Dear reader,

The content of the Proceedings of the 9th International Conference of the Association for Family Ecology and Consumer Sciences truly reflect the diversity of the discipline and the challenges that professionals are confronted with on a daily basis.
All the abstracts of papers that were accepted for report at the conference are included in the Proceedings. Also included are the abstracts of full length papers that were submitted for review and possible publication in the 2008 Journal of Family Ecology and Consumer Sciences.

Please note that the content of all abstracts reflect the format in which they were submitted by the authors. We did however request authors to include detailed
reference lists to encourage further reading. Questions pertaining to the content can be directed to the authors as indicated.

I hereby wish to thank all the authors for their contributions and their effort with the oral and poster presentations at this special conference which forms part of the Centenary celebrations of the University of Pretoria. I trust that the content will inspire, enlighten, excite and challenge you!
Best wishes

Alet C Erasmus

Conference chair
ACKNOWLEDGMENTS

The conference committee of the 2008 SAAFECS conference would like to thank the following individuals/organisations for their contributions towards this conference:

• The Faculty of Natural and Agricultural Sciences of the University of Pretoria for financial assistance that enabled us to invite prof Jonathan Schroeder of the Exeter University in the UK as a guest speaker.
• Bernina Saskor for their sponsorship of the “conference bag competition”. Every conference attendant will thus receive a very individualistic conference bag that was created by an under graduate student of the Department of Consumer Science to hold all the conference essentials and to contain wonderful memories of the exciting week on the TUCS campus.

• Stuart Graham and Home Fabrics sponsored the many metres of fabric that were used for the conference bags.

• Nestlé sponsored bottled water for the duration of the conference.

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• Ravats for the loan of Persian carpets.
• Karongwe Furniture for supplying exquisite handmade furniture for the registration area for the duration of the conference.

We would also like to express our appreciation to
• Professor Alex Duffey for his sincere invitation to the Van Tilburgh Museum for the cocktail event.
• The students of the Department of Consumer Science who so willingly assisted when called upon.
• Personnell of the Department of Consumer Science for their support and assistance.
Research Methodology workshops

Presenter: Professor Jonathan Schroeder

BA Michigan, MA, PhD Berkeley; Professor of Marketing and Director of Research, Exeter University, UK

Profile

Prof Schroeder's research focuses on visual communication; understanding the cultural aspects of brands, consumption, and communication and the relationship between image and identity. In his book, Visual Consumption, he follows an interdisciplinary approach and integrates theory and principles from art history, photography, and visual studies towards an understanding of consumers' buyer and consumption behaviour. He is recipient of a five year research grant from the Jan Wallanders and Tom Hedelius Foundation. He has presented several executive management programs and has inter alia taught at the University of California, Berkeley, the University of Rhode Island, Novgorod State University, Russia and the Summer Exploration Program at Wellesley College and. Jonathan Schroeder was formerly involved in the Department of Industrial Economics and Management at the Royal Institute of Technology (KTH) in Stockholm, Sweden as the Director of Marketing. His research interests include: Advertising; Branding; Consumer Behaviour; Innovation and Strategy; Marketing Communications; Tourism Marketing; Visual Communication; Identity.

The following external positions indicate his involvement and expertise in terms of research and publishing:

- Editor, Consumption Markets and Culture
- Member, Editorial Board, European Journal of Marketing
- Member, Editorial Board, Marketing Theory
- Member, Editorial Board, Advertising and Society Review
- Member, Editorial Board, International Journal of Indian Culture and Business Management
- Member, Editorial Board, Journal of Business Research
- Member, Editorial Board, Journal of Historical Research in Marketing
- Director, Brands, Companies and Consumers research grant, 2002-2007
- Research Associate, Centre for Advanced Study of Leadership, Stockholm
- Research Affiliate, European Centre for Art and Management, Stockholm
- Associate Member, Centre for Consumption Studies, Dublin City University
- Research Fellow, Centre on Digital Enterprise, University of Auckland, 2007

Examples of recent publications:


Schroeder, J. E. (2005), Art and Brand Management, Advertising Express (India), 5, 7-21.


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SESSION 2A – FOODS RELATED TOPICS
INTRODUCTION

The grocery industry, which includes all forms of outlets focused on the reselling of groceries, toiletries and confectionery has a vast influence on the developing South African economy. Within the South African context, these outlets have been estimated at a total of 69 771 stores with a turnover of close to R64 729 million in 2002 (ACNielsen, 2002). Considering the impact of this industry, it stands to reason that grocery shopping and the retail environment in which it occurs has been studied extensively from several different perspectives. An aspect that has however received less consideration, is the shelf-edge signage (also referred to as “shelf-edge labels” or “shelf talkers”) used in the grocery retail environment.

Most retail outlets make use of shelf-edge labels to communicate product and price information (Food Marketing Institute, 2001). Piemonte (2001) defines it as a printed card designed to be attached to the shelf, conveying a message about the product. Although grocery retailers’ use and application of shelf-edge signage seem to revolve around the communication of information to the consumer, the question posed is whether consumers indeed use the information included on shelf-edge signage in their selection of grocery items. This question is relevant in light of various South African retail chains that are currently investigating the feasibility and potential value of upgrading these printed cards to electronic shelf-edge signage at a considerable financial cost. Empirical findings suggest that consumers either engage in nominal or limited decision-making during the acquisition of grocery items (Burgess, 1998). These types of decision-making involve low purchase involvement and low perceived risk, resulting in limited or no external search for information. The value of shelf-edge signage as an external source of information is therefore questioned.

Studies conducted in more developed countries have in fact highlighted the significant impact of signage in retail stores and in particular the value it has as cues for information about products (Inman, McAlister & Hoyer 1990;
Jansson, Bointon & Marlow, 2003). Inman et al. (1990) conclude that some consumers would pay more attention to signage and cues surrounding the product, than the product itself in their decision-making processes. Considering the fact that most decision-making processes occur within the store environment (Hui, 2004; Iris, 2002; Kahn & McAlister, 1997) some might argue that the use of in-store information such as provided by shelf-edge signage is inevitable. In this regard, organizations such as the Food Marketing Institute (2001) argue that the use of shelf-edge signage is not without problems. A typical example would include the occurrence of pricing discrepancies that may cause dissatisfaction among consumers.

The above research findings (derived from countries other than South Africa) reflected some of the initial ideas on the possible influences of shelf-edge signage on urban consumer decision-making processes within South African grocery retail outlets. The ideas were however mere speculation, since no empirical research had been conducted on the topic within the South African context prior to this study. Moreover, the divergent composition of the South African population and in particular the multiplicity of cultural groups relevant in this context would dictate certain disparity. The lack of empirical findings in this regard inspired a qualitative naturalistic research design, during which data were collected in the context-specific settings of grocery retail outlets in Gauteng, which is known for its multicultural nature.

OBJECTIVES

The objectives for the study included exploring and describing the informational input of shelf-edge signage in urban consumers’ nominal and limited decision-making processes, the problems they may incur in their use of shelf-edge labels as well as their recommendations on how the signage could be improved to better facilitate their selection of grocery items.

RESEARCH METHODOLOGY

In applying a phenomenological approach, qualitative data collection techniques such as semi-structured interviews, projective exercises and focus group discussions were used with the intention of describing the consumer’s point of view.

FINDINGS

The findings of the study emphasize the value of shelf-edge signage in providing price-, product- and retail-related information in grocery consumers’ limited decision-making processes. Yet, the findings also illustrate that shelf-edge signage is of less merit to consumers who engage in habitual or nominal decision-making. During this type of decision-making (examples include brand loyal or repeat purchases), consumers tend to rely on internal sources of information to guide their purchasing. The study provides clarity on the type of problems consumers incur when using shelf-edge signage. These include blocking mechanisms, such as incorrect information, illegibility, incorrect positioning and time constraints, all of which inhibit the potential informational value of the signage in consumers’ search for relevant information, albeit limited in nature. Of particular interest to retailers and marketers are consumers’ reactions to these blocking mechanisms, which in some cases involve relinquishing purchase intentions and patronage of alternative retail outlets. Situations such as these tarnish the retailer’s reputation and have a detrimental effect on retailers’ as well as manufacturers’ sales and revenues.
RECOMMENDATIONS

In terms of recommendations for improving shelf-edge signage, participants concurred that the information currently included on the signage is important, although it can be enhanced by adding additional specifications such as product ingredients and nutritional value. This would however depend on the retailer’s ability to maintain accurate descriptions and correct placement of the signage. In aligning for the future, retailers may thus benefit from new technology such as electronic shelf-edge labels which guarantees enhanced data integrity, more secure positioning of signage and improved informational value to the consumer. More research is however required in this regard. For future research purposes, the findings of the study are incorporated into a theoretical framework that is based on a systems perspective and provides an understanding of shelf-edge signage as an informational input in grocery consumers’ decision-making processes.

REFERENCE LIST


APPLYING THE ELABORATION LIKELIHOOD MODEL OF PERSUASION TO CONSUMERS’ PERCEPTIONS OF FOOD ADDITIVE LABELLING

by

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INTRODUCTION AND JUSTIFICATION FOR THE RESEARCH

World-wide only a limited number of research projects have attempted to explain consumers’ understanding (Crowe et al., 1992), perceptions (Wandel, 1997), viewpoints (McNutt, et al., 1986; Kajanne & Pirttilä-Backman, 1996), as well as opinions and practices (Prättälä et al., 1985) with regard to food additives. Other studies (Zibrik et al., 1981; Sloan et al., 1986) relating to food additives and consumers, focused on their attitudes while most of the research studies investigating overall food labelling included the issues of food additive labelling (Crawford & Worsley, 1986; Crawford & Baghurst, 1990; Worsley, 1996; Wandel, 1997; Nancarrow et al., 1998; Siu & Tsoi, 1998; FSANZ, 2003) and food additive safety (Williams et al., 2004) to a limited extent, no study investigating food additive labelling from a consumer viewpoint could be found. However, the increased marketing of processed foods containing food additives and the concern consumers express with regard to the risks of food additives call for the development of a theoretical basis for research into these issues. There is currently a lack of such data in South Africa.

OBJECTIVES

The primary objective of this study was to apply the Elaboration Likelihood Model of Persuasion (ELM) (Petty & Cacioppo, 1987:4) on consumers’ perceptions of food additive labelling. The model was used to explain how consumer information processing influences consumers’ decision-making and their consequent purchasing behaviour of food products containing food additives.
RESEARCH METHODOLOGY

This study was conducted from a phenomenological qualitative approach (Leedy, 1997:161, Delport & Fouché, 2005:264, Lichtman, 2006:27) with a descriptive exploratory nature (Greeff, 2005:303). This study was approved by the Ethics Committee of the North-West University. A non-probability technique, using purposive and snowball sampling (Babbie & Mouton, 2001:166) were applied. For inclusion in this study, subjects/participants must have had all or shared responsibility for the families household shopping, between the ages of 20-60 years and be food additive label readers. Consumers seeking nutritional information and health claims, brand names, other information provided on food labels, students and those having reading problems were excluded from the study. Data was collected by means of eight focus group sessions until saturation of the data was reached. In total 39 food additive label readers from the Vanderbijlpark-Vereeniging area participated in the study. Content analysis of the focus group discussions resulted in the categorising of concepts and sub concepts, thereby identifying 33 subtle underlying themes. Triangulation, credibility and transferability checks as well as dependability and conformability audits were used to ensure trustworthiness (Lincoln & Guba, 1985:372, Miles & Huberman, 1994:347; Babbie & Mouton, 2001:166; Carson et al., 2002:67; Shank, 2006:115).

FINDINGS

The main findings of the study were that food additive terminology, claims about additive content and E-numbers on the product label contributed to consumers’ general perceptions of food additives. Moreover, tartrazine, MSG and aspartame were more on “top of mind” than any other food additive. Participants were confronted with various blocking mechanisms when searching for and selecting food products containing additives. It included a lack of standardisation of terminology, illegible ingredient listing, a lack of food control and regulation, information-overload, uncomprehensive information, manufacturer dishonesty, time constraints and incorrect, untrustworthy, insufficient information. On the other hand, participants used various risk reducing strategies to reduce their concerns. They included the need for more legal control, government and private laboratory tests, completely avoiding products containing specific types of food additives or E-numbers, limiting the use of additives and E-numbers, avoiding all known types of additives, searching for more specific information to facilitate avoidance, reading the food labels, trusting endorsements and a need for more research. Participants indicated their intention to buy products which bear a “free”, “no X added”, “natural” or an ingredient “warning” claim on the label or packaging.

DISCUSSION

The adapted model illustrates how the consumers’ perceptions of food additive labels and additional information search influence their purchasing behaviour to varying extents. The ELM highlights the importance of anticipating how much elaboration is likely to occur during food additive message processing. Moreover, the route which the consumers choose to follow depends on their involvement, comprehension and their ability to process the information provided. Consumers are motivated to use the information about food additives on labels but lack the ability to do so. The low levels of food additive knowledge that were observed in this study represent the failure of the media and food manufacturers whose promotional campaigns and materials have been misleading and often silent on the food additive contents of products. The outcome of the central route to persuasion, as indicated by the ELM, with highly involved participants led to “will purchase”, “will not purchase” and “selective purchasing”. On the
other hand the outcome of the peripheral route to persuasion with low-involvement participants led to “will purchase” and “will not purchase”. More elaboration took place in the central route than in the peripheral route to persuasion.

The main limitations of this study were related to the small number of participants and the use of the purposive sampling technique. However, care was taken, by using a screening questionnaire (Carson et al., 2002:118), to ensure that the participants were food additive label readers. While the findings are indicative of trends in food additive label reading behaviour, it is exploratory and inconclusive. Hence, the results should be interpreted with caution and should not be regarded as necessarily representative of the South African population as a whole or be considered as general consumer behaviour.

RECOMMENDATIONS

More attention should be given to consumer education with regard to additive terms used on food labels and that the results could be useful in the current revision of labelling regulations. Marketers and retailers can use the information to understand and describe the food additive label reading consumer better. Salespeople could be a good source of information on additives and it is recommended that retailers should focus on the training of relevant sales people about additives. This project showed how educators, manufacturers, producers, retailers, marketers and legislators can align them for the future in order to provided better service to consumers.

REFERENCE LIST


RELATIONSHIP BETWEEN OBSERVED AND SELF-REPORTED ADHERENCE TO BACTERIAL FOOD-BORNE DISEASE PREVENTION GUIDELINES OF FEMALE STUDENTS IN SELF-CATERING RESIDENCES AT THE CAPE PENINSULA UNIVERSITY OF TECHNOLOGY

by

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BACKGROUND

A considerable proportion of bacterial food-borne disease cases are caused by food prepared in a domestic kitchen; using a communal kitchen increases the risk (Beumer & Kusumaningrum, 2003; Sharp & Walker, 2003). In this study the relationship between the observed and self-reported adherence to bacterial food-borne disease prevention guidelines of female students living in self-catering residences at the Cape Peninsula University of Technology: Cape Town campus were determined.

METHODOLOGY

Self-reported data on the adherence to bacterial food-borne disease prevention guidelines provide information on the awareness of these guidelines, but do not appear to be good predictors of the actual behaviour of consumers (Jay et al., 1999; Clayton et al., 2003; Redmond & Griffith, 2003). Direct observations of food preparation in communal kitchens, utilising an observational checklist, and structured personal interviews were used to collect the observed and self-reported adherence data. Participants were provided with a limited number of ingredients, including raw chicken, a potential high risk food item, and were observed, in a communal residential kitchen, while they prepared a meal utilising these ingredients. Following the food preparation session, participants were interviewed. Sixty black, female students, representing 7.4% of the female self-catering residence population voluntarily participated. Stratified random sampling based on communal kitchen usage was used to determine the sample.
The data from a preliminary questionnaire, food safety regulations (South Africa, Department of Health, 1977) and bacterial food-borne disease control points (Griffith and Worsfold, 1994; Medeiros et al., 2001) were used to compile four guidelines applicable to this study. These guidelines, namely, safe storage of ingredients, practicing good personal and general hygiene, and thorough cooking of food items, served as the basis for formulating the individual items in the observational checklist and questionnaire. The checklist and questionnaire were peer reviewed.

Interviewers, of the same age, gender and race as the participants and with a background in food safety and meal preparation, were trained, utilising role playing techniques, to observe and interview the participants. Pre-tests, simulating the observation and interview, were conducted in a food preparation laboratory of the university to determine the validity and reliability of the recorded observation and interview data. Observations and interviews took place during the first three weeks of May 2003 at the residences. No instructions regarding the meal preparation were supplied and although participants were informed that they would be observed and a checklist completed, they were unaware of the specific activities checked.

The chi-square test was performed to establish whether observations were related to self-reported behaviour. Odd ratios were used to determine the strength of the association between the observed and self-reported behaviour. The level of significance used was $p = 0.05$ or $0.01$.

RESULTS

The participants adhered to some of the bacterial food-borne disease prevention guidelines. All the participants reported storing perishable ingredients in a refrigerator and cooking chicken thoroughly. This was confirmed by the observations. Personal hygiene practices were neglected, with the observed behaviour being less positive than the self-reported behaviour. All the participants reported that they cleaned their hands before starting food preparation, while 70% of participants were observed attempting to clean their hands ($p < 0.05; p=0.023$). Only 63% of participants were observed attempting to clean their hands after handling raw chicken, while 88% indicated that they would follow this practice ($p < 0.05; p=0.019$). Only 63% of participants were observed attempting to clean their hands after handling raw chicken, while 88% indicated that they would follow this practice ($p < 0.05; p=0.019$). A third of the participants indicated that they would use soap and water for cleaning their hands before starting food preparation, but only 10% were observed cleaning their hands in this manner ($p < 0.05; p=0.031$). Eleven participants indicated that they would wash their hands with soap and water after handling raw chicken, but this was observed in only three cases. Although 71% of the participants reported that they would usually wash fruit and vegetables prior to consumption, only 63% were observed washing the tomatoes supplied to them.

Adherence to general hygiene practices, such as avoidance of cross-contamination was low. Storing raw meat or chicken on the bottom shelf of the refrigerator was reported by 33% of participants and observed in a similar number of cases (30%). A disparity was shown between the self-reported ($n = 33$) usual use and observed ($n = 41$) use of the same knife for raw chicken and ready-to-eat food items, with the self-reported data indicating safer usage ($p < 0.05; p=0.018$). In contrast, a lower number of participants (40%) were observed using the same plate/chopping board for the raw chicken and the ready-to-eat food items compared to the 35% who reported this usual behaviour ($p < 0.05; p=0.05$).
Cross-contamination can be avoided if a utensil is washed with soap and water in between using it for raw and ready-to-eat food items. None of the participants who used the same knife for the raw chicken and ready-to-eat food items was observed following this procedure, although five participants reported that they would clean the knife if used in this manner. Only one respondent was observed washing a plate with soap and water after using it for the raw chicken and before using it for the ready-to-eat food items, while 13 participants indicated that they would follow this practice. Using the same cloth to wipe raw food items and/or surfaces and to clean or dry dishes, leads to cross-contamination. The same cloth was used by 61% of participants during the observation of these actions and 58% of participants reported that they would use the same cloth. This indicates a great risk of cross-contamination.

The self-reported behaviour of the participants was more in line with bacterial food-borne disease prevention guidelines than the observed behaviour. Similar variations between the stated and observed behaviour of respondents were found in other studies (Jay et al., 1999; Clayton et al., 2003; Anderson et al., 2004). A possible reason for the discrepancy is, according to Bowling (1997:155), that respondents may claim to carry out the “correct” behaviour in order to convey a positive image. Barriers that may prevent participants from actualising their positive behaviour should be investigated. Internal barriers, such as habitual behaviour (Ajzen, 2002), self-efficacy and a positive optimistic bias regarding a “home” kitchen (Clayton et al., 2003) and external barriers, such as a lack of time or facilities, could prevent consumers from following bacterial food-borne disease prevention guidelines.

CONCLUSION AND RECOMMENDATION

Very little information on bacterial food-borne disease prevention is available to the South African consumer. The data obtained in this study can be used as a basis for planning interventions aimed at bringing the communal kitchen food preparation practices of young adults in line with bacterial food-borne disease prevention guidelines. Limitations of the study include the small sample and the limited determination of the validity and reliability of the checklist and questionnaire.

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INTRODUCTION

Consumers form quality expectations based on quality cues and the position that such a value assumes in the mind of a consumer determines the competitive position of these quality attributes within the market (Young, 1999:81). Successful (food) products communicate significant value in the key categories that are of importance to the target consumer and setting (Cagan & Vogel, 2002:5-7, 14; Sheth & Mittal, 2004:19). The voice of the consumer is indicated by a hierarchical set of “customer needs” where each need is depicted by a priority value. These parameters then become key criteria in providing a quality product (Griffin & Hauser, 2004:224). Consumers perceive a food product as accumulated benefits (Earle, Earle & Anderson, 2001:3; Ness & Gerhardy, 1994:29) consisting of a combination of attributes (Green & Srinivasan, 1987:119). The challenge is therefore to skilfully integrate knowledge on consumer needs, as portrayed by food preferences for specific attributes against the backdrop of their perception of reality (Connor & Armitage, 2002:2), with food product design and development for low-income households (Costa & Jongen, 2006:4).

METHODS

An empirical and exploratory approach was followed.

Study population

Fifty three household caregivers from (very) low-income households in an informal settlement, representative due to size and geographical positioning (Oldewage-Theron, Dicks & Napier, 2006:795). The respondents were
identified through planned random sampling using a town map of the settlement. A convenience sample of 32 experts familiar with deprived circumstances and consumers with a low literacy level and/or with food product development experience, identified from the role players in the food environment in South Africa.

**Operationalisation**

(1) A pilot study was conducted in the target community to test perceived needs of low-income households for food product attributes and benefits that guide purchase choice for maize meal. The importance perceived for the different food product attributes was reported on a six point hedonic rating scale (Garber, Hyatt & Starr, 2003:7).

(2) A questionnaire was compiled to source information from the role players in the food environment in South Africa. Structured one-to-one telephonic interviews were utilised.

Quantitative analysis procedures were applied to identify the FPA of importance to most of the different role players and the target population.

**RESULTS AND DISCUSSION**

**Research and development policy**

The R & D (research and development) policy guidelines in FPD for low-income households, as reported by the different role players in the South African food environment, are indicated.

Staple based products represent the most important food product range for FPD for (very) low-income households. Focus was therefore placed on the FPA’s (food product attributes) as applicable to staple foods only.

**Food product attributes needed and benefits expected from staple foods**

Due to the overlap in the food product attributes reported by the food environment for the attributes needed and the consumer benefits expected by (very) low-income consumers from the food products they purchase, a combined summary was prepared.

But are these FPA of importance to the role players during FPD? Do the FPA provided by available staple foods meet the needs of the population at risk? The difference between the importance allocated by the role players in the food environment and the (very) low-income consumers regarding food product attributes of importance, were thus indicated in a table. Results indicate that taste (66%), nutrient content (62%), price (53%) and to a lesser degree texture (40%) as the food product attributes of importance in FPD to most of the role players in the food environment.

The importance allocated to the individual FPA (as based on needs) were summarised in a ranked order. The current study revealed affordability (price), consumer nutrient requirements, taste and product quality as the priorities when developing food products for the (very) low-income market in South Africa. The Bureau for Food and Agricultural Policy (BFAP, 2007:52) indicated the main concern of low-income consumers in South Africa as the provisioning of basic food security through the availability of an adequate quantity (satiety value) of affordable
food that would satisfy nutritional requirements. However, the latter was indicated as of very low importance to the target population investigated (TNS Research Surveys, 2007).

CONCLUSION

This study confirmed the need to identify the food product attributes of importance to (very) low-income consumers in a consumer-acceptable manner. The development of staple based foods was only mentioned in the R&D policies of six percent of the food industries, although these products were reported as the main focus in the product range provided by the food industry (53%) for FPD for (very) low-income consumers. This discrepancy needs serious consideration. According to the food industry the most important FPA’s for (very) low-income consumers include satiety value (65%) and meeting of nutrient requirements (65%), followed by affordability (59%), taste (59%), meeting of aspirations (59%) and shelf life (47%). This scenario provides a closer match to the needs indicated by the (very) low-income consumers themselves than the FPA actually indicated as important in FPD for these consumers by the food industry. A more collaborated effort between food product developing, marketing and management sections within food industries can possibly contribute to a better provisioning of staple FPA as important for, and needed by, the (very) low-income consumers.

The lower priority awarded by (very) low-income consumers to food product acceptability (sixth) is a possible indication that survival needs were overriding cultural, ethical and religious parameters in the lives of these consumers. This observation is supported by the words: “…eat what could be provided to you or find a manner that will make it possible for you to eat this food” (Marumo & Duvenage 2006). The reality of the (very) low-income consumer within the South African context, indicated by the focus on the provisioning of satiety value, lower-priced foods (affordability, packaging size and value for money), and foods that are not spoiled (acceptability) is indicative of the needs to survive, i.e. maintain life, as portrayed by the consumer food-demand pyramid (Hughes, 2002:10). Only then product quality and lastly health-related attributes (consumer nutrient requirements and product safety / shelf life) are considered by these consumers. One may thus very well ask whether financial (economic) pressures have replaced the human enjoyment factor in FPA choice for (very) low-income consumers survival strategies?

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THE IMPROVEMENT OF THE CURRENT SERVICE LEVEL AGREEMENT FOR THE FOODSERVICE PROVIDERS OF CE @ UP

by

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BACKGROUND AND JUSTIFICATION

Continuing Education at University of Pretoria (Pty) Ltd, (CE @ UP), is a department at the University that specialises in the administration, co-ordination and management of quality, lifelong learning programs, short courses and year programs. Their aim is to be the foremost partner of the public and private sectors of South African and other sub-Saharan countries in the development of people through the provision of quality, lifelong learning opportunities as a financially sustainable activity on behalf of the University of Pretoria. CE @ UP became aware that the catering services offered during their courses did not meet the same level of satisfaction in comparison to the rest of the elements assessed during the course attendance.

CE @ UP is contracting a number of foodservice providers, to supply them with the catering for various functions and courses. Because of the diverse services that each of these providers deliver, a uniform level of service is needed to be established to which all of these providers would adhere to. This could be seen as the ‘service level’ that each of them would be responsible to uphold when delivering foodservice to CE @ UP.

The Department of Consumer Science was approached by CE @ UP to conduct a study on various aspects of the catering component of the department (CE @ UP). These aspects include the menus used; the meal experience of the delegates; the level of service they receive; their expectations prior to the meals; cultural preferences; nutritional aspects and aspects related to corporate culture. All of the aforementioned aspects were investigated to enable the researchers to critically assess the current Service Level Agreement (SLA) used by CE @ UP to be able to improve on the agreement.
AIM

The aim of the study was to evaluate the current SLA of CE @ UP and to compile an improved SLA for the foodservice providers of CE @ UP to ensure customer satisfaction with the catering provided at short courses.

APPROACH TO THE STUDY

The study was conducted as a class project by the 4th year B Consumer Science Hospitality Management students of the Department of Consumer Science, University of Pretoria. Students worked in pairs and each group was responsible for a specific aspect of the study as various factors contribute to the satisfaction level of customers.

The following aspects were investigated by the peer researchers in order to assist the group who was responsible for the assessment of the current SLA and to compile an improved SLA:
1. A SWOT-analysis/ profile of people attending the courses.
2. The products (food & beverage: menu, quality, presentation) offered to attendees.
3. The services (importance of education/ training in service management) provided by the foodservice providers.
4. The expectations and satisfaction level of the attendees’ with regard to meal experience.
5. The cultural preferences and the nutritional awareness of the attendees.
6. The influence of corporate culture on the expectations of the attendees.
7. The influence of knowledge and management style of foodservice providers on menu planning.

RESEARCH METHODOLOGY

For the purpose of this study a quantitative research approach was employed to collect data on the satisfaction of the customers and aspects that contributed to their satisfaction with the meals and refreshments provided. Questionnaires were used to collect the data concerning the aspects that related to the customers. Open and close ended questions were used to determine the demographic profile of the attendees, their food habits, preferences, expectations and level of satisfaction with the meals provided. In addition, qualitative data gathering techniques by means of semi-structured interviews were used to obtain information on the training, knowledge and experience of the foodservice managers of the service providers, as well as their views on the current SLA with CE @ UP.

RESULTS

It was found that the current SLA of CE @ UP had many shortcomings and was identified by the service providers as a ‘dead-end document’ because it did not elaborate on service specifications. Most of the service providers claimed never to have signed a SLA with CE @ UP, although most of them had a long term relationship with CE @ UP.

If the SLA is more specific with clearly defined parameters, the foodservice providers would have a higher regard for it. They would therefore adhere to the requirements stated in the SLA, which would in the end contribute to an increased satisfaction level of the course attendees with the catering provided.
The results obtained from peer researchers showed that while the majority of delegates stated that the food provided were ‘average’, a staggering amount of them stated that the food was ‘below average’ or ‘low quality’. It is therefore evident that CE @ UP needs to concentrate on improving the quality of the food provided by the foodservice providers. This information together with the opinions and views of the managers of the foodservice providers was used to define some of the lacking parameters in the SLA, and assisted and facilitated with the compilation of the improved SLA for CE @ UP.

RECOMMENDATIONS

It is clear that if the SLA of CE at UP is implemented and monitored correctly, the level of customer satisfaction of the attendees at the CE @ UP courses regarding the meals and refreshments offered could be improved dramatically. It is expected that the implementation of the SLA will be more effective due to the fact that it contains more specific guidelines, requirements and parameters. This, in the end will ensure consistent levels of service.

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Hospitality Management. 23: 397-408.
SESSION 2B – CLOTHING AND TEXTILES RELATED TOPICS
EASE ALLOWANCE AND FIT OF SELECTED FEMALE MILITARY UPPER GARMENTS

by

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INTRODUCTION

This study was contracted by the African Warrior Project of the South African National Defence Force (SANDF), which focuses on the needs of the future soldier. The goal was to explore and describe the fit in terms of ease of selected female military garments, namely the closely fitted dress jacket and the loosely fitted combat shirt. The objectives of this study were first to determine and interpret the amount of ease/tolerance that will comply with the functional needs related to the activities and comfort of the wearers and result in an aesthetical acceptable fit; second to analyse and interpret the suitability of the key dimensions used to determine the current size designation in terms of body shape and gender; third to determine and interpret the relevance of the currently used sizing system with regard to the representativeness of the measurements of the intended population. This report focuses on the findings relevant for the first objective and specifically on the amounts of ease/tolerance that will ensure that the functional and aesthetical needs of an optimum number of wearers of the dress jacket will be met.

LITERATURE

The comprehensive Sizing System Model of Susan Ashdown (2000), which focuses on sizing and fit, served as theoretical point of departure for this study. The conceptual framework for this study centered around three focuses of Ashdown's (2000) model, namely sizing systems, design features and fit issues to investigate fit in terms of ease.
METHODOLOGY

The target population for this study was the 15 724 female troops of the SANDF. The sample was selected from the 4% operational troops. Data gathering occurred at the Uniform Maintenance Center in Valhalla. The sample consisted of 49 subjects allocated by the African Warrior Project officer during the three days allowed for data gathering. Although it was planned to select 60 subjects to participate in focus groups (20 per day), for the first phase of the study, 19 subjects participated on the first day, seven on the second day and 21 subjects on the third day. A non-probability sampling technique was employed to purposively select eight subjects from the first and last group using age, ethnicity, and body shape as parameters. These 16 subjects and all the subjects participating in the focus group on the second day were included in the second phase of the study.

A qualitative research strategy was employed to explore and describe the fit in terms of ease of the dress jacket from both objective and subjective viewpoints. The methods included biographic profiling to describe the samples. Focus group and one-to-one interviews assisted in exploring and describing personal fit preferences and the subjective viewpoints on ease/tolerance with regard to the functional and esthetical performance of the garments. Two trained judges evaluated the fit of the dress jackets using fit checklists to provide an objective viewpoint regarding fit in terms of ease and the affect thereof on the aesthetic appearance of the garments. Mobility tests provided information regarding the functionality. Somathographs were analysed to identify body shapes and two anthropometrists measured each subject. The researcher measured the dress jacket worn by each subject at corresponding positions to be able to calculate ease at the different body locations.

RESULTS AND DISCUSSION

The findings relevant for the realization of the first objective were analysed and interpreted as follows. The Body Mass Index (BMI) for each subject was calculated. The somatographs were analysed according to a method of Kefgen and Touchie-Specht (1981). The fit preferences of each subject were identified from the one-to-one interviews. These findings were tabulated and served as a background to assist interpretation of the findings. The ease values for the bust, waist, back width, upper arm and scye circumference of each subject were calculated and compared to the ease calculated from the ARMSCOR specifications specified for the dress jacket: (Document KMG 27/71). The hip dimensions of the subjects were compared to that of the finished garments as it was not specified. The amounts of ease that each subject considered as adequate, insufficient or excess at the relevant body locations were identified from the one-to-one interviews and compared to the fit evaluations of the fit judges. Ease ranges (minimum and maximum amounts of ease) for each of the body locations were established for both the subjects and judges. To interpret the findings an ease norm was inferred from pattern design literature, of which one is the standard of Cooklin (1995) for outsized women. According to Cooklin’s classification, seventeen of the 23 subjects were truly outsized or very nearly outsized. When the ease ranges were established, various factors were considered to eliminate unrealistic ease values, e.g. the opinions of subjects that were not wearing correct jacket sizes, or whose evaluations varied drastically from earlier opinions regarding fit in terms of ease of their jackets. From the findings it was established that subjects wearing smaller sizes needed less ease, and subjects wearing larger sizes needed more ease at the various body locations. Subjects that preferred tighter fits were satisfied with less ease than subjects that preferred loosely fitted garments. The ease ranges established according to the evaluations of the judges were in almost all instances less than the subjective ease ranges.
Against the background of the findings of this study, the inferred ease range was adapted and expanded to an ease range for smaller sizes and one for larger sizes. An ease range for each size of the ARMSCOR specifications was suggested, each with a minimum value (for tighter fits) and a maximum value (for looser fits).

Further to the above the findings of the mobility tests indicated that insufficient or excess ease at a particular body location could restrict movement and had an affect on the aesthetic appearance of the garments. Plus-sized wearers were more dissatisfied and experienced more problems with the functionality of the garments than smaller-sized wearers. The use of the bust as only key dimension did not ensure that subjects with different body shapes had sufficient ease at other body locations, e.g. hip location (triangle body shape) and waist (diamond body shape). From the findings it is clear that the ARMSCOR specifications for the dress jacket do not accommodate the ease needs of the subjects.

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WHAT FEELS GOOD MUST BE GOOD: THE ROLE OF FEELINGS IN THE YOUNG FEMALE CONSUMER’S EVALUATION OF THE FIT OF HER CLOTHES

by

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INTRODUCTION

As competition increases in the clothing industry, consumers have more choice of products. However, worldwide the clothing industry finds it increasingly difficult to satisfy the consumer because, apparently, consumer priorities have changed markedly in the last decade. According to Alexander et al (2005) and Otieno et al (2005) dissatisfaction with fit is the most frequently stated problems with garment purchases.

It should be noted here that fit does not only concern the functional behavioural characteristics in that a garment should fit comfortably, but also the aesthetic behavioural characteristics. The aesthetic behavioural dimension of fit is, however, not only concerned with the appreciation of beauty on sensory level, but also to the extent that the garment conforms to the socio-psychological needs of the wearer. It is generally accepted by marketing and consumer researchers that individuals consume products for their symbolic properties as much as for functional benefits. Piacentini and Mailer (2004) point to the fact that clothing can be viewed as an essential social tool in the lives of teenagers and found in their research that they used clothes as a means of self-expression and as a way of judging the people in situations they face. Although various researchers from the past have studied the symbolic value of clothes, very little has been done with regard to the emotional value of clothes. Pham (2004) reasons that feelings are part of an overall system of judgement and decision-making. Forgas and Ciarrochi (2001) add that affective styles play a major role in how people learn, remember, think and evaluate information.

Against the background of the forgoing reasoning, and with the lack of information regarding, especially the role of emotions in the early-adolescent’s clothing behaviour in mind, the overall purpose of this research was thus to
explore and describe the role of emotions in the early-adolescent female consumer’s expectations and evaluations, as well as satisfaction relating to the fit, as part of the quality of her clothes. An understanding of the role of emotions in this consumer group’s expectations and evaluations regarding the fit of their clothes could help companies to meet demands for comfortable and well fitting clothes for one of the most viable clothing consumer markets of today.

METHODOLOGY

The sample analyzed was thirteen-year old Caucasian female early-adolescents, living in an urban environment. Non-probability sampling was used and a snowball technique was used to obtain 128 respondents. A structured questionnaire was used and the data gathering was done in group-administrated sessions.

FINDINGS AND DISCUSSIONS

It was found that the emotional dimension of the aesthetic behavioural characteristics of fit is of more importance to the early adolescent female consumer than the symbolic dimension. It is especially important for the early-adolescent female consumer that the fit of her clothes should provide a feeling of pleasure in that she should feel good about herself as a result of the fit of her clothes. In addition a statistically significant majority of the respondents found knowing that they will fit-in with others an important factor when they evaluate the fit of their clothes during the decision-making process, most probably because it will give them a feeling of dominance to know that they are part of significant others. However, when wearing the clothes, only about half of the respondents indicated that they are satisfied because of the positive feedback on fit that they receive from others, contribute to a feeling of pleasure when wearing the clothes during the post-purchase state.

When expectations are not met, consumers are dissatisfied with the purchase and maybe also with themselves, especially when they have evaluated the clothes at the point of purchase against their expectations and have anticipated that the clothes would live-up to their expectations when wearing them. Dissatisfaction goes hand in hand with disappointment which is even more emotional than achieving a surplus on expectations. In the case of products with high social visibility (as clothes) and when belief-dependent emotional pleasure is concerned (as in this case where the early-adolescent female consumer anticipated that she will receive positive feedback and will compare favourable with others) the scenario is even worse.

CONCLUSIONS AND IMPLICATIONS

It can be concluded that fit is, for the early-adolescent female consumer, not only about the functional dimension (in that the clothes should fit comfortably), but also about the emotional dimension, and especially that the fit should contribute to a feeling of pleasure and a feeling of dominance.

It can secondly be concluded that the peer group plays a major role in the early-adolescent female consumer’s expectations as well as evaluation of the fit of clothing products. The fact that she knows she fits in with others, due to the fit of her clothes, contributes to a feeling of dominance, while the peer group’s positive feedback on the fit of her clothes contributes to a feeling of pleasure. Anticipation of positive feedback from the group (and the accompanying feeling of pleasure) and anticipating that she will fit in with the group (and the accompanying
feeling of dominance) also plays an important role when the early-adolescent female consumer evaluates the fit of clothing products during the decision-making stage.

Unfortunately it seems that, either these young consumers do not have the knowledge and skills that can enable them to realistically evaluate the fit of their clothes with the purpose of giving them emotional pleasure during the post-purchase experience, or they are just not able to find clothing products that would contribute to these important feelings during the post-purchase stage – therefore contributing to their dissatisfaction with the emotional dimension of their clothes, due to the fit of the clothes.

One of the major platforms for any company is branding its products. A brand promises the consumer value for money and quality. With fit as part of the quality of clothing products, this implicates that a brand aimed at a specific consumer group should therefore “stand for” and “promise” a specific fit that would not only contribute to functional comfort for the specific consumer, but would also fulfill her emotional needs when she wears the clothes. In the case of the early-adolescent consumer it means that the fit of the brand should contribute to a feeling of pleasure because of the positive feedback that it elicit from the peer group (most probably because the consumer looks fashionable and “cool”), and should secondly contribute to a feeling of dominance because the young consumer fits-in with others (most probably as advocated by the current fashion). Brands can play an important role in creating the desired look and fit, but only if the brand is sized and styled for the consumer group it is aiming at. With the buying power of the tween market in mind, this means that a brand that is specifically aimed at these young consumers should specifically be sized according to the measurements and figure proportions of the young consumer, coming from a specific cultural background and living in a specific country. That is probably the only way to ensure satisfaction with the fit of the brand when wearing the clothes.

REFERENCE LIST


THE EVALUATION OF MIXED YARN FABRICS OF GONOMETA POSTICA SILK, ACRYLIC AND WOOL

by

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INTRODUCTION

Silk occupies a unique position as a textile fibre with a rare combination of beauty and strength. Production and processing of silk is labour intensive which leads to high cost and limited production of the silk fibre (Miller, 1992:36). *Gonometra postica* silk is the product of the *Gonometra postica* silkworm, which lives in the wild and feed on the leaves of the *Acacia erioloba* or camelthorn tree (Paterson, 2002:67). Silk is a natural protein fibre consisting of two separate proteins: fibroin, a fibrous protein, and a nonfibrous material called sericin (Freddi et al, 2003: 102; Jiang et al, 2006). Fibroin is a crystalline protein while sericin is an amorphous protein (Reddy and Krisnan, 2003:26; Jiang et al, 2006). Wool is also a natural protein fibre (Kadolph and Langford, 2002) and is known as a form of hair. As the protein fibres contain many of the same constituents, they also exhibit many of the same characteristics. An acrylic is a manufactured fibre in which the fibre-forming substance is any long-chain synthetic polymer composed of at least 85 percent by weight of acrylonitrile units (Ardrey et al., 1979). Acrylic has two important characteristics; its adaptability for common usage and low price (Moncrief, 1970). For this study Courtelle acrylic was used.

JUSTIFICATION AND OBJECTIVES

Unfortunately the high cost of silk makes it unaffordable for many consumers; therefore mixed yarn fabrics could be constructed in order to lower the price of the fabric, without changing the unique properties of the silk negatively. In October 2007 the price of 100g of wool yarn are set at R40.00, and the price of 100g of Courtelle yarn at R15.00, while *Gonometra postica* silk yarn is trading at R130.00 per 100g (Olivier, 2007; www.capewools.co.za; Singer Shop). This indicates that the price of the mixed yarn silk fabric would be a lot less than the price of a 100% *Gonometra postica* silk fabric.
METHODS

The essential textile properties of the fabrics were evaluated to be able to compare the properties of the *Gonometa postica* silk fabric with the properties of the mixed yarn fabrics consisting of a *Gonometa postica* silk weft on a wool warp, and a *Gonometa postica* silk weft on an acrylic warp. Standard methods were used to evaluate the abrasion resistance (ASTM 4966), tensile strength and elongation (ISO 13934), stiffness (BS 3356), crease recovery (AATCC 66), fabric thickness (BS 2544), dimensional change (AATCC 99) and moisture regain (ASTM D2654). Analysis of variance supported the interpretation of the results of the tests.

RESULTS AND DISCUSSION

The *Gonometa postica* silk weft/*Gonometa postica* silk warp textile fabric has relatively good abrasion resistance, with a mean value of 28,750 rubs necessary to break two yarns. Wild silks’ good abrasion resistance can be attributed to the smooth surface of the filaments (Potter and Corbman, 1967). The silk weft/wool warp test fabric showed very good abrasion resistance with a mean value of 51,000 rubs required to break two yarns. Wool fibres possess very good abrasion resistance because of the irregular, overlapping scales which resists deteriorating influences (Joseph, 1986; Hall, 1969:15). And the silk/acrylic test fabric also showed relatively good abrasion resistance, although it was lower than the other test fabrics with a mean value of 25,197 rubs needed to break two yarns. The acrylic filaments are of uniform diameter and have a smooth surface (Joseph, 1986:127) that contributes to abrasion resistance. The silk/silk test fabric had the largest weight loss, while silk/wool fabric had the smallest weight loss.

Tensile strength and displacement was measured and the *Gonometa postica* silk weft/*Gonometa postica* silk warp fabric had a mean maximum load necessary to break the silk weft yarns of 492.317 N and the mean displacement at maximum load was 39.048 mm while the mean maximum load to break the silk warp yarns was 412.750 N and the mean displacement was 31.764 mm. The *Gonometa postica* silk weft/wool warp fabric had a mean maximum load of 475.970 N that the silk weft yarns could carry and the mean maximum displacement was 39.442 mm, while the mean maximum load that the wool warp yarns could carry was 426.011 N and the mean displacement was 46.448 mm. The *Gonometa postica* silk weft/acrylic warp fabric had a mean maximum load that the silk weft yarns could carry before break of 347.910 N and the displacement was 34.465 mm and the mean maximum load that the acrylic warp yarns could carry was 462.840 N and the maximum displacement was 51.447 mm. According to Kadolph and Langford (2002:63) silk is a very strong fibre, while wool has poor tenacity and acrylic has moderate tensile strength.

The tenacity and elongation at break of silk are different from other protein fibres because of the chemical differences – fibroin consists mainly of four amino acids without bulky side-chains, cross-linked by hydrogen bonds – and structural differences – high crystallinity and orientation (Susich and Zagieboylo, 1953:405).

The bending lengths of all the samples are small enough to indicate that it has good draping qualities, considering the thickness of the fabrics.
The *Gonometa postica* silk weft/wool warp fabric showed the best crease recovery especially in the warp direction (145°), while the *Gonometa postica* silk weft/*Gonometa postica* warp fabric had the worst crease recovery especially in the warp direction (128°).

The *Gonometa postica* silk weft/*Gonometa postica* warp fabric was thinner than the *Gonometa postica* silk weft/wool warp fabric and the *Gonometa postica* silk weft/acrylic warp fabric. This was expected as silk doesn’t create bulky yarns like wool and acrylic, which physical structure contributes loft and body to fabrics (Kadolph and Langford, 2002:115).

The moisture regain of the *Gonometa postica* silk fabric was found to be 13%, while the *Gonometa postica* silk weft/wool warp fabric had a moisture regain of 11% and the *Gonometa postica* silk weft/acrylic warp fabric had a moisture regain of 8.6%.

The *Gonometa postica* silk weft/wool warp fabric and the *Gonometa postica* silk weft/acrylic warp fabric had no shrinkage in the warp directions. This could be due to the fact that the wool has a finish that made it washable and acrylic doesn’t shrink as a result of exposure to water. The *Gonometa postica* silk fabric showed more shrinkage in the warp direction than in the weft direction. No residual shrinkage was found.

**RECOMMENDATION**

The *Gonometa postica* silk weft/wool warp fabric showed the best abrasion resistance and crease recovery which are both very important properties of textile fabrics, and didn’t affect the properties of the *Gonometa postica* silk negatively. Therefore it is recommended that the wool fibre be used to create a mixed yarn fabric as it result an appealing fabric when mixed with the *Gonometa postica* silk.

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INTRODUCTION

The bulk of non-woven fabrics and products in South Africa are imported from developed countries. High procurement costs of such products have created a need for local production. In response to the realized need, the Council for Scientific and Industrial Research (CSIR) commissioned a non-woven production line, incorporating Fleissner Aquajet™ spun-lacing machinery, with the view to transfer technology and build research and development (R&D) capacity for product development for the local market. Trial runs on the technology produced different samples of spun-laced non-woven fabric using man-made cellulose/natural fibre blends and cellulose/natural fibre blends. Selected fabric samples produced from the trials were further explored for potential end uses in the agricultural sector.

Agricultural output is continually being challenged by various factors despite recent agricultural practices of growing more healthy produce for consumers, which include organically grown crops; conservation of environment by non tillage of the soil prior to planting; and the reduction of environmental pollution. While healthier eating is one of the key goals that some United Nation organizations are espousing, it is also a fact that there is still gross underproduction of food supply and food insecurity especially in many developing countries. Shortage of food in these countries will continuously be a driver in supporting the green revolution paradigm of using hybrid seeds, fertilizers and pesticides to maximize production within the constraints of recent climatic fluctuations.

The agricultural sector was identified as an area of need particularly because there are now more stringent trading rules in the export market for exporters to European Union countries, to specify the production conditions of produce (Maharaj, 2005). Furthermore, farm workers do not always heed proper procedures in using protective wear. The latter observation was confirmed by Branson and Sweeney (1991) who noted that a large number of farm workers who are exposed to hazardous pesticides are reluctant to wear protective clothing due to the
discomfort experienced particularly in hot environments; yet farm workers should be protected from dermal exposure to pesticides (Lee and Obendorf, 2001). Unfortunately, there is no enforcement of that common knowledge in the South African Development Community (SADC) region.

Currently, available protective clothing for farm workers who use pesticides in the SADC region is the polyester/cotton or cotton twill or plain woven fabric made into two piece suits or one piece coveralls. Both styles have a high percentage of body coverage. In the absence of national policies governing the use of protective clothing by farm workers in South Africa and the whole of the SADC region, farm workers are exposed to the long term effects of hazardous pesticides used in farming, and, given the generally hot and humid working conditions of the workers in this part of the world, there is need for an alternative, more comfortable protective wear in the sector.

Existing alternative protective clothing is the non-woven disposable coveralls. Generally uncoated non-woven fabrics offer greater protection than woven fabrics and similar protection to soil-repellent finished cotton or cotton/polyester blends (University of Minnesota, 2005). Uncoated non-wovens offer effective protection against dust, granule, powder or dilute liquid pesticides; but are not recommended when using more toxic liquid pesticides (Johnson, 2006). Coated non-wovens on the other hand, like Tyvek® a 100% spun-bond polyethylene non-woven coated with polyethylene film produced by DuPont, are used as disposable protective wear against more toxic liquid pesticides. Barrier properties may be achieved through using nanotechnologies, one of the leading areas in textile research (Zhou, Reddy & Yang, 2005). Nanotechnologies are the design characterization, production and application of structures, devices and systems by controlling the shape and size at the nanometer scale.

AIM

The aim of the study was, therefore, to investigate the current practices of farm workers on the use of protective garments in South Africa, and to measure the performance of nano-treated fabric structures, which could be utilized in alternative protective garments.

METHODOLOGY

Two research designs were used in the study. The first one was a descriptive survey, which was used to gather information on current practices of farm workers. A convenience sample of 23 farmers was sent a questionnaire for data collection. Results from the survey led to the next phase of the study, where an experimental design was utilised on the application of three different cationic nano-finishes and their performance on barrier and comfort properties of the selected fabric structures. Fabric finishes used were a cationic nano-molecular fluoro-polymer (GOR), a cationic nano-molecular fluoro-polymer / nano-structured silicic acid combination (GOR/NSG), and cationic fluorocarbon resin with polymeric dendrimers in a hydrocarbon matrix (EEE). The AATCC and SANS test methods were used to determine the performance properties of the test fabrics. A water vapour transmission and air permeability tests were conducted to test the comfort properties of the fabrics. Furthermore, a gutter test was carried out to evaluate the penetration of the two organophosphate pesticides to assess the safety of the worker if he/she were to wear a garment made from the selected fabrics when using pesticides on the job. Three non-woven fabric structures were selected for the experiments, and they were 100 percent viscose, 90/10 percent viscose/flax
fabric blend, and Tyvek. A 100 percent cotton drill was used as a control. The gutter test was used to measure the pesticide penetration through the fabric structures.

RESULTS

Results on the survey revealed that all the respondents wore coveralls made from 100 percent cotton supplemented with PVC jackets and aprons. Eighty five percent of the respondents washed their coveralls by hand, and out of the 85 percent, 39 percent of the respondents washed their coveralls once a week compared to 31 percent who washed them daily. The coveralls were generally comfortable to wear; although there were concerns regarding the level of protection offered against organophosphate pesticides, namely the chlorpyrifos and mercaptothion. Another strong concern expressed by the respondents was the practice of wearing casual garments instead of protective clothing by some workers when conducting farm duties due to the discomfort experienced by workers, particularly in hot and humid environments. The practice poses a danger to farm workers and does not comply with the prescribed guidelines for optimal protection. All the farm workers were willing to try an alternative disposable protective garment with the following benefits: convenience, savings on water costs for washing, improved worker safety, improved comfort in the working conditions.

Findings on the second phase of the study revealed that the viscose/flax non-woven fabric with the GOR/NSG finish had the highest mean values on water vapour transmission, oil and water repellence, 5559, 7 and 7 respectively, and the second highest mean value of 93.4 ml/s/cm² on air permeability. Its performance on air permeability was significantly different from the spun-bond fabric, which had a mean value of 0.5ml/s/cm², although the latter had the best resistance to pesticide penetration of 0.1. The performance of viscose/flax non-woven blend was a better alternative to cotton drill, which is currently used for protective clothing. The viscose/flax non-woven fabric blend is therefore recommended for the product development phase of the project.

CONCLUSION

The nano-finished viscose/flax blend of non woven fabric performed the best on the barrier properties without compromising on the comfort properties. It also outperformed the cotton drill, currently utilised for protective clothing, on protection against the penetration of the tested organophosphates. Therefore, the viscose/flax blend would be suitable to use for the product development phase as a replacement of the cotton drill currently used in protective coveralls. Findings will be shared with the South Africa Non-woven Association, for possible fabric products to try out on a large scale, and with the Department of Agriculture to influence policy formulation in this area.

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INTRODUCTION

South Africa’s clothing industry is large, capital and people intensive (Du Preez & Visser, 2003:15). One very important factor contributing to consumers’ purchasing behaviour is the interaction of the consumer with the staff in the clothing store (Terblanche & Boshoff, 2003:143). During interaction between the consumer and the sales assistant, a relationship is formed. If the proper relationship is established in the beginning, the sales assistant will recognize what the consumer’s expectations are and how to satisfy the consumer’s needs (Parmentier, 2005:8).

OBJECTIVES

This study aimed to narrow the gap in knowledge about the effect the clothing sales assistant has on the consumer’s purchasing behaviour in a South African context. The objectives of this study were to firstly determine consumers’ perceptions of the clothing sales assistant with regard to their assistance and service provision. Secondly, the effect of the clothing sales assistant on consumers’ emotional state or emotions was investigated. Lastly, the clothing sales assistant’s assistance and service provision on consumers’ purchasing decision was determined.

RESEARCH METHODOLOGY

A qualitative and exploratory research approach was applied to this study to determine the influence of the clothing sales assistant on consumers’ purchasing decision. The sampling technique used to recruit participants for the study was purposive sampling. The sample consisted of female consumers, irrespective of age or race, entering the selected clothing store in Johannesburg in the Gauteng Province in South Africa. These female consumers need not necessarily have purchased merchandise. One-on-one semi-structured interviews, using open-ended
questions were used as a research instrument. A pilot study was conducted to precede the main study and interviewing continued until saturation of data was obtained, which occurred after 25 interviews. During interviews, the participants’ contributions were audio-recorded to ensure accurate recollection of their opinions for data analysis. The audiotapes made during data analysis were transcribed verbatim to identify the concepts that came forward in the interviews. Trustworthiness was guaranteed in this study by using Guba’s model for trustworthiness (Lincoln & Guba, 1985) in combination with the four criteria presented by Krefting (1991).

FINDINGS AND DISCUSSION

Results from the present study indicated attributes the clothing sales assistant should strive for and attributes they should avoid. The participant indicated that the sales assistant should strive towards good etiquette (e.g. being professional), positive characteristics (e.g. being available) and obtaining skills (e.g. language skills). Characteristics that the sales assistant should avoid is offensive conduct (e.g. being intrusive). The attributes that surfaced from the consumer’s interviews can be used as a guideline by which a clothing sales assistant can direct their behaviour towards the consumer and might be implemented into their training, since these attributes could influence consumers’ patronage of the store.

This study also indicated the positive and negative perceptions the consumer has of the clothing sales assistant. Positive perceptions included the already mentioned positive characteristics and the positive mindset that they have towards the clothing sales assistant (e.g. tolerance towards the assistant). Negative perceptions included negative characteristics, a negative mindset towards the sales assistant (e.g. aversion in service quality) and negative behaviour (e.g. being forceful). The perception that the consumer has of the clothing sales assistant can create a positive or negative mindset among consumers which will influence consumers’ emotions and consequent purchasing decision. By addressing these negative perceptions that consumers have of sales assistants’ behaviour, the retailer can create a more positive atmosphere in-store by creating a friendly and welcoming environment which will promote store patronage and sales.

The negative behaviour of sales assistants has an effect on consumers’ emotions by causing negative feelings. These negative feelings included the following: pressure, irritation, discomfort, sadness, indecisiveness, low sense of self-worth, embarrassment, invasion of personal space, intimidation, upset and unwelcome. These feelings caused by the sales assistant will influence consumers’ purchasing decision.

Consumers’ opinions about the influence of the clothing sales assistant on their purchasing decision were categorized into three themes, namely the retailer gaining purchases, the retailer losing purchases and no influence on purchasing decision. The retailer would gain purchases due to increased purchasing, change in purchasing decision or when the consumer purchase unwanted items. However, purchases will be lost when the consumer decides to purchase elsewhere, do not purchase, leave the store without purchasing or delay their purchasing to avoid the sales assistant.

CONCLUSION AND RECOMMENDATIONS

This study proved that each clothing consumer has different expectations and therefore requires a different level of service from the clothing sales assistant. If the perception they gain of the clothing consumer does not meet the
expectations they have about the sales assistant, it might lead to certain negative emotions in the consumer. These negative emotions evoked in the clothing consumer can have a positive, negative or no implication to the retailer in terms of consumers’ purchasing decision. The potential negative effect of these emotions on consumers’ purchasing decision should motivate retailers to ensure that clothing sales assistants are trained thoroughly, not only in terms of the product knowledge but also in terms of their conduct and behaviour towards the consumer.

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SESSION 2D – INTERIOR AND EDUCATION RELATED TOPICS
INTRODUCTION

Meaning has not been sought in the appearance new homeowners create in the British living room as the interior design and decorating industry subjects consumers to a multitude of decorative options. The British living room is considered the hub of the contemporary British home (Cooper, 1996) afforded with a multipurpose quality that supports personal, social and cultural activities of the home (Nissen, Faulkner & Faulkner, 1994). The underlying assumption is that, apart from the contemporary purpose, the British living room has a particular meaning, achieved through its decorated appearance and subsequent atmosphere and the purpose of the room. Little (1987) suggests that place meaning, includes the unconscious determinants of attraction or repulsion towards the place determined through subjective experiences subsequently transformed into the meaning of the physical environment (Choker, 1993). One way to determine these meanings is to study people's attitudes (Hanyu, 1997; Lyons, 1998) as attitudes can reveal the underlying dimensions experienced in places for attitudes are particularly sensitive psychological processes with which to determine meaning (Canter & Thorne, 1972). The aim of this study is therefore to determine the meaning of the living room through the attitude new homeowners hold towards the appearance they decoratively created.
LITERATURE

A conceptual framework provided by the Evaluative Response Model (ERM) offers a practical approach within which to study and interpret meaning of the decorated style of the contemporary living room as it is an evaluative response approach from which to explore people’s attitudes. Eagly and Chaiken (1993) identify three response types that form the cornerstone of ERM: (a) cognitive response that reflects the thoughts and ideas people have about the attitude object, (b) affective response which refers to emotions, feelings, moods that are experienced with regard to the evaluation of the attitude object and (c) behavioural response that refers to the intentions to act or the overt action associated with the attitude objects. Thus, peoples’ understanding of the meaning of the decorated living room can be revealed through the attitude they hold towards the appearance of the living room as explored through the ERM response types.

METHODOLOGY

The semantic differential (SD) instrument has successfully been used to extract place meaning (Ritterfeld & Cupchik, 1996). A convenience sample of 53 voluntary new home owners in Liverpool who had moved into new homes on privately developed estates in the West Derby and Croxteth wards and who had completed decoration and modification to the new living room was subjected to a 27 item semantic differential attitude measure. This is a comprehensive measuring instrument characteristic of two constituents: (a) a number of bipolar adjectives which for the study was formulated from the words people used to talk about rooms during pilot interviews and other SD studies, which measured a variety of qualities, were conceptually different, that best captured the attitude towards the appearance of the living room, compelled participants to judge each item accordingly and similar to verbal associations the study sample of new homeowners made of their own living rooms and (b) an interval rating scale with which to determine the strength of the evaluation captured in the score assigned to each of the bipolar adjective scales of which seven-point scales are customary to evaluate places and objects as not more then seven discriminations can be made simultaneously (Oppenheim, 1999). For the purpose of this study a seven point scale was used.

DATA ANALYSIS AND FINDINGS

Data entered into the SPSS program were subjected to a Multidimensional Scaling procedure such as Smallest Space Analysis (SSA), a non-metric multidimensional scaling procedure, that represents the association between the attitude items in geometric space and in the smallest dimensionality (Borg & Shye, 1995) during which a two dimensional configuration with Coefficient of alienation 0.21904 was achieved. The configuration revealed three main characteristics to the meaning of the living room: (1) a core thematic region, found in a central quality of comfort originating in the appearance resulting from a strong relationship that exists between each of the other attitude items in semantic space depicting a fundamental quality to the living room around which other thematic regions of meaning revolve, (2) sub-thematic and (3) thematic descriptors of meaning.

Five thematic sub-regions contribute to the core quality of comfort in the living room as they represent the relationship between different attitude items achieved from clusters of attitude items: (a) Function (functional and purposeful quality), (b) Excitement, (perceived intensity of the living room) (c) Impression (attractive impact the living room makes upon its observers) (d) Style (indication of fashionable trends in furnishing and décor) and (e)
Colour and space experienced in the living room. Each sub-region consists of one attitude item in close proximity to the core quality of comfort also referred to as a thematic descriptor of each thematic sub-region as they capture the main experience of the five sub-regions with regard to the significance of comfort of the living room. They are (a) “good” in the Function sub-region, (b) “friendly” in the Excitement sub-region, (c) “inviting” in the Impression sub-region, (d) “welcoming” in the Style sub-region and (e) “positive” in the Colour and space sub-region.

The five descriptors can be combined into three quality components of comfort of the room (a) purpose is found in the Function, (b) atmosphere as experienced through the Excitement and Impression and (c) appearance indicative of the Style and Colour. These components can be equated to the ERM response types where the purpose of the living room is represented by the behavioural actions occurring in the living room, the atmosphere forms the affective response type found in the emotional experience related to the room and the appearance is signified by the cognitive response type formed through the ideas and opinions significant of the attitude towards the modified living.

CONCLUSIONS

Interior design may find value in the deeper dimensions of meaning consumers’ experience when evaluating the appearance of the living room they created. This may guide future interior design professions in achieving consumer satisfaction through the decorated appearance of a room as cultural differences may greatly influence the meaning of rooms.

REFERENCE LIST


REDESIGN OF THE RIETLVLEI NATURE RESERVE’S FARMHOUSE INTERIOR INTO A 4-STAR LODGE

by

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BACKGROUND

Final year students in interior merchandise management at the Department of Consumer Science, University of Pretoria must execute a design project in the field of interior design to complete their studies. The outcomes of the design project require that students should formulate and conceptualise an applicable design problem, integrate different theoretical backgrounds in a literature study to address the problem, apply subject specific knowledge to the design process by making functional and aesthetic visual presentations, and finally, present the design proposal for evaluation by using applicable media.

AIM

The purpose of this presentation is to present a design proposal for the redesign of the interior space of the Rietvlei Nature Reserve’s farmhouse into a 4-star lodge.

STRUCTURE

This presentation starts with the justification for the design project. Secondly, the literature review is discussed in terms of the history, natural physical environment (fauna and flora) and the cultural physical environment (built environment: accommodation, infrastructure, facilities) of the Rietvlei Nature Reserve, the Tourism Council of South Africa’s star rating scheme and subsequent requirements for lodges/guesthouses, examples of other lodges/guesthouses located in nature reserves and the role of ergonomics in the design of the environment using Galers’ (1987) user-machine-workspace-environment-interaction model. Thirdly the conceptual framework, problem statement and objectives for the design project are presented. Finally, the new design is presented by means of a discussion in terms of the above-mentioned aspects and visual presentations (floor plans, perspective drawings using AutoCAD, presentation boards, etc).
OUTOME

The outcome of this project is a design proposal for the transformation of an old farm house, situated in the Reitvlei Nature reserve, into a 4-star lodge (*Pumala lodge*) with a truly South African atmosphere, created by combining natural elements and contemporary design trends based on sound design principles.

VALUE

This presentation is of value for and everyone with an interest interior design.

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REDESIGN OF THE PALACE OF JUSTICE, PRETORIA

by

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INTRODUCTION AND JUSTIFICATION

The Palace of Justice in the heart of Pretoria is one of the oldest buildings in South Africa. Built in the nineteenth century by S Wierda and J Munro, the once High Court of the Zuid-Afrikaansche Republiek is surrounded by the historic buildings on Church Square and serves as a major tourist attraction. Unfortunately, after the completion of the New Supreme Court in 1993, the Palace of Justice was left vacant and was vandalized on a number of occasions. It was only in 2001 that the architectural components of the building were restored and the building used as chambers for Judge President and other high court judges. The building is, however, still not in optimal use; many of the offices lie vacant and only two of the three courts are used regularly. Although insufficient for its purposes, an under-floor level is used for storage, along with cells of historical value.

The significance of the Palace of Justice in terms of a museum probably lies in its historical significance as well as its architecture. The Rivonia Trial of 1964 took place in Court C of the Palace of Justice. This is probably the most prominent trial to have taken place in the building, in which the country saw Nelson Mandela, Walter Sisulu, Ahmed Kathrada, Govan Mbeki, Dennis Goldberg, Raymond Mhlaba, Elias Motsoaledi and Andrew Mlangeni sentenced to life imprisonment. Mandela’s famous ‘I am prepared to die’ speech was delivered here.

In terms of the restoration and re-use of this impressive building, there are several obstacles to overcome. The surface is very fragile and the inscriptions on the walls were written with weathering material. The walls themselves are very damp and the paint is peeling. The underground storage areas are insufficient for storing all the court case files that were brought here after the renovations, but, if a new storage area could be identified this space would lend itself to the design for a Museum of Justice that would provide a history of the Palace of Justice itself and the Rivonia Trial that was held there. A museum would also be a tribute to the South Africans who made a lasting impact on our judicial system. The money raised from guided tours could be used to maintain the museum and for pro bono work carried out by lawyers. This would contribute to the development and working of the law. The money
raised from guided tours could be used to maintain the museum and for pro bono work carried out by lawyers. This would contribute to the development and working of the law.

OBJECTIVE

It is project proposed that the interior of the Palace of Justice is restored and that three storage areas are converted into a proper exhibition area so that the museum can be used optimally.

LITERATURE REVIEW

Historical background

In 1892, the Transvaal High Court was situated in a rented building on the northern corner of Andries Street and Burosteeg. President Paul Kruger decided, however, that the building was too small. For this reason, the Volksraad decided not to renew their lease on 16 July 1892, but this decision was not realized. In 1893, at the sitting of the first Volksraad, the issue of the building was once more raised, this time by Sir A Wolmarans. President Paul Kruger announced that the government had designed a building for the new High Court (Holm & Holm, 1984:9). On 17 June 1895, Chief Justice J.G. Kotze and the Overige Rechters addressed a letter to the State President and the members of council announcing that they had drawn up the plans for the new High court building with State Architect and Head of Public Works, Sytze Wopkes Wierda. After several tenders had been submitted, work commenced in June 1896 (Landman, 2002:24-32).

President Paul Kruger laid the first foundation stone on 8 June 1897. While the building was under construction, the Anglo-Boer War broke out. The building had not been used as a court but as a studio by artist Herr Wichgraf while he was painting the Executive Council of the the Zuid Afrikaanshe Republiek. It was also used by the Vrouwens Werkgezelschap to make clothes for the men on the front (Landman, 2002:24-32). Pretoria soon fell under the jurisdiction of the British Army and was administered by Lord Athlumney. The incomplete Palace was seized and turned into a medical hospital for British and Irish soldiers from June 1900 until late 1901 (Landman, 2002:24-32). On 25 October 1900, the Zuid Afrikaansche Republiek was formally annexed by proclamation. Proclamation 14 of 1902 provided for a High Court, which soon opened for business after judges and staff had been recruited (Landman, 2002:24-32). The Public Works Department then completed the Palace of Justice.

On 9 May 1902, the first sitting of the High Court of the Colony of the Transvaal was held in the Palace of Justice. The building was used extensively until the 1990s but the Transvaal Provinical Division became too big and had to be moved into a new courthouse. This left the Palace vulnerable to vandals, vagabonds and schoolboys until the decision was taken to restore it to its former glory (Landman, 2002:24-32). In 1997 a tender was accepted by the Department of Public Works to allow Gerolemou/ Thamane Construction, under the supervision of Holm and Holm Architects, to restore the architectural elements of the building. The restoration was completed In February 2001, and the building was occupied by the judges and staff of the High Court (Landman, 2002:24-32). This building was initially designed to serve as a high court but it was used for this purpose only for a very short time and it is still not being used to its full potential. Only half of it is presently occupied by the judges of the High Court.
Architecture of the Palace of Justice

The Palace of Justice is one of the most representative buildings of the Neo-Renaissance style. Wierda derived his inspiration for the design of the Palace of Justice from France rather than the Netherlands, aiming to bring new influences and modern styles to the Zuid-Afrikaansche Republiek. The Neo-Renaissance style is an inclusive style that encompasses many aspects of the 19th century architectural revival styles that were neither Grecian nor Gothic but were influenced instead by a wide range of classicizing Italian modes. During the 19th century, the Renaissance style often materialized not only in its original form but also as a hybrid of all its earlier forms according to architects and patrons rather than geography and culture. It also borrowed architectural elements from the succeeding Mannerist period and the even later Baroque period. The Renaissance style was used so diversely over such a long period, in new ways and with new designs, that it is difficult to define and recognize Neo-Renaissance architecture. Two great buildings that resemble Neo-Renaissance architecture are the Opera building and Le Petit Palais in Paris, as well as the Palais des Beaux-Arts in Lille. The Renaissance style of architecture is accredited to Filippo Brunelleschi. The underlying feature in his work was order, which engendered an aspiration for symmetry and proportion, a feature not evident in the preceding medieval and Gothic styles. Neo-Renaissance architecture developed out of the severe original Italian architecture but evolved in France during the 16th century.

The exterior of the Palace of Justice is made up of architectural orders: the ground level is composed of solid rock with small windows. On the south side, Doric columns decorate the first floor and Corinthian columns the second floor, with Turkish columns on the third. The staircase resembles those in the chateaux of Blois and Chambord. Other interior features of the Palace include stained glass windows and skylights, which are a very distinct feature of the Neo-Renaissance style. An interesting wood graining painting technique typical of the period was used on the doors of the courtrooms and offices. Columns and decorative plasterwork were used in both the interior and exterior. The columns mostly served as a feature supporting the Corinthian order, which is known for its slender, plain shaft and decorative capital resembling the acanthus plant. There is a noticeable absence of decorative paint details and intricate color schemes. The interior is very decorative, but the colors used are simple and supportive of the beautiful effect of the stained glass and brass work. For this reason, the same principles were implemented in the design of the museum: the exhibits rather than the color of the paint become the focus of the room.

CONSIDERATIONS FOR THE DESIGN OF THE MUSEUM

Collections in museums and the accompanying information should be made available in displays or by other methods depending on the type of objects in the collection, which also provide a guideline for the curator and museologists to do their work. The objects must be cared for and conserved to protect it for the future. Exhibits should be aesthetically pleasing and stimulating for the visitor but they also be protected from damage. Exhibitions exist in space as well as in time and are framed not only by the gallery but also by the museum facility in general. An exhibition gallery is framed by the museum building and its site; all three provide the locus for the visitor’s experience. Visitors have an immediate impression of the location, approach, orientation, form and color and are affected by the messages these send about the museum and its contents. For the particular design of the museum in the Palace of Justice, the Modernism style was chosen. Specific attention was given to space, different viewing heights of individuals and flow of traffic to enhance visitors’ experience of the museum: needs of the disabled were accommodated. Because people are innately predisposed to touching objects as sensory and experimental confirmation of what they see, touching also acts as memory reinforcement. Spatial separation was planned into
the design to protect exhibits without creating resentment. Important objects were highlighted with good use of light and suitable placement.

Unfortunately most of the objects and furniture used in the final designs will have to be custom made to meet the requirements of the museum and the proposed design ideas.

REFERENCE LIST


INTRODUCTION

The 1940s and 1950s were periods of transitions between the austerity of the Second World War and its aftermath of rationing and shortages, and the youthful, exuberant design revolution of the 1960s. Impelled by the Modernist principles of functionalism, the Contemporary aesthetic was defined by new materials (e.g. chrome, glass, veneers, plywoods, plastics and vinyl upholstery fabrics) and the development of technologies to use them effectively, as well as a spirit of buoyancy and confidence. It was a vigorous period in design, with bold shapes, bright colours, and practical solutions to the needs of daily life (Whiton & Abercrombie, 2002:514; Riley N & Bayer, 2003:420).

Basically, contemporary furniture is designed with the future in mind rather than going back to earlier traditions. It is a continually changing furniture style. Contemporary furniture pieces have distinctive lines and designers are constantly searching for new materials and new shapes (Bennington, 2004:84; Crochet, 1999:245-251).

GOAL

The goal of this presentation is to provide an overview of contemporary design as applied in interior design.

STRUCTURE

The presentation introduces the cultural milieu and the frame of mind (mood) of the contemporary design period, followed by a discussion of its manifestation in the architecture, textiles, furnishings and other interior artefacts. Examples of modern-day interiors designed according to the principles of the contemporary style are supported with clear illustrations.
VALUE

This presentation is of value for today’s interior designers and decorators and everyone with an interest in furniture history.

Note:
This presentation was compiled as an assignment for the subject: Furniture and Textile History, which is part of the curriculum for the Bachelors degree in Consumer Science with specialization in Interior Merchandise Management offered by the Department of Consumer Science, University of Pretoria.

REFERENCE LIST


OF THE TEACHING OF TEXTILES COMPONENT WITHIN THE HOME ECONOMICS SUBJECT IN LESOTHO

by

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BACKGROUND

Lesotho is an underdeveloped country whose economy is richly contributed to by the textile industry. In this country the clothing and textiles industry is the largest employer with about 47,000 workers and it surpasses the civil service, in this way it is very helpful in poverty alleviation. The situation is expected to continue in the near future, as more foreign investors take advantage of the affordable labour that Lesotho offers.

The teaching of the textile section of Home Economics in the local schools does not seem to be recognised for the vast contributions and openings of opportunities that it is capable of doing for the country and its people. Firstly the emphasis is on the processes and not the textile science which provides a better understanding and appreciation of the behavior of the fabric in the textile products. Secondly the number of schools offering Home Economic subjects are very few in the country, from this small number of schools; a further division is made as some choose to offer Food and Nutrition (F&N) while others choose to offer Fashion and Fabrics (F&F). The latter is noticeably a smaller number for several reasons identified by the study. Thirdly within the schools that are offering Fashion and Fabrics, the students are at liberty to choose a subject they prefer to major in.

AIM

This article explored the possible contributing factors in the bias seen in its teaching of F&F in the Lesotho schools.

FINDINGS

The textile component appears to be less favoured by the students. This is seen by the comparatively smaller numbers enrolling for this section in the high schools as a preferred area of study in Home Economics. The situation has continued to an extent that some schools that were initially offering F&N alone phased out the subject altogether as the F&F was introduced recently with the new localised integrated curriculum.
Of the 20 principals interviewed 6 said they would not start offering F&F in their schools as even the teachers themselves are not as enthusiastic about it as they are about F&N, 9 said they would offer the subject in their schools but would have a problem at the beginning is expensive to establish but running cost are affordable. The remaining 5 expressed their interest in the subject and how they would do anything possible see to it that the subject is offered in their school for the skills it provides.

The students indicated in the interview sessions that they like F&N more because they get skills to do catering business and can be employed in food processing factories; some would like to teach it in the schools, and there were a few who expressed a special liking for F&F and these were discovered to those who have a relative, friends or a neighbour making a living out of the textile manipulation skills, and who were influenced greatly especially if the person was successful. There is yet another group of students who simply pick F&F as an academic subject because they find it easy to get a credit in it, this they said is because of the practical work that one can practice and with some interest and hard work scoring 100% in practicals is possible.

From the focus group discussions with the teachers it became apparent that they do not have the same interests. This was easy to determine because most teachers in Lesotho have gone through the same kind of training as they all went to the Lesotho Agricultural College. The factors that contribute to the difference are from the experience of the individual teachers. Those who do not prefer F&F gave the following reasons: incompetence, brought about by lack of exposure and ineffective dissemination of content during training; the lack of enthusiasm with which the teacher trainers demonstrate while training; some really have a negative attitude towards the subject because the subject has a reputation as being low class and only suitable for those who can not achieve satisfying results academically.

The factors discussed above contribute to the negative attitude that the teachers have towards F&F and this becomes detrimental when they teach because it gets passed on to the students who in turn react by possibly hating the subject altogether. This is possible because of the impact the teacher has on their students. It means that if the current situation is to be turned around, then the teachers are the first to be dealt with.

Statistical information acquired from the examinations council of Lesotho and the National Curriculum Development Centre indicate that there are indeed less schools offering F&F as compared to those offering F&N, there is a total of 22 schools offering Home Economics at the high school level, and 9 of these schools offer F&F as an option while the remaining 13 only offer F&N. the performance pattern for the past five years has been noticeably improving with 2005 recording the highest number as can be seen in a table below:

The findings revealed that the application of the subject does not seem to be taken to heart at this level of learning. This became evident as the people practicing in this field are mostly the ones who never did the subject in school, but are finding it useful now. There are only a few schools offering career guidance for the students. Apparently the curriculum is still relevant, the problem lies entirely on the dissemination.

It is therefore recommended that Lesotho schools offer textile courses with an emphasis as they contribute directly to the economy of the country. Professionals should embark on the in-service training to address problematic areas; educational excursions for the teachers and students can provide the exposure and possibly improve on the attitudes of the teachers; lastly the tertiary training institutions should make effort to rejuvenate their educators. It is
believed that people attach importance to a certain subject depending on what they know about it, and it is recommended that the relevant professionals and education authority should embark on intensive publicity and marketing strategies to promote this subject.

REFERENCE LIST

INTRODUCTION AND JUSTIFICATION FOR THE RESEARCH

In consumer-driven societies it has become essential to promote consumer competence and consumer learning – particularly among young people who will be the consumers of tomorrow. In essence, consumer learning is concerned with acquiring the skills, attitudes, knowledge and understanding that will enable individuals in a consumer society to make full use of the range of consumer opportunities present in a complex marketplace (Bannister & Monsma, 1982; Atherton & Wells, 1998; NICE-Mail 18, 2002:13).

As higher education institutions cultivate the leaders and economically active citizens of tomorrow, they might be sound environments to promote consumer learning through innovative curriculum development and relevant, proactive curricula, engaging students in the purposeful study of consumer issues and provide learning facilitators (lecturers) the opportunity to stress the importance and relevance of consumer concepts and skills to academic as well as vocational disciplines.

OBJECTIVES

The study aimed to establish a basis for the development of a curriculum framework for consumer learning at a higher education institution - in this case the Cape Peninsula University of Technology (CPUT) - which is compatible with the requirements of the South African Qualifications Authority and the Higher Education Qualifications Framework in South Africa (SAQA, 1995; RSA DoE, 1997). The knowledge, informed attitudes and critical thinking skills developed through consumer learning integrate well with these educational reform processes.

RESEARCH METHODOLOGY

Following an applied research approach, a case study design (Wheeler, 2001:8) was used to generate data for an understanding of the problem being addressed. The research was descriptive in the sense that it provided a
snapshot of the variables of interest at a single point in time in order to gain a deeper understanding of the meaning and relevance of the data (Denscombe, 2001; Wheeler, 2001).

To determine the need for consumer learning at the CPUT – the “bounded context” of the study – a situation analysis was conducted as the first phase of curriculum development (Carl, 1997:40). Methods to triangulate data included the use of quantitative and qualitative research methods, together with a thorough literature study. The two sets of empirical data were obtained from two research instruments, namely self-administered survey questionnaires administered to first year students and semi-structured interviews with learning facilitators at the institution.

The survey questionnaire used was based on a dendrogram (Schutte, 1992), which defined the conceptual framework of the study and from which the questions could be constructed. This assisted in the needs assessment for curriculum development at the CPUT and to determine the knowledge, skills, values and attitudes of 474 first-year respondents regarding consumer rights and responsibilities, as well as other consumer-related issues. This not only provided data to analyse the situation, but also assisted in the planning and development of a curriculum framework for consumer learning.

The researcher used semi-structured interviews to determine the views and perceptions of learning facilitators regarding the importance of consumer learning, and to gauge the need for such learning at the institution. Learning facilitators were asked in particular to identify the characteristics of an informed consumer, both in the marketplace and in daily life in order to contribute to the development of the curriculum framework for consumer learning. Curriculum related questions to learning facilitators included topics/themes to be included, possible teaching strategies, the implementation, development and incorporation of critical crossfield outcomes (SAQA, 2000), as well as the major benefits and obstacles that need to be faced in offering consumer learning at the particular institution (CPUT).

FINDINGS

The two-tiered situation analysis indicated that students expressed a clear need for consumer learning at the CPUT, especially regarding the areas of consumer rights and responsibilities (Thoresen, 2000:19; Consumers International, 2003). The importance of consumer learning and the “readiness climate” from the perspective of the learning facilitators was also clearly established.

Findings from the survey questionnaire completed by first-year students (quantitative data analysis) indicated the significant need for consumer learning at the CPUT. The questionnaire was also used to determine the knowledge, skills, values and attitudes of the respondents regarding consumer rights and responsibilities, as well as other consumer-related issues. This not only provides insight into the situation regarding consumer learning at CPUT, but also guides the curriculum design phase (Carl, 1997:48) of a curriculum framework for consumer learning.

To analyse the qualitative data generated, an adapted format of the analytical abstraction method (AAM) suggested by (Carney in Miles & Huberman (1994:91) was used to reflect a more simplified version of the process. The AAM was adopted in order to analyse the transcripts on a basic or content level, developing a matrix in which responses were placed in categories. This matrix formed the base from which higher-level analysis of data took
place, thereby facilitating the identification of emerging patterns. Seven such patterns were identified, which informed the development of the curriculum framework for consumer learning. The findings of the analysis of the qualitative data obtained from the semi-structured interviews conducted with learning facilitators indicated that there was a need for consumer learning and that it should be prioritised at the CPUT.

The above findings provided information regarding the situation analysis and contributed towards the rationale for the development of a curriculum framework for consumer learning. The development of a framework for consumer learning was therefore inevitable, as the need and “readiness climate” for such a framework was established and verified.

DISCUSSION

The study culminated in the development of a curriculum framework that is compatible with the requirements of the South African Qualifications Authority and the Higher Education Qualifications Framework in South Africa and could serve as a guideline for planning and implementation of a consumer learning programme at the CPUT. Acknowledging the structures which form the scaffolding which is needed to ensure quality learning outcomes is essential, as this provides the direction to be followed in a curriculum design process for consumer learning.

IMPLICATION

The proposed curriculum framework for consumer learning, as well as the suggestions regarding the operationalisation thereof, might serve as a starting point for the development of innovative consumer learning programmes, especially in Africa, as Africans face unique challenges and are best suited to develop their own strategies to empower future consumers. By implementing the proposed curriculum framework, the wellbeing of students can be improved. It is therefore foreseen that the proposed curriculum framework for consumer learning, as well as the suggestions regarding the operationalisation thereof, might serve as a starting point for the development of innovative consumer learning programmes, especially in Africa, as Africans face unique challenges and are best suited to develop their own strategies to empower future consumers.

Retrospectively, the ultimate aim of the research was to contribute to the improvement of the human well-being of young university adults by developing their knowledge, skills, values and attitudes in the domain of consumer learning to become critical, independent thinking and informed consumers who not only manage consumer resources responsibly in a complex, multi-faceted society, but also take appropriate action to influence the factors that affect consumer decisions as part of the global society’s collective life.

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THE IMPACT OF BOTSWANA INTERNATIONAL TRADE FAIR ON INFORMAL SMALL SCALE CLOTHING PRODUCERS

by

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INTRODUCTION

Micro and small businesses have become contributors to both reduction of unemployment and to national development. Many of the informal small-scale clothing producers in Botswana have been supported by government through policies directed towards poverty alleviation and employment creation. Despite the government’s efforts of availing financial assistance, technical expertise and training, promotional and marketing support, the informal small-scale clothing producers do not seem to utilise these for full benefit.

OBJECTIVES

Participation of the informal small-scale clothing producers at Botswana International Trade Fair was expected to provide them with avenues for long-term benefits through marketing their products and learning. The purpose of this study was to establish the impact of participating in the Botswana International Trade Fair (BITF) on the informal small-scale clothing producers’ businesses. The informal small-scale clothing producers have had assistance and access to promoting their products for a considerable time, with apparently not much change in their market share and quantities produced. The challenges facing these informal small scale clothing producers were to utilise the BITF for competing with other local and regional producers in providing quality products; to increase production for meeting the demands of the market; to increase profits, and expand businesses to reduce unemployment.

RESEARCH METHODOLOGY

Purposive sampling was used to select participating informal small scale clothing producers (those who had participated in BITF at least three times over the previous five years) and council Home Economists (all who had
been involved with these same businesses) while the small scale independent exhibitors were conveniently sampled during the 2006 trade fair. Seventeen informal small-scale clothing producers from the eastern part of Botswana were interviewed to establish impacts after participating at the trade fair. One producer who had won most prizes at the trade fair was interviewed for a different perspective of the production and marketing strategies employed. Fifteen council Home Economists, acting as liaison and change agents for the informal small scale clothing producers, also participated in a survey and focus group discussions. Two case studies were developed from in-depth interviews with independent small-scale exhibitors to ascertain the impacts brought about by BITF on these different producers. Therefore both qualitative and quantitative approaches were used in collecting data. The results were analysed in terms of frequencies and chi-square relationships.

FINDINGS

Great similarities were found to exist between the three samples. The results revealed that there was adequate knowledge about BITF from the informal small-scale clothing producers, as well as from council Home Economists and the small-scale independent exhibitors. The three groups understood the objectives of BITF to be mostly educational and followed by promotion. All the groups reported noticeable impacts to the growth in the number of customers, increase in production, increase in assets purchased, improvement in quality of products and the addition of newly developed products. Perceptions of the three groups on the benefits from BITF matched with what they experienced as a result of participation at the trade fair. The producers on the other hand experienced a decline in the number of employees while the small-scale independent exhibitors had experienced an increase. This was attributed to the removal of government funding after a certain period, while the independent producers had not had that support.

DISCUSSION

The differences between the samples were slight. The independent exhibitors who reported great gains from the BITF had both worked in clothing businesses before stepping out for themselves. In addition, one of the exhibitors had retained her government job and ran her business with employees from her house. The education levels of the Home Economist-supported small-scale producers were lower and they did not have prior commercial experience. The Home Economics catalogue produced to guide the producers was both helpful in ensuring required quality, while also stifling creativity to some extent. The Home Economist accentuated quality products rather than creative ideas for meeting changing market requirements. The Home Economists were happy with what they were achieving and the small-scale producers had virtually no problems with how the system worked. They agreed though that working from their homes (which most did) was not ideal for attracting customers.

RECOMMENDATIONS

For utmost benefit from BITF, the producers have to strengthen their marketing strategies, during and outside the trade fair. There is need for the producers to take initiatives to secure their own stalls for participation during the trade fair as individuals or jointly with other producers (rather than rely on the feedback from the Home Economists). Producers could benefit more from using funding from government for promotion of products. Home Economists should support self-representation by the producers so that they directly learn from participation and
eventually wean off continued support from government. For monitoring and planning purposes, a national
database for micro and informal small-scale clothing producers should be kept by the Department of Social
Services. Benchmarking on involving micro and small-scale businesses in training is essential, and establishment
of local markets for continued contact with customers could expand producers’ knowledge of production.

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SELECTED ATTRIBUTES AND BEHAVIOURS OF SMALL FASHION BUSINESS OWNERS IN THE VAAL REGION

by

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INTRODUCTION AND JUSTIFICATION FOR THE RESEARCH

Unemployment is very high in South Africa. The unemployment rate was still rising up to 2002 and it is still seen as one of the most pressing socio-political problems facing the South African government (Kingdon & Knight 2004:1). The labour market pattern, based on the official definition of unemployment, shows that the latest official unemployment rate is 25.5% (Statistics South Africa September 2006). Small businesses have created thousands of jobs in South Africa (Rwigema & Venter 2004:4). Kroon (2002:215) confirms that entrepreneurship development is a means to economic development, which implies a need to develop an entrepreneurial population.

In this country, an entrepreneurial culture, that stimulates economic development, has not developed (Kroon 2002:216). Many authors (Hisrich & Peters 2002:51, Kuratko & Hodgetts 2004:28, Rwigema & Venter 2004:60) are of the opinion that there are specific desirable and acquirable attributes and behaviours that entrepreneurs should possess or develop in order to be successful. Testimony given by successful entrepreneurs reveals that the attributes and behaviours that they have in common, are: the ability to respond positively to challenges and to learn from mistakes, personal initiative, and great perseverance and determination (Timmons & Spinelli 2004:249). It is consequently necessary to approach the problem from an integrated perspective on fashion entrepreneurs and their businesses in South Africa and the technological fashion environment in which they function.

In a study conducted in 1999 Van Aardt and Kroon (1999:3) established that there was a lack of information regarding small fashion business owners and their businesses in this country. A Nexus search reveals that the situation has not changed. If an entrepreneurial culture in the fashion world in South Africa is to be developed, urgent attention must be paid to the training and technological development of existing as well as potential fashion entrepreneurs. In order to make recommendations for an effective training and development programme, information on entrepreneurial attributes of South African fashion entrepreneurs is needed.
OBJECTIVES

The purpose of the study was, amongst others, to investigate selected attributes and behaviours of small fashion business owners in the Vaal Region. This presentation will focus on that investigation.

RESEARCH METHODOLOGY

A structured questionnaire was compiled in accordance with the research framework. A non-probability convenience sample was used, applying the snowball method. The sample incorporated 100 small fashion businesses that had been in operation for 2 years or longer. Statistical analysis of the data included frequency analyses and an investigation into the construct and content validity of the instrument and reliability by way of alpha coefficients.

FINDINGS

The study as a whole entails an investigation into personal characteristics of fashion entrepreneurs in the Vaal Region, as well as the start-up and functioning of their businesses. This presentation will focus on only six desirable and acquirable attributes and behaviours of fashion entrepreneurs in the Vaal Region which were ranked as follows: Leadership, commitment and determination, motivation to excel, creativity and ability to adapt, customer service, and finally, risk tolerance, ambiguity and uncertainty.

DISCUSSION

Leadership: The fashion entrepreneurs in this study possessed an extremely strong and well-developed capacity for leadership. This attribute was ranked first of all six attributes, with a mean score of 3.6 on a 4-point scale. The statement that was scored highest on this subscale, stated that entrepreneurs should treat others as they would want to be treated themselves.

Commitment and determination: The respondents obtained high scores in all the individual items testing commitment and determination, with mean item scores ranging between 3.59 and 3.41 on a 4-point scale. The statement ‘willingness to make personal sacrifices’ obtained the highest score and was ranked second, showing that commitment and determination were regarded as strong characteristics among these entrepreneurs.

Motivation to excel: The fashion entrepreneurs in this study seemed to be highly motivated to perform extremely well in their businesses. This attribute was ranked third, with a mean score rating of 3.42. Individual item analysis showed that the majority were aware of their own weaknesses and strengths, followed by the fact that they had a goal-and-result orientation and set high but realistic goals for themselves.

Creativity, self-reliance and ability to adapt: Creativity, self-reliance and ability to adapt was regarded as of moderate importance. This obtained a mean score rating of 3.39, which positions this factor fourth among the six attributes. The item stating that they have the ability to learn quickly was scored highest, followed by the ability to conceptualise and visualise details.
Customer service: The small fashion business owners in this study were not exceptionally customer-oriented, as this attribute was rated fifth, with a mean score of 3.37. The majority felt that they strive towards excellent value creation and enhancement and nearly equal numbers claimed that they have an intimate knowledge of customers’ needs. However, these entrepreneurs didn’t seem to be particularly market driven.

Tolerance of risk, ambiguity and uncertainty: Tolerance of risk and uncertainty does not seem to be a very strong characteristic of these fashion entrepreneurs, as this was scored lowest, with a mean score rating of 2.81 on a 4-point scale. When analysing the individual items, it is clear that the majority of the respondents were of the opinion that they have the ability to resolve problems and integrate solutions. All the other statements with regard to risk taking, risk sharing, managing of contradictions, tolerance for uncertainty and also for stress and conflict were scored lowest.

RECOMMENDATIONS

It is recommended that all tertiary institutions involved with the education and training of students, who intend to find an entrepreneurial career in the fashion field, should identify curriculum contents required to prepare them to start and run a successful business. This study revealed that fashion entrepreneurs in the Vaal Region possessed most of the desired attributes and behaviours which were investigated, to a satisfactory extent, but that there is a need for more extensive education and training in the area of tolerance of risk, ambiguity and uncertainty.

REFERENCE LIST


THE USE OF LABEL INFORMATION BY FEMALE CONSUMERS WHEN ASSESSING THE QUALITY OF CLOTHING TEXTILE PRODUCTS

by

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INTRODUCTION

Manufacturers, retailers and marketers use quality to differentiate their products from those of their competitors. The way consumers perceive quality and how these perceptions influence decision-making are important issues that can be used to understand buyer behaviour. Previous studies indicate that consumers’ perception of quality is a multi-dimensional concept. Another important issue in the South African context is that very little textile information is supplied in any retail environment. Consumers often have only a very limited textile knowledge, which is usually based on experience. The use of label information formed part of a larger study where the purpose was to determine which cues consumers use to assess the quality of clothes before making a purchase decision. This information was used to develop a guide to assist online clothing consumers in their decision-making. By developing and implementing a consumer guide, which could also successfully be used in the traditional shopping environment, consumers could be educated to demand more accurate and informative textile labelling to help them when making purchase decisions.

BACKGROUND

Many studies of perceptions of clothing quality have focused on both intrinsic and extrinsic informational cues used by consumers to assess quality. The effect of attributes such as fabric, fibre content, construction, brand and care labels have been investigated with varied results. Studies have also been conducted on the relationship of perceived quality, purchase intentions and eventual satisfaction. Some researchers have found a direct relationship between perceived quality and purchase intention, while others have reported an indirect relationship through satisfaction. In one qualitative study focus groups were used to determine which quality cues were used, and the findings indicated that they did not only use concrete attributes, but also aspects such as performance expectations, psychological expectations and aesthetic appeal. Other researchers found that the reasons why consumers used specific concrete attributes to assess quality differed based on each consumer’s personal values.
This confirms the multi-dimensionality of the perception of quality and emphasises that a variety of informational cues as well as personal expectations play a role in the assessment of garment quality.

One of consumers’ main concerns when making a purchase decision is how the garment will perform in use. When shopping different possibilities are compared to specific aesthetic and performance standards each consumer thinks they should meet. The comparing of products to these standards is usually subconscious, and therefore many consumers are unaware of how they decide which product meets their personal criteria. From the literature it is also evident that no two purchase decisions are made in exactly the same way. A good set of guidelines, of which accurate labelling forms part, could help consumers to be better equipped to use this information to make sound decisions regarding the purchase of clothing products.

RESEARCH STRATEGY AND METHODOLOGY

This research strategy is descriptive and cross-sectional as an attempt is made to describe and understand behaviour, tendencies, and situations at a specific point in time. A quantitative study was done using a questionnaire to determine which quality cues adult career women use when assessing the quality of clothing products. This was judged an appropriate method, as the sub-objectives and specific aims could be addressed in this way, and as other researchers have successfully used structured questionnaires to measure consumer perceptions of apparel quality and decision-making in fashion retailing. The questionnaire was compiled after studying literature on apparel quality, the way consumers perceive quality when purchasing garments and factors that affect decision-making. Dimensions that influence quality of textile products were identified as well as aspects that influence consumers’ expectations concerning apparel quality and satisfaction with the purchased garment. The questionnaire was pre-tested and adapted before given to the respondents.

A non-probability sampling technique was used. Purposive or judgemental sampling was recommended, as members of a specialised population, adult career women, were used in this study. The study included 116 career women working at the University of Pretoria, teachers at various schools in Pretoria and women working for various companies in Pretoria.

One of the aims was to determine if respondents use label information as aid to assess textile quality when purchasing formal and casual daywear. A survey questionnaire was used to gather information on a variety of intrinsic quality cues. One of the aspects the respondents were asked to indicate, was if they used label information when buying apparel. They were also asked to indicate which type of information they used and what they would like to be added to facilitate the decision-making process. Closed questions were pre-coded while the open-ended questions were coded after all questionnaires had been returned so that all responses could be written down and placed in categories as determined by the conceptual frame work used for the study.

Cronbach’s Alpha coefficient was used to measure the internal consistency of the responses to the Likert-type scales used to assess the type of information on labels (related to performance properties) consumers would find helpful when making decisions. The alpha value of 0.80 indicates a good internal consistency.
In the analysis of the data frequency distributions were determined to see how many respondents use label information for assessing quality. The mean scores of the responses were calculated to determine which type of label information is most often used for assessing quality.

RESULTS AND CONCLUSIONS

Findings suggest that most respondents use labels to determine the size and price of the product (extrinsic cues). Although the majority of the respondents (90 out of 116) use care labels (directly related to performance), more than half of them do not relate the fibre content on the label to the care instructions supplied. Most respondents do not know which formal and performance properties of fibres and fabrics influence a garment's quality and seem to rely on previous experience when making buying decisions. These results indicate the need for more consumer information for assessing quality that address these specific aspects, as well as the need to supply consumers with accurate label information. This is especially important for the South African consumer who often only has a care label to rely on for information.

RECOMMENDATIONS

More information on fibre properties seems to be an urgent need. By including information on fibre properties the consumer will be better informed and know what to expect from the fabric in terms of durability, comfort and maintenance, which would, in the long run, also help in the decision-making process. Although the fibre content is indicated in most cases, consumers still don't seem to relate fibre content to performance properties. These recommendations could enable retailers to address the lack of knowledge concerning textiles and their properties in both traditional and on-line store environments and aid the consumers in their decision-making.

REFERENCE LIST


INTRODUCTION

The world of fashion is stylish, glamorous and exciting but from an environmental point of view, the clothes we wear and the textiles they are made from can cause a great deal of damage. The chemicals that are used to bleach and colour textiles can damage the environment and consumer's health. This research emphasizes the use of simple, affordable yet beautiful environment and consumer friendly natural dyes, and decorative features of traditional peasant designs and styles. Manipulated samples have been given ageing and rustic textures. Coffee and clay dyeing methods have been considered so as to give a subtle coloration to fabric surfaces. It's a time-honoured practice, one that most likely had its origins in the earliest days of fabric dyeing. Home crafted dyeing and handmade embroidery has been used to create the textures on fabric thus giving an ecological and organic feel to fabrics.

PURPOSE OF STUDY

The future lies in the consumers’ consideration to the environment and strategies to prevent pollution. The Textile Industry in Mauritius is booming, however small entrepreneurs and local artisans are bearing the consequences of modern technology. Since Mauritius is a multi cultural country with its strong roots in agriculture and peasant traditions, this research geared towards a solution tackling environmental problems occurring with chemical emission and air pollution, by recycling ancient techniques and materials. The world concerns today is global warming, Mauritius although small, has a responsibility to protect its lagoons, flora and fauna. Aligning for the Future in this case refers to the use of eco materials and traditions to counteract the continuous damage of our eco system.
OBJECTIVES

The main objectives was to promote eco-friendly textiles and clothing to reach the mass generating awareness, also bringing forward a changeover from synthetic textiles to environment- friendly textile products. Consequently by promoting eco-friendly products, it can be proved that style and sustainability can co-exist thus creating market demand and improving consumers’ environment and health. Moreover another aim of this research was also to revive the rich heritage of the traditional style and techniques and make people aware of its values and use.

RESEARCH AND IMPLEMENTATION

Design Brief through Visual Research

After looking into different aspect of the peasant style in the medieval ages, sources of materials and visual images were gathered to prepare a mood board, based on the theme ‘peasant spirit’. The mood board was prerequisite to the research since it was used as reference for inspiration, colour palette, sourcing and manipulation of fabrics and for the design development of the garment collection. The colour palette consisted of faded shades of handicraft earthenware and pottery accompanied by olive greens.

Interaction with Consumers

A focus group of women between the age of 18-30 years old within student and working class category was approached to assess and evaluate the design concept and to determine how Mauritian women felt about wearing traditional wear while incorporating ageing and rustic textures to the fabric surfaces. This specific group represented a major segment of the consumer’s market, which has a higher buying power. The interactions consisted of surveys, