown three similar pictures of window displays that differentiated exclusively on their background colour (warm vs. cool vs. black & white colour

background). The order in which the warm condition picture and cool condition picture were presented to participants was randomised. For each display, participants were asked to express their attitude and behavioural intention (seeking further information inside the store).

Manipulations. Regarding purchase involvement, following Petty and Cacioppo (1979, 1981), participants in the low involvement condition were told that the promotional activities that they would evaluate referred to a company that operates abroad. Moreover, they were informed that after the completion of the research they would take part in a lottery to win a pen. Participants in the high involvement condition were told that the promotional activities concerned a furniture company that would open a new store in their region during the next month. Additionally, they were informed that after the completion of the research, they would receive a 20-euro voucher that could be used in the new store. According to Gardner (1985), mood can be manipulated with exposure to positive or negative stimuli. Usually, positive/negative words (e.g. Richards, Johnson, Naparstek & Williams, 1992) or pictures (e.g. Albarracin & Hart, 2011) are used as a manipulation process. In order to enhance the effectiveness of the manipulation, we used two articles containing positive/ negative words and positive/ negative pictures. Specifically, participants in the negative and the positive condition were asked to read the article that induced negative feelings and the article that induced positive feelings respectively. Participants were then debriefed and received the 20 euros (in the form of a voucher of an existing store).

Manipulation checks and measures. The mean of four 7-point scales was used to check the success of the purchase involvement manipulation (Park & Hastak, 1994) ($\alpha = .76$). The four items were the following: (1) personal relevance, (2) personal importance of making the right decision on this occasion, (3) personal interest in assessing the stimuli on this occasion, (4) cautiousness with which the stimuli were evaluated. The manipulation of mood was checked by measuring the subject's affective mood state with a 4-item, 7-point semantic differential scale (Allen & Janiszewski, 1989) ($\alpha = .88$). The four items of the scale had the following endpoints (1) good/ bad, (2) unpleasant/pleasant, (3) happy/sad, and (4) negative/ positive and were following the phrase "*at this moment I am feeling...*" and responded on items.

Respondents expressed their attitude toward the promotional activity (window display) and behavioural intention, which served the role of the dependent variables of the study. Attitude toward the promotional activity (window display) was operationalised using a 7-point multi-item Likert scale (Henthorne, LaTour & Nataraajan, 1993) ($\alpha = .85$). The items used were the following: (1) Good, (2) Interesting (3) Informative (4) Appropriate (5) Easy to Understand (6) Objective, and the initial prompt was "This promotional activity was..." Finally, a multi-item, semantic differential scale was adopted (Ajzen & Fishbein, 1972, 1980; Machleit et al., 1993) in order to measure the stated inclination of the respondent to engage in a specific behaviour (seeking further information at the store of the given window display). The concept of intention to seek for information was rated on five items of the scale, which had the following endpoints (1) unlikely/likely, (2) non-existent/existent, (3) improbable/probable, and (4) impossible/possible, (5) uncertain/certain, and were following the phrase "*I would seek for information at the store of the given window display...*" ($\alpha = .72$).

Results. Regarding the Ishihara colour blindness test, all respondents had normal vision. Both the manipulations of purchase involvement ($M_{high} = 5.51$, $M_{low} = 5.09$, $t(190) = 2.29$, $p < .05$) and mood were successful ($M_{high} = 5.84$, $M_{low} = 5.41$, $t(190) = 2.304$, $p < .05$). The results of the repeated measures ANOVA indicated a significant main effect of colour on both attitude ($M_{cool} = 5.85$, $M_{warm} = 5.05$, $M_{black-white} = 5.12$, $F(2,189) = 183.56$, $p < .001$) and behavioural intention ($M_{cool} = 5.43$, $M_{warm} = 4.75$, $M_{black-white} = 4.91$, $F(2,189) = 155.32$, $p < .001$). Post hoc analysis with the use of Scheffe test indicated that the mean for cool colours was significantly greater than for warm colours for both dependent variables. Hence, H1 is supported. Also, a significant interaction was found between colour and involvement for both attitude ($F(2,189) = 4.51$, $p < .05$) and behavioural intention ($F(2,189) = 3.21$, $p < .05$), supporting H2. H3 is also supported as the interaction between colour and mood was also found significant for both attitude ($F(2,189) = 3.81$, $p < .05$) and behavioural intention ($F(2,189) = 3.99$, $p < .05$). Means and SDs are presented in Table 1 (see Appendix). No other main effect or interaction was found significant.

