

# A REFLEXIVE ACCOUNT OF DEVELOPING COMMUNITY HEALTH CARE MATERIAL THROUGH THE USE OF PRETESTING METHODS AND VISUAL PERSUASION TECHNIQUES

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## Abstract

*Fetal Alcohol Syndrome (FAS) is a congenital syndrome caused by excessive consumption of alcohol by a mother during pregnancy. It is characterized by retardation of mental development and physical growth, particularly of the skull and face of the infant. FAS is a growing problem in South Africa, with it being rife in the townships and rural areas. The lack of public information and intervention is one of the reasons why the syndrome persists in these communities and this was also the motivation for this study.*

*The study will be carried out in an inland town, in tandem with an NGO based within the community, which serves the people of the community. There are two sections to the methodology of this research:*

*The first section was the content analysis of existing health communication material. The second section was the development of test material by soliciting feedback through focus groups, which will be sampled from the community, in order to determine the variables for more effective health communication material. The researcher will work in partnership with the local NGO on this part of the methodology.*

*The focus groups give feedback regarding the visual and persuasive elements of the designed material, thus being incorporated into the development and design of the material. The study deals with Fetal Alcohol Syndrome as a subject and will discuss the methodology used in order to achieve the set aim of responding to the need for health communication material by developing the material in tandem with a community group. This study, once completed, will contribute to knowledge that will assist in preventing and dealing with the effects of the syndrome, and contribute to the improvement of health communication messages.*

**Keywords:** *Visual Persuasion Techniques; Fetal Alcohol Syndrome; Health Communication*

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## Introduction

Fetal alcohol Syndrome (FAS) is a congenital syndrome caused by excessive consumption of alcohol by the mother during pregnancy and is characterized by retarded mental development and physical growth. This paper discusses the methodology used in order to achieve the set aim of responding to the need for health communication material by developing the material in tandem with a community group, as well as the testing of persuasion techniques in health communication material. The project deals with Fetal Alcohol Syndrome as a subject, and the methodology implemented to test graphic and visual variables that could contribute to improved preventative and treatment communication material. It is hoped that the outcome of this study will contribute to knowledge that will assist in preventing and dealing with the effects of the syndrome, as well as contribute to the body of existing knowledge regarding effective health communication material.

FAS is caused due to unborn children being exposed to alcohol prenatally. Most of the mothers of these affected children are marginalized and do not have the economic or social power to avoid or abandon their

situation (May, Brooke, Gossage, Croxford, Adnams, Jones, Robinson, & Viljoen 2000). While FAS is preventable, its effects are also incurable once it has affected an individual. FAS is preventable by total abstinence from alcohol during pregnancy. The message of total alcohol abstinence during pregnancy however, has not made its way into the consciousness of communities as yet. Toutain (2010) for example, looked at the abstinence/consumption of alcohol during pregnancy in France. The study revealed that abstinence from alcohol during pregnancy was misunderstood by participants and is often interpreted as ‘cutting down’ on regular amounts. Only a small minority of women refused to consume alcohol during pregnancy (Ibid 2010: 185). Toutain’s research also revealed the essential role of culture around alcohol in a given society. Toutain (2010: 187) recommends that there must be a unified recommendation of alcohol abstinence during pregnancy; that awareness campaigns be implemented to counteract misconceptions concerning prenatal alcohol exposure and; to educate the public concerning prevention and safety (total abstinence).

Understanding and identifying which populations are high-risk in terms of Fetal Alcohol Spectrum Disorders (FASD), helps prevention efforts and these efforts in turn have been met with more success than a general prevention approach (Thomas et al. 2010). The high risk factors for FASD as identified by Thomas et al. (2010) are typically present in some South African Communities. These are: low socio-economic status and education; increased maternal age; number of pregnancies and poor malnutrition before or after prenatal alcohol exposure. It is not that these conditions are just present in some of South African communities; several authors even suggest that the highest prevalence of FAS occurs in wine growing areas of the Western Cape (May, Gossage, Brooke, Snell, Marais, Hendricks, Croxford, & Viljoen 2005; WHO 2011). It is for this reason that the fieldwork took place in a small town, in the Western Cape. Doing fieldwork in such a community poses its own difficulties. Cultural differences between the subjects and researcher cloud communication efforts and could weaken the effectiveness of health care communication material. Hugo (2000: 13), an advocate of cultural sensitivity in health communication material, argues that material must communicate with patients and not to them. Such material must not only be culturally sensitive and “with them” but also requires a level of self-efficacy, rather than a simple linear form of communication, to be effective (Ojo & De Lange 2011).

In attempt to make their poster communication more effective, governments and political parties often use persuasion techniques in their campaign communication, in order to solicit votes from the electorate and sway decision-making in their favour. These techniques have been effective and are varied from harsh and blatant, to more subtle and suggestive (Thomas, Warren & Hewitt 2007). Examples of this is evident in persuasive South African political communication. One example is ‘Name Calling’, and was used by the Independent Democrats. Their poster read “Put criminals in Jail. Not in Government”. The ‘criminals’ they refer to are members of the African National Congress (ANC) that were in government at that time. The posters use the Name Calling technique by labeling ANC members as criminals and thus portray a negative image of the ANC to the electorate. This poster is illustrated underneath.



**Figure 1. Put criminals in jail. Not in government (Independent Democrats 1999)**

This paper looks at the methodology used in developing health communication material for a targeted audience, as well as pretesting the audience's response to persuasion techniques embedded within health communication material. In addition to this, the study comments on the variables that contribute to improved health communication material. This aim is achieved by discussing the techniques used during the testing phase of a series of visual communication materials, as well as the visual persuasive techniques employed in the material.

## The Method

This section discusses the process of preparing test material and the technique used in the study that aimed to test the response of the audience to persuasion techniques within health material. The test material preparation was preceded by an analysis of existing FAS communication material. The field work i.e. the testing of material and development of final material, in conjunction with an NGO, took place in an inland town in the Western Cape. The name of the town and NGO may not be listed due to confidentiality reasons and agreements with participating subjects. The NGO was established for FAS prevention, education and awareness and driven by a vision of children born without FAS. The organization conveys the FAS message through an experimental learning model, aimed at young children, adults, and shebeen owners.

### The analysis of existing FAS communication material

The South African Department of Health did not have material that deals with FAS at the time of enquiry, therefore the posters and graphic material used in the analysis were collected largely from the internet, using the key phrases 'Fetal Alcohol Syndrome Poster Campaigns' and 'FAS Communication Material', and from a South African NGO. 105 Posters were collected and formed the sample for analysis.

### Thematic analysis

The aim of the content analysis was to identify thematic trends and persuasion techniques in existing FAS health communication material. This analysis used a similar approach to the one employed by Roberts and Pettigrew (2007) who conducted a thematic content analysis by developing codes for analysis and having the material independently viewed and coded by two separate coders. The development of themes to use within the analysis was achieved by having the researchers view the material separately, and then ascribe a thematic description to each poster. The researchers identified similar, overarching, themes throughout the body of material. A brief reflection of the main nine themes identified during the analysis is given below.

### Consequence - Negative

This particular theme is characterized by the use of strong graphic imagery to communicate the consequences of an undesirable behavior or being affected by a particular ailment. Examples of such a theme are given below:



Figure 2. Permanent brain damage (FASfact 2013).

### **Consequence – Positive**

This theme communicates the potential consequences of engaging in risky healthy behavior while also communicating the potential rewards of abstaining from such behaviors. An Example is below:



Figure 3. Thanks mom (preventfas n.d)

### **Prevention - Negative**

Prevention-negative posters focus on the consequences of not adopting a particular health behavior. These messages typically do not contain a self-efficacy element. An example of this theme is below:



Figure 4. Avoid alcohol during pregnancy (Washington State Liquor Control Board n.d).

### **Prevention - Positive**

This theme highlights prevention methods as well as the positive outcomes of adopting the mentioned prevention methods. Example below:



Figure 5. Fetal alcohol syndrome cured (Minnesota Prevention Resource Centre [a]).

**Promotion – Negative**

Characteristics of this theme are identified as a promotion of health behaviors accompanied by copy or graphic that addresses the negative impact that risky health behaviors can have. The poster below is an example of this theme:



Figure 6. Alcohol can harm your unborn baby (Russel Family Fetal Alcohol Disorders Association 2011).

**Promotion - Positive**

This theme promotes the positive impact or benefits of adopting or abstaining from certain health behaviors. These types of messages are positive in nature, provides and outcome of the desired behavior. These posters typically contain a self-efficacy element in their communication. An Example is given below:



Figure 7. Love (FASworld Toronto 2013).

**Informational – Negative**

This theme is identified as awareness information provision from a corporate or governmental source highlighting the negative effects of the health subject e.g. Fetal Alcohol Syndrome. Below, is an example of a poster that utilizes this theme:



Figure 8. 40, 000 Babies (The Arc of New Jersey 2012).

**Informational – Positive**

This theme is identified as awareness information provision from a corporate or governmental source highlighting the promotion aspects of the health subject. An example is below:





Figure 9. My family wanted me to be as healthy as possible (Best Start Resource Centre 2001)

**Informational – Neutral**

This theme is identified as awareness information provision from a corporate or governmental source that has neither an explicitly positive or negative focus. An example is below:



Figure 10. FAS facial characteristics (Shane Hill 2000).

**Informational – Positive + Negative**

This theme is identified as awareness information provision from a corporate or governmental source that highlights both negative impacts and prevention information with regards to a specific health subject. An example is below:



Figure 11. Fetal alcohol spectrum disorders (Ohio County Substance Abuse Prevention Coalition 2008).

The second component of the posters' analysis identifies persuasion techniques, taken from the literature, and seeks to identify which persuasion techniques were made use of in each poster's design.

#### ***Analysis of communication techniques***

Similarly, the sample of posters was analyzed for persuasion techniques in their designs. The technique analysis was done to ascertain if any notable persuasion techniques, such as those used in political posters, were used in these items. It is also hypothesized that by including persuasion techniques in health communication material, one might increase their effectiveness. The codes used to identify the different persuasion techniques are taken from the work of Fleming (1995) and Bryder (2008). A description and example of each technique is as follows:

#### ***Name Calling***

'Name Calling' is attaching a negative label to a subject to incite negativity from the audience towards that subject, whether the subject be a person, party, ideology or ethnic group (ibid.: 1995: 4). The effect of this technique is that it justifies negative/preventative behavior towards the subject.



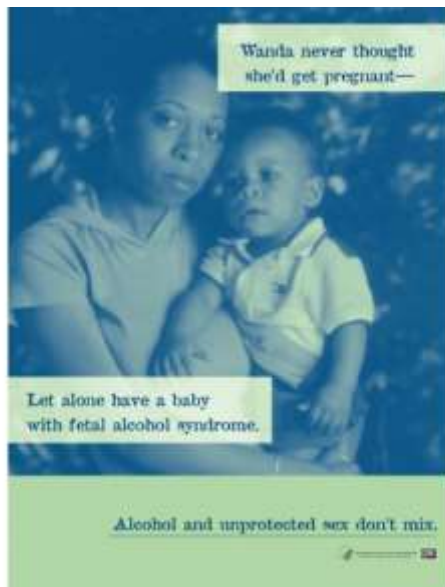
Figure 12. Some mothers spoil (Minnesota Prevention Resource Centre[b]).



The poster uses the 'Name Calling' technique to attach a negative connotation to 'some mothers' as used in this context. The labeling of these mothers is used in order to encourage women to not be a part of this group by abstaining from alcohol while pregnant.

### **Plain Folk**

This technique is the representation of the target audience in the communication, in a bid to win acceptance from the target audience (ibid.: 1995:9). The advantage of using this technique is that it builds a relationship with the audience, based on similarity. This relationship suggests that the propagandist has similar concerns, passions and fears to the audience and is therefore to be trusted and supported to deal with the audience's concerns as well. An example is presented below



**Figure 13. Wanda never thought she'd get pregnant (Idaho Radar Center 2013).**

The poster makes use of the Plain Folk technique by using a model, which is likely representative of the target audience, and makes it even more personal by giving the model in the poster a name (Wanda). The naming of the model makes the model part of the audience and could help the audience to identify themselves with the message.

### **Bandwagon**

The 'Bandwagon' technique is used to incite group behavior and to create the impression that everybody likes members of this group. This technique also appeals to the insecurities of people and subtly suggests exclusion as a repercussion of failing to cooperate with the appeal given. An example is given below.



**Figure 14. No thanks I'm pregnant (prevention institute n.d.).**

The above poster depicts an image of a woman refusing a glass of wine because she is pregnant. Depicting this behavior encourages a viewer to act accord to the norm being established.

***Message Simplification***

This technique focuses on simplifying the message. This is a common technique used in health communication posters.



**Figure 15. Cured (Minnesota Prevention Resource Centre[c]).**

The poster above communicates a complex process in a simplistic manner. This technique is the core of prevention messages dealing with FAS.

With the first step of the methodology completed, which was the content analysis of existing materials, the research moved into the second phase of the methodology. The second phase was the testing of material and development of final material by way of bottom-up process, which made use of focus groups.

## **Testing of Material and Development of Final Material**

Several authors recommend the use of focus groups when developing and pretesting health communication material (Dowse 2004, Houts, Doak, Doak, & Loscalzo 2006 & Hugo 2000). This study used such focus groups to obtain feedback for the development and the final communication material. The problems that faced the researchers in the planning stages were the differences between the intended audience and the researchers in terms of language, education and cultural orientation. The biggest obstacle was that the researchers are not the same gender as the intended interviewees and do not speak the same language. It is for these reasons, and influenced by the work by Hugo (2000), that the decision was to follow a qualitative approach and to make use of an interviewer that matched the target audience with regards to culture and gender to act as a facilitator between the subjects and the researchers.

The work of Rosaline Barbour (2005), in terms of managing focus groups, in turn guided the interaction between the focus groups, the facilitator and the researchers. She explains that homogenous focus groups provide a secure environment for participants to share their views, and that they may also express their views more openly, as participants find themselves in a naturally occurring peer group (ibid; 2005:743). The downside to using homogenous groups is that participants may feel pressured to conform to certain views that are held by peers, as opposed to expressing their own individual opinion.

### ***The subjects and facilitator***

The subjects came from a high-risk population in terms of the conditions for FAS to be prevalent. The focus groups were made up of members from an Afrikaans-speaking community that lived in the immediate peri-urban areas surrounding the main town. Subjects for the focus groups were determined by the NGO and obtained through the use of convenience quota sampling. The subjects consisted of mothers, who are part of the community, and serve as mentors to other mothers affiliated with the NGO's FAS programmes. These mentors are between the ages of 35 and about 50. The focus groups were small and ranged from 3 to 5 per focus group discussion. Interaction with the focus groups took place via a facilitator of the same gender as the subjects. The facilitator was a professional person (a social worker) employed by the NGO who acted as the interviewer and facilitator of the focus groups. The facilitator spoke the same Afrikaans dialect and shared the same cultural nuances as the subjects in the focus groups.

A university ethics committee approved the project with conditions.

### ***Piloting the test material***

The work of Houts, Doak and Loscalzo (2006) and the results of the analysis of existing FAS material influenced the development of twelve preliminary test items. Houts et al. (2006) assessed the effects of pictures on health communication through a review of peer-reviewed studies in health education, psychology, education and marketing journals. Their work sought to address the challenges of low-literate patients and identified how to make pictures most effective within health communication. Some of their recommendations are that health educators should look for ways to incorporate pictures in their health communications; pictures and photographs must be simple, and the language used with pictures should be as simple and as "straight-forward" as possible (ibid., 2006:188). The pilot process consisted of presenting twelve preliminary test items to the NGO management, and going through a review process with the facilitator and a focus group. Persuasion techniques were imbedded within some of the test material, and presented to the focus group participants alongside material that had no persuasion techniques imbedded in them; according to the studies hypothesis, the group was to be in favor of material that contained the persuasive element. An example of two of these test items are given below.



**Figure 14. Ons gaan gesonde kinders he.**

The above message is a promotion-positive poster that uses a bandwagon technique. The poster made use of persuasive text alongside a non-persuasive graphic.



**Figure 15. Ons gaan gesonde kinders he (2).**

This poster, presented alongside the one above, is also a promotion positive poster, making use of the bandwagon technique. This poster, however, makes use of both persuasive text and a persuasive graphic.

This was the only focus group session where one of the researchers was present and observed the focus group interviews. The facilitator received feedback on interview and recording techniques and how to encourage interviewees to comment on the concepts. This pilot process enabled the refinement of the focus group-facilitator interaction, the recording and communication between the facilitator of the researchers. The comments from the pilot focus group and recommendations from the NGO's management enabled several changes to the test material for two additional focus group tests.

### ***First phase focus group***

The twelve test items consisted of image-text health care messages, adapted from the twelve ideas used in the pilot test. These changes came after considering the comments from the NGO management, the facilitator and comments from the subjects during the pilot phase. The facilitator, in a relaxed atmosphere, explained the process and the purpose of the focus group. The subjects viewed the messages on separate sheets and freely commented on each item. The facilitator encouraged debate and clarified issues if a member asked a question. The subjects expressed a wide range of emotions and responded with tones of acceptance and rejection to small nuances in images and text in each poster. One example where the subjects commented on small detail is a message endorsed by Pieter de Villiers, a previous coach of the South African national rugby team. The aim of these two posters was to test the technique of Band Wagon and Plain Folk. Pieter is a well-known and

respected person in the community and the text is supposed to induce a sense of appropriate group behavior. This particular message is aimed at men, but it was informative to hear the responses of the interviewees. They made specific comments as to why the words “liefeling” (darling) and “watse” (which) in the text may not be appropriate. They valued the celebrity’s personal life, his relationship with his wife, as important and even commented on small incidences about Pieter from news reports and television broadcasts. The two images of Pieter are shown underneath.



**Figure 16. Pieter de Villiers**

### ***Second phase focus group testing***

After receiving feedback from the focus groups in the first phase, the researcher designed a second set of posters (text only) to determine which communication style would elicit a better response from the interviewees. This involved determining the audience’s ‘regulatory focus’, which indicates whether the audience is prevention or promotion focused. These posters compared promotion to prevention messages (regulatory focus); self-efficacy to non self-efficacy; and elaborative to simplified text messages. The focus group session in this phase followed a similar process to the previous session. An example of a text-message poster is given underneath.



**Figure 17. Text-message posters.**

These text messages are similar except the one uses a Promotion-negative theme whilst the other uses a Promotion-positive theme. Although it is not within the scope of this paper to report on the subjects' feedback, we noted that the interviewees did not show a strong preference for one or the other, but that children and their wellbeing is of extreme importance to them.

## **Reflection**

The advantages of focus group testing, are that the developer of the material learns early in the development process which messages will be most effective, and which are well received by the target audience (Hugo 2000). In addition to that, positive results on pretested material can also allow buy in and sponsorship from corporate organizations (National Cancer Institute n.d.). The National Cancer Institute (NCI) proposes a framework with essential steps in developing and pretesting message materials. These steps range from collection and reviewing of existing material; the development and testing with the target audience; decisions as to what include and exclude; and then the final message development. The NCI framework informed the formative process of the material development. Using focus groups from the target audience to develop health communication material can be further advocated by the fact that focus groups assist in bridging socio-cultural divides and addressing nuances that may emerge in cases where the designer is not from the socio-cultural background as the target audience. In an attempt to develop communication that is better understood, better received, and better related to lived-experience of the target audience and by this understood to be more effective, focus groups have a significant impact in the process of the development of such material.

The feedback from the participants as relating to the use of persuasion techniques in the material, especially those techniques that were concerned with textual rhetoric, suggest that persuasion techniques of rhetoric are not as important to the participants as the 'angle' (motivating idea) from which the subject (FAS) is addressed. The participants were largely concerned with ideas of a loving and stable family and healthy children, these were the variables that were highlighted from the discussions as contributing to improved health communication material. So in this case, an attempt to create material that could be more persuasive might be more successful by focusing particularly on these variables within the target audience and include visual and textual cues that speak to these priorities.



## Conclusion

The high prevalence of FAS in some parts of South Africa motivated a project for effective health care communication material. Developing a message for a narrowly defined group requires the input from the target audience to ensure that the messages and graphics are culturally appropriate and are understood by the intended audience.

The development of the test material was preceded by an analysis of existing communication material. The analysis indicated that existing FAS communicators material fall into four major themes namely, fear, prevention-negative, promotion-positive, and society/family. Health communicators also use some persuasion techniques, similar to those used by political parties and governments, namely, Name Calling, Plain Folk, Bank Wagon, and the Simplification technique.

The analysis of existing FAS health care messages, an interpretation of the tape recordings of the three focus group sessions and post hoc discussions with the facilitator led to the following conclusions:

Socio-cultural issues play a major role in health communication, and must form the emotional anchor for health care communication messages.

A formative approach with pre-testing is mandatory if one needs to develop health care messages that require behavioral change.

A targeted message requires a targeted researcher (facilitator) to interact with a sample from the target population.

This paper recommends the use of persuasion techniques within health care material, although recognizing that the employment of such techniques will not be a panacea to communication improvement. Additionally recommended, is the employment of an appropriate interviewer to facilitate focus group session when pre-testing health care communication material that requires feedback from a target audience. The researcher or facilitator in this process must:

- not only be from the same socio-cultural group as the sample selected for pre-testing the material, but must also:
- be socially accepted by the interviewees;
- share the same values and emotional connectedness as the interviewees;
- be seen as an equal and not as a person in a position of power and furthermore;
- must be objective and be able to focus interviewees to the task at hand.

Health care communication materials require more than pre-testing and cultural sensitivity (Hugo 2000), it also needs a sensitive and culturally matched facilitator (researcher) that they can relate to, and be accepted by subjects during a pre-testing phase.

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