2.2. Study 2

In contrast to Study 1, Study 2 examined the effect of colour on attitude and behavioural intentions in a consumer trade show situation. Trade shows are considered an important marketing communications tool as they promote and sell the product, generate awareness and provide information for the product/service (e.g. Gottlieb, Brown & Ferrier, 2014; Tafesse & Korneliussen, 2012; Gopalakrishna et al, 1995). Little research has focused on B2C retail shows (Gottlieb, Brown & Ferrier, 2014). This type of show combines traditional retail variables (e.g. atmospherics) with experiential themes (e.g. product testing; Tafesse &

Korneliussen, 2012). The current study focuses on atmospherics and specifically on the variable of colour, which constitutes atmospherics' most important aspect (Morton, 1990).

Participants: One hundred and eighty students (84 male and 96 female, $M_{age}=22.10$, $SD = 1.13$) were randomly assigned to the twelve conditions of the following mixed experimental design: 2 (purchase involvement: high or low) x 2 (mood: positive or negative) x 3 (colour of kiosk background: warm or cool or black & white background). Similarly to Study 1, the colour of the background was approached as a within subject variable while involvement and mood were approached as between subjects variables.

Procedure and manipulations: The procedure was similar to the one followed in Study 1. The main difference was that respondents were shown and asked to evaluate pictures of kiosks in consumer trade shows. The relations were again tested on the product category of furniture. Specifically, participants were asked to evaluate the kiosks (attitude towards promotional activity, i.e. kiosk) and to state their intentions to seek further information about the furniture in the kiosk. Both purchase involvement and mood were manipulated similarly to Study 1.

Manipulation checks and measures. Similarly to Study 1, purchase involvement and mood manipulation checks were conducted with Park and Hastak (1994, $\alpha = .88$) and Allen and Janiszewski (1989, $\alpha = .74$) scales respectively. The dependent variables and their measures, were identical to the ones used in Study 1 (i.e. attitude towards the kiosk- $\alpha = .85$, behavioural intentions -likelihood of seeking information at the given kiosk - $\alpha = .77$).

Results. All participants were found to have normal vision (or corrected vision) according to the Ishihara colour blindness test. Both the manipulations of purchase involvement ($M_{high} = 5.62$, $M_{low} = 5.21$, $t(178) = 2.872$, $p < .01$) and mood were successful ($M_{high} = 5.56$, $M_{low} = 5.12$, $t(178) = 2.61$, $p < .01$). The results of the repeated measures ANOVA indicated a significant main effect of colour on both attitude ($M_{cool} = 4.75$, $M_{warm} = 4.11$, $M_{black-white} = 4.02$, $F(2,177) = 179.88$, $p < .001$) and behavioural intention ($M_{cool} = 4.33$, $M_{warm} = 3.72$, $M_{black-white} = 3.60$, $F(2,177) = 127.19$, $p < .001$). Post hoc analysis with the use of the Scheffé test indicated that the mean for cool colours was significantly greater than for warm colours, for both dependent variables. Therefore, H1 is supported. Moreover, the interaction between colour and involvement was found significant only for attitude ($F(2,177) = 12.666$, $p < .001$), supporting only partially H2; H3 is also partially supported, as the interaction between colour and mood was found significant only for behavioural intention ($F(2,177) = 9.34$, $p < .001$). Means and SDs are presented in Table 2 (see Appendix). No other main effect or interaction was found significant.

2.3 Study 3

Study 3 is a replication of Study 1 in a different promotional context. In contrast to Studies 1 and 2, the effect of colour on attitude and intentions to seek information was examined in a guerrilla marketing promotional activity. Guerrilla marketing is a marketing communication tactic that aims to attract attention and enhance attitudes by using unconventional marketing techniques (Langer, 2006). Initially, this promotional tool was specifically designed for small businesses with limited budgets, but large firms have recently employed it too (Hutter & Hoffman, 2011). The main advantage of guerrilla marketing campaigns rests on the fact that

they are relatively inexpensive and effective in promoting the company's communication aims.

Participants: One hundred and seventy-nine students (78 male and 101 female, $M_{\text{age}}=21.20$, $SD = 1.10$) were randomly assigned to the twelve conditions of the following mixed experimental design: 2 (purchase involvement: high or low) x 2 (mood: positive or negative) x 3 (colour of the guerrilla marketing tool used: warm or cool or black-white tool). Similarly to Study 1 and Study 2, the colour of the background was approached as a within subject variable while involvement and mood were approached as between subjects variables.

Procedure and manipulations: Participants were presented with an image of a two-armed toilet seat, which resembled an armchair. Aligned with the guerrilla marketing definition, the picture presented an unconventional technique and had a strong element of surprise, as consumers were exposed to an image of an unexpected promotional activity. The transparent glass home furniture was the product category we used (consistent to the studies 1 and 2), so the arms and the toilet seat were made from transparent glass (so they were seen as one entity) and were distinct from the opened toilet cover. The latter, was made of solid non-transparent materials; it was coloured according to the two conditions (blue and red, respectively), and it served the role of the coloured background, which was manipulated. Purchase involvement and mood were manipulated similarly to Studies 1 and 2.

Manipulation checks and measures. Similarly to Study 1, purchase involvement and mood manipulation checks were conducted with Park and Hastak (1994, $\alpha = .92$) and Allen and Janiszewski (1989, $\alpha = .82$) scales respectively. The dependent variables and their measures, were identical to the ones used in previous studies (i.e. positive affective attitude- $\alpha = .87$, attitude towards the guerrilla activity - $\alpha = .93$, behavioural intentions - $\alpha = .70$). Overall evaluation of the guerrilla activity and behavioural intentions (likelihood of seeking information at the website given on the toilet cover) were measured using the same scales as two previous studies.

Results. Similarly to the previous two studies, all participants in Study 3 were found to have normal vision as tested with the Ishihara colour-blindness test. Both the manipulations of purchase involvement ($M_{high} = 5.43$, $M_{low} = 4.92$, $t(177) = 3.53$, $p < .001$) and mood were successful ($M_{high} = 4.92$, $M_{low} = 4.65$, $t(177) = 2.88$, $p < .01$). The results of the repeated measures ANOVA indicated a significant main effect of colour on both attitude ($M_{cool} = 4.93$, $M_{warm} = 4.32$, $M_{black-white} = 4.04$, $F(2,176) = 114.17$, $p < .001$) and behavioural intention ($M_{cool} = 4.61$, $M_{warm} = 4.16$, $M_{black-white} = 4.11$, $F(2,176) = 73.89$, $p < .001$). Post hoc analysis with the use of the Scheffé test indicated that the mean for cool colours was significantly greater than for warm colours, for both dependent variables. Hence, H1 is supported. Moreover, a significant interaction was found between colour and involvement for the behavioural intention ($F(2,176) = 3.93$, $p < .05$) while for the respondents' attitude the specific interaction was found marginally significant ($F(2,176) = 2.36$, $p < .10$). Hence, H2 is also supported. H3 is also supported as the interaction between colour and mood was also found significant for both attitude ($F(2,176) = 3.62$, $p < .05$) and behavioural intention ($F(2,176) = 4.33$, $p < .05$). Means and SDs are presented in Table 3 (see Appendix). No other main effect or interaction was found significant.

2.4 Discussion & implications

This research presents new data in an attempt to further explore the dynamics of promotional tools that are relatively neglected in literature. Our contribution to the relevant theory stems from the investigation of the effect of background colour on consumer attitudes and behavioural intentions. New evidence is offered in respect to the moderating role of mood and involvement on the relationship between colour and attitudes/behavioural intentions in a series of promotional activities.

Our research builds on existing literature on the effect of colour on attitude and behavioural intentions. Findings of the three experiments are aligned with prior research (e.g. Crowley, 1993) and provide evidence for the main effect of colour on attitudes and behavioural intentions in retail shows, window displays and guerrilla marketing tactics. Specifically, participants formed more positive attitudes and were more willing to seek further information on the product promoted when the background colour of the activity was blue versus red. Moreover, our results suggest a moderating role of both mood and involvement on the aforementioned relation. In other words, consumers seem to rely more on background colour of the promotional activity for their evaluations in low involvement and high mood conditions. Colour is considered a peripheral visual cue (Petty & Cacioppo, 1986) that affects consumers' evaluations via the low involvement peripheral route outside consumers' consciousness (Mehta & Zhue, 2009). Thus the effect of colour (i.e. blue versus red) was stronger in low involvement conditions (versus high involvement conditions). Moreover, the use of colour as one of consumers' evaluative criteria is expected in non-systematic processing (Soldat, Sinclair & Mark; 1997), which is usually employed in positive mood

conditions. Therefore, when consumers have a positive mood, they rely even more on colour for their product evaluations than when they are in a low mood.

The emerging results lead to some robust implications for businesses. To begin with, the background colour was found to have significant importance across all promotional activities. It should be carefully selected, though, given that in promotional activities where a cool colour background is used, more positive attitudes and behavioural intentions are stimulated compared to those having a warm background colour. This can be explained by evidence on the ground of previous research underlining cool colours' relaxing theme in contrast to warm colours' arousal power (Bellizzi & Hite, 1992). This effect is shown to be stronger when the promotional activity is addressed to consumers being in a positive mood state or those being in a low involvement condition.

As such, marketing communications managers should carefully consider how to use background colours when considering both the consumers' mood and involvement. Consumers' mood should be manipulated in order to have a stronger colour effect, thus, companies that are about to select a background colour in their promotional activity should find ways to ameliorate a customer's mood before he is exposed to the promotional activity. In accordance with emotions literature, mood can be changed subject to consumers' exposure to positive stimuli or unexpected provision of material rewards (e.g. ZhangHui & Barrett, 2014; Gardner, 1985). For example, music and pictures that evoke positive feelings, or gifts and additional unexpected price reductions could positively enhance mood. This is paramount in order to achieve better scores, in terms of attitude and behavioural intention. What's more, most companies are associated with specific corporate colours by means of IMC strategy implementation; thus, the selection of a colour that isn't aligned with their corporate colours might seem to be problematic regardless of its positive effect on consumers' attitude and

behavioural intentions. Still, being consistent in terms of colour is only one of the various aspects of IMC (Dewhirst & Davis, 2005). In this sense, it can be inferred that integration, as perceived by professional communities, is not essentially all about tactical coordination of visual elements in order to be in accordance with the corporate visual identity. Instead, it is a complex process involving well-thought research and value delivery to diversified audiences that should be carefully segmented and defined (Schultz & Patti, 2009). Hence, it is up to business intelligence to find the delicate balance between being visually consistent across platforms and being effective in the communication with several target audiences.

In any case, the need for future research is apparent and could be directed toward the examination of individual differences, such as personality traits (e.g. extroverts vs. introverts; Choungourian, 1967) on the basis of research already undertaken. Moreover, the current research focused on the colour attribute of hue. Future studies could look into the moderating roles of mood and involvement on the colour – attitude/ intentions relation by focusing on the other two attributes of colour, i.e. saturation and value.

References

- Ajzen I. & Fishbein M., (1980). *Understanding Attitudes and Predicting Social Behavior*. Englewood Cliffs, NJ: Prentice-Hall Inc.
- Ajzen, I., & Fishbein, M. (1972). Attitudes and normative beliefs as factors influencing behavioral intentions. *Journal of personality and social psychology*, 21(1), 1.
- Alba, J.W., & Hutchinson, J. W., (1987). Dimensions of Consumer Expertise. *Journal of Consumer Research*, 13(4), 411-454.
- Albarracin, D., & Hart, W. (2011). Positive mood+ action= negative mood+ inaction: effects of general action and inaction concepts on decisions and performance as a function of affect. *Emotion*, 11(4), 951.
- Allen, C. & Janiszewski, C., (1989). Assessing the Role of Contingency Awareness in Attitudinal Conditioning with Implications for Advertising Research. *Journal of Marketing Research*, 26(1), 30-43.

- Alpert, J.I., & Alpert, M.I. (1990). Music influences on mood and purchase intentions. *Psychology and Marketing*, 7(2), 109–133.
- Bagchi, R., & Cheema, A. (2012). The effect of red background color on willingness-to-pay: The moderating role of selling mechanism. *Journal of Consumer Research*, 39(5), 947-960.
- Batra, R., & Ray, M L. (1986). Affective responses mediating acceptance of advertising. *Journal of Consumer Research*, 13(2), 234-249.
- Bellizzi, J. A., Crowley, A.E., & Hasty, R.W. (1983). The effects of colour in store design. *Journal of Retailing*, 59(1), 21-45.
- Bellizzi, J.A., & Hite, R., (1992). Environmental Colour, Consumer Feelings, and Purchase Likelihood. *Psychology and Marketing*, 9(5), 347-363.
- Bower, G. H., (1991). Mood congruity of social judgments. In Forgas J. P. (Ed), Emotion and social judgments. *International series in experimental social psychology*, 31-53. Elmsford, NY, US: Pergamon Press
- Chaiken, S., (1980). Heuristic versus Systematic Information Processing and the Use of Source versus Message Cues in Persuasion. *Journal of Personality and Social Psychology*, 39(5), 752-756.
- Cheng, F. F., Wu, C. S., & Yen, D. C. (2009). The effect of online store atmosphere on consumer's emotional responses—an experimental study of music and colour. *Behaviour & Information Technology*, 28(4), 323-334
- Choungourian, A. (1967). Introversion — Extraversion and Color Preferences. *Journal of Projective Techniques and Personality Assessment*, 31(4), 92-94
- Cimbalo, R.S., Beck, K.L. & Sendziak, D.S. (1978). Emotionally toned pictures and color selection for children and college students, *Journal of Genetic Psychology*, 33(2), 303-4.
- Clore G. L. (1985). The cognitive consequences of emotions and feelings. American Psychological Association Conference, Los Angeles
- Coyle, J.R. & Thorson, E., (2001). The effects of progressive levels of interactivity and vividness in web marketing sites. *Journal of Advertising*, 30(3), 65-77.
- Crowley, A. E. (1993). The two-dimensional impact of color on shopping. *Marketing letters*, 4(1), 59-69.
- De Vries, L., Gensler, S. & LeeFlang, P. (2012). Popularity of Brand Posts on Brand Fan Pages: An Investigation of the Effects of Social Media Marketing. *Journal of Interactive Marketing*, 26(2), 83-91.
- Dewhurst, T., & Davis, B. (2005). Brand strategy and integrated marketing communication (IMC): A case study of Player's cigarette brand marketing. *Journal of Advertising*, 34(4), 81-92.
- Dresler-Hawke, E., & Veer, E. (2006). Making healthy eating messages more effective: Combining integrated marketing communication with the behaviour ecological

model. *International Journal of Consumer Studies*, 30(4), 318-326.

Duffett, R. (2015). Facebook advertising's influence on intention-to-purchase and purchase amongst Millennials. *Internet Research*, 25(4), 498-526.

Elliot, A. & Maier, M. (2014), Color Psychology: Effects of Perceiving Color on Psychological Functioning in *Humans in Annual Reviews*, Palo Alto, 95-120.

Engel, J.F., & Blackwell, R.D., (1982). *Consumer Behavior*. 4th ed. New York: The Dryden Press

Ettis, S. A. (2017). Examining the relationships between online store atmospheric color, flow experience and consumer behavior. *Journal of Retailing and Consumer Services*, 37, 43-55.

Gardner, Meryl P. (1985), Mood States and Consumer Behavior: A Critical Review, *Journal of Consumer Research*, 12 (December), 281-300.

Ghaderi, M., Ruiz, F. and Agell, N. (2015), Understanding the impact of brand colour on brand image: A preference disaggregation approach, *Pattern Recognition Letters*, 67, pp. 11-18.

Goldberg, M.E., & Gorn, G.J., (1987). Happy and sad TV programs: how they affect reactions to commercials. *Journal of Consumer Research*, 14(3), 387-403.

Gopalakrishna, S., Lilien, G. L., Williams, J. D., & Sequeira, I. K. (1995). Do trade shows pay off?. *The Journal of Marketing*, 75-83.

Gorn, G. J., Goldberg, M. E., & Basu, K. (1993). Mood, awareness, and product evaluation. *Journal of Consumer Psychology*, 2(3), 237-256.

Gorn, G.J., Chattopadhyay, A., Yi, T., & Dahl, D. (1997). Effects of Colour as an Executional Cue in Advertising: They're in the Shade. *Management Science*, 43(10), 1387-1400.

Gottlieb, U., Brown, M., & Ferrier, L. (2014). Consumer perceptions of trade show effectiveness: Scale development and validation within a B2C context. *European Journal of Marketing*, 48(1/2), 89-107..

Henthorne, T., LaTour, M. & Nataraajan, R., (1993). Fear Appeals in Print Advertising: An analysis of Arousal and Ad Response. *Journal of Advertising*, 22(2), 59-69.

Hutter, K., & Hoffmann, S. (2011). Guerrilla marketing: The nature of the concept and propositions for further research. *Asian Journal of Marketing*, 5(2), 39-54.

Hyojin Lee, Xiaoyan Deng, H. Rao Unnava, Kentaro Fujita. (2014). Monochrome Forests and Colorful Trees: The Effect of Black-and-White versus Color Imagery on Construal Level. *Journal of Consumer Research* 41(4), 1015-1032.

Ishihara, S. (1993). *Ishihara's tests for colour-blindness*. Tokyo, Japan: Kanehara & Co

Kareklas, I., Carlson, J.R. & Muehling, D.D., (2014). I eat organic for my benefit and yours: Egoistic and altruistic considerations for purchasing organic food and their implications for advertising strategists. *Journal of advertising*, 43(1), 18-32.

Karnal, N., Machiels, C.J.A., Orth, U.R. & Mai, R. (2016), Healthy by design, but only when in focus: Communicating non-verbal health cues through symbolic meaning in packaging, *Food Quality and Preference*, 52, 106-119.

Kido, M. (2000), Bio-psychological effects of color, *Journal of International Society of Life Information Science*, 18(1), 254-62.

Kim, K., Sin, S.J. & He, Y. (2013). Information seeking through social media: Impact of user characteristics on social media use, *Proceedings of the American Society for Information Science and Technology*, 50(1), 1-4.

Kitchen, J. P., Kerr, G., E. Schultz, D., McColl, R., & Pals, H. (2014). The elaboration likelihood model: review, critique and research agenda. *European Journal of Marketing*, 48(11/12), 2033-2050

Krishna, A. & Schwarz, N., (2013). Sensory marketing, embodiment, and grounded cognition: Implications for consumer behaviour, 24, 159-168.

Labrecque, L.I. and Milne, G.R. (2012), Exciting red and competent blue: the importance of color in marketing, *Journal of the Academy of Marketing Science*, 40(5), 711-727.

Labrecque, L.I., Patrick, V.M. & Milne, G.R. (2013), The Marketers' Prismatic Palette: A Review of Color Research and Future Directions, *Psychology & Marketing*, 30(2), 187-202.

Langer, R., 2006. Stealth Marketing Communications – is it ethical? Strategic CSR communication. In: *Morsing, M., Beckmann, S.C.* (Eds.), Copenhagen, DJOEF Publishers, 107–134

Lee, K. (2012), Consumer processing of virtual experience in e-commerce: A test of an integrated framework, *Computers in Human Behavior*, 28(6), 2134-2142.

Madden, T. J., Hewett, K., & Roth, M. S. (2000). Managing images in different cultures: A cross-national study of color meanings and preferences. *Journal of International Marketing*, 8(4), 90-107.

Machleit, K. A., Allen, C. T., & Madden, T. J. (1993). The mature brand and brand interest: An alternative consequence of ad-evoked affect. *The Journal of Marketing*, 72-82.

Mandel, N. & Johnson, E. J. (2002). When Web Pages Influence Choice: Effects of Visual Primes on Experts and Novices, *Journal of Consumer Research*, 29(2), 235-245.

McGrath, J. M. (2005). A pilot study testing aspects of the integrated marketing communications concept. *Journal of Marketing Communications*, 11(3), 191-214.

Mehta, R., & Zhu, R. J. (2009). Blue or red? Exploring the effect of color on cognitive task performances. *Science*, 323(5918), 1226-1229.

Middlestadt S. E. (1990). The effect of background and ambient color on product attitude. *Advances in Consumer Research*, 17(1), 244-249.

Miller, E.G., & Kahn, B.E., (2005). Shades of Meaning: The Effect of Color and Flavor Names on Consumer Choice. *Journal of Consumer Research*, 32(1), 86 - 92

- Morton, J., 2009. Who Owns Hues? [Online] Available at: <http://www.colormatters.com/color-and-marketing/color-and-trademarks> .
- Ots, M. & Nyilasy, G. (2017). Just doing it: theorising integrated marketing communications (IMC) practices. *European Journal of Marketing*, 51(3), 490-510.
- Pantin-Sohier, G. (2009). The influence of the product package on functional and symbolic associations of brand image. *Recherche et Applications en Marketing (English Edition)*, 24(2), 53-71.
- Park, J.W., & Hastak, M. (1994). Memory-based product judgments: Effects of involvement at encoding and retrieval. *Journal of Consumer Research*, 21(2), 534-547.
- Pasadeos, Y., Phelps, J. & Edison, A. (2008), Searching for our 'own theory' in advertising: an update of research networks, *Journalism and Mass Communication Quarterly*, 85(4), 785-806.
- Petty R. E., & Cacioppo, J. T. (1979). Effects of forewarning of persuasive intent and involvement on cognitive responses and persuasion. *Personality and Social Psychology Bulletin*, 5, 173-176.
- Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. *Advances in experimental social psychology*, 19(1), 123-205.
- Petty, R.E. & Cacioppo, J.T. (1981), *Attitudes and Persuasion: Classic and Contemporary Approaches*, Wm. C. Brown Company Publishers, Dubuque, IA.
- Richards, A., French, C. C., Johnson, W., Naparstek, J., & Williams, J. (1992). Effects of mood manipulation and anxiety on performance of an emotional Stroop task. *British Journal of Psychology*, 83(4), 479-491.
- Rizomyliotis, I., Konstantoulaki, K., & Kostopoulos, I. (2017). *Business-to-Business Marketing Communications: Value and Efficiency Considerations in Recessionary Times*. Palgrave Mc Millan: London
- Sabate, F., Berbegal-Mirabent, J., Cañabate, A. & Lebherz, P.R., (2014). Factors influencing popularity of branded content in Facebook fan pages. *European Management Journal*, 32(6), 1001-1011.
- Schaie, K. W., & Heiss, R., (1964). *Colour and personality*. Berne, Switzerland:Hans Huber.
- Schuldt, J. (2013). Does Green Mean Healthy? Nutrition Label Color Affects Perceptions of Healthfulness, *Health Communication*, 28(8), 814-821.
- Schuldt, J. P., & Schwarz, N. (2010). The "organic" path to obesity? Organic claims influence calorie judgments and consumption recommendations, *Judgment and Decision Making*, 5, 144-150.
- Schultz, D.E. & Patti C.H., (2009) The evolution of IMC: IMC in a customer-driven marketplace. *Journal of Marketing Communications*, 15(2-3), 75-84
- Schwarz, N.,(1990). Feelings as information: Informational and motivational functions of

affective states. In Higgins, E.T., & Sorrentino, R.,(eds), Handbook of motivation and cognition. *Foundations of social behavior*, 2, 527-561, New York,

Sharpe, D. T., (1974). The psychology of colour and design. Chicago: Nelson-Hall.

Singh, S. (2006). Impact of color on marketing. *Management decision*, 44(6), 783-789.

Sokolik, K., Magee, R. G., & Ivory, J. D. (2014). Red-hot and ice-cold web ads: The influence of web ads' warm and cool colors on click-through rates. *Journal of Interactive Advertising*, 14(1), 31-37.

Soldat, A.S., Sinclair, R.C., & Mark M.M., (1997). Colour as an environmental processing cue: External affective cues can directly affect processing strategy without affecting mood. *Social Cognition*, 15(1), 55-71.

Strayer, D. L., & Johnston, W. A. (2001). Driven to distraction: Dual-task studies of simulated driving and conversing on a cellular telephone. *Psychological science*, 12(6), 462-466.

Strayer, D. L., & Johnston, W. A. (2001). Driven to distraction: Dual-task studies of simulated driving and conversing on a cellular telephone. *Psychological science*, 12(6), 462-466.

Tafesse, W., & Korneliussen, T. (2012). Identifying factors affecting consumers purchase incidence at retail trade shows. *Journal of Retailing and Consumer Services*, 19(4), 438-444

Turner, P. (2017). Implementing integrated marketing communications (IMC) through major event ambassadors. *European Journal of Marketing*, 51(3), 605-626

Visser, M., Gattol, V. & Van der Helm, R. (2015), Communicating Sustainable Shoes to Mainstream Consumers: The Impact of Advertisement Design on Buying Intention, *Sustainability*, 7, 8420-8436.

Wedel, M. & Pieters, R. (2015), The Buffer Effect: The Role of Color When Advertising

Zaichkowsky, J. L. (1985). Measuring the involvement construct. *Journal of Consumer Research*, 12(3), 341-352.

Zhang, X., Hui, W. Y., & Barrett, L. F. (2014). How does this make you feel? A comparison of four affect induction procedures. *Frontiers in Psychology*, 5. 689.

Table 1: Means and Standard Deviations for Interaction Effects (Sample 1)

			Attitude		Behavioural Intention	
Colour	Mood	Involvement	Mean	SD	Mean	SD
		High	5.92	0.86	5.37	1.29
	Negative	Low	5.34	1.11	5.29	0.80

Cool	Positive	Total	5.79	0.94	5.25	1.19
		High	5.19	1.34	5.42	1.20
		Low	6.04	0.71	5.23	1.24
	Total	Total	6.10	0.96	5.31	1.15
		High	5.54	0.89	5.38	1.27
		Low	5.55	1.04	5.27	0.90
Warm	Negative	High	5.06	1.08	4.42	0.95
		Low	5.22	0.77	4.98	0.84
		Total	5.20	0.94	4.80	0.93
	Positive	High	5.26	1.25	4.66	0.64
		Low	5.45	0.83	4.71	0.93
		Total	5.29	0.97	4.69	0.84
Total	High	5.43	1.06	4.53	0.87	
	Low	5.28	0.80	4.79	0.90	
	Negative	High	4.33	0.68	4.26	1.19
Low		3.86	1.43	4.70	1.08	
Total		4.06	1.05	4.51	1.11	
Black & White	Positive	High	5.26	1.05	5.02	0.92
		Low	5.04	0.88	4.78	0.81
		Total	5.09	0.91	4.83	0.91
	Total	High	5.08	1.01	4.88	0.98
		Low	4.94	0.97	4.77	0.72

Table 2: Means and Standard Deviations for Interaction Effects (Sample 2)

			Attitude		Behavioural Intention	
Colour	Mood	Involvement	Mean	SD	Mean	SD
Cool	Negative	High	4.55	0.95	4.18	0.94
		Low	4.59	0.62	4.25	0.76
		Total	4.57	0.88	4.20	0.89
	Positive	High	5.11	0.70	4.79	1.07
		Low	5.03	1.20	4.76	0.84
		Total	5.20	0.97	4.77	0.88
	Total	High	4.70	0.94	4.24	0.96
		Low	4.79	0.80	4.40	0.79
	Warm	Negative	High	3.95	0.94	3.51
Low			3.69	0.56	4.15	0.61
Total			4.11	0.92	3.65	0.82
Positive		High	4.41	0.62	3.30	0.81
		Low	4.20	0.77	3.74	0.84
		Total	4.28	0.71	3.58	0.84
Total		High	4.28	0.88	3.45	0.81
		Low	4.14	0.74	3.86	0.79
Black & White		Negative	High	4.34	0.54	3.10
	Low		4.42	0.69	3.85	0.74
	Total		4.39	0.56	3.55	0.87
	Positive	High	4.18	1.29	3.45	0.62
		Low	4.03	0.94	3.80	0.83
		Total	4.06	1.02	3.72	0.79
	Total	High	4.20	1.20	3.40	0.66
		Low	4.05	0.92	3.81	0.82

Table 3: Means and Standard Deviations for Interaction Effects (Sample 3)

			Attitude		Behavioural Intention	
Colour	Mood	Involvement	Mean	SD	Mean	SD
Cool	Negative	High	5.01	0.94	4.53	0.54
		Low	4.95	0.59	4.82	0.63
		Total	5.00	0.86	4.55	0.56
	Positive	High	5.47	0.47	5.09	0.72
		Low	5.52	1.00	4.36	0.18
		Total	5.50	0.76	4.63	0.63
	Total	High	5.05	0.91	4.59	0.57
		Low	5.12	0.75	4.71	0.55
	Warm	Negative	High	4.13	0.92	3.81
Low			4.89	0.56	4.02	0.75
Total			4.29	0.91	3.87	0.84
Positive		High	4.61	0.62	3.47	0.89
		Low	4.40	0.77	3.64	0.78
		Total	4.48	0.71	3.58	0.81

Black & White	Total	High	4.27	0.87	3.68	0.88
		Low	4.54	0.74	3.75	0.77
	Negative	High	4.54	0.54	3.50	0.22
		Low	4.62	0.69	3.45	0.46
		Total	4.59	0.56	3.47	0.35
	Positive	High	4.46	1.43	3.93	0.53
		Low	4.21	0.95	3.77	0.73
		Total	4.26	1.06	3.80	0.69
	Total	High	4.47	1.32	3.87	0.52
		Low	4.24	0.94	3.75	0.72

Appendix 1

Experiment Stimuli – Study 1



Experiment Stimuli – Study 2



Experiment Stimuli – Study 3



Mood Manipulation Stimuli

Child Trafficking



(Source: [Unicef](#), 2009)

"Approximately 600,000 to 800,000 victims are trafficked across international borders annually, and between 14,500 and 17,500 of those victims are trafficked into the United States each year. More than half of these victims worldwide are children!" - Child Victims of Human Trafficking, Department of Health and Human Services, USA and the U.S. Department of State

Child trafficking unlike many other issues is found in both developed and developing nations. Trafficked children are used for prostitution, forced into marriage, illegally adopted, used as cheap or unpaid labour, used for sport and organ harvesting. Some children are recruited into armed groups. Trafficking exposes children to violence, abuse, neglect and exploitation. According to [UNICEF](#) a child victim of trafficking is "any person under 18 who is recruited, transported, transferred, harboured or received for the purpose of exploitation, either within or outside a country". Trafficking is one of the hardest crimes to track and investigate hence data is hard to obtain. The latest figures estimate that 1.2 million children are trafficked worldwide every year. Child prostitution has the highest supply of trafficked children.

(Source: <http://www.childlineindia.org.in/child-trafficking-india.htm>)

Child Mortality



(Source: [Wikipedia](#), 2005)

A disproportionately heavy burden of child deaths weighs on families in eastern and southern Africa. Every day 5,500 children under the age of five die across the 21 countries of the region and the majority of the deaths are largely preventable.

That means that in the space of just two months more children's lives are lost in the region than were lost in the tsunami. This toll is followed by 530,000 more in the next two months, and every two months.

(Source: [Unicef](#), 2005)

Good News from Around the World

“There are plenty of benefits when you read lots of good news!”

Operation Smile Turning Deformed Faces into Smiling Faces.



In 18 years, Operation Smile has treated over 40,000 children and young adults with deformities in the U.S. and abroad, offering hope and changing the face of the world one smile at a time. Founded by Dr. William Magee and his wife, Kathleen, the group has been turning deformed faces into smiling faces in countries all over the world, donating \$28 million in medical services each year.

Penguins Caught in Oil Spill Saved by “Commando” Veterinarians.



Hundreds of Magellanic penguins that washed ashore in Argentina after an oil spill have been saved by a group of “Commando” veterinarians. They are volunteers, part of a worldwide network called the IFAW Emergency Relief Team, who “rely on rapid-deployment, know-how and dish soap.” Arriving at the scene, they immediately built a field hospital to remove the deadly oil and for housing the birds during weeks of recovery. *The International Bird Rescue Research Center (IBRRC) discovered that Dawn dish soap excels at removing oil from feathers. The detergent is now a staple in rescue efforts and the manufacturer Procter and Gamble has donated truckloads of the stuff.*

Our world is getting better...

(Source: goodnewsnetwork.org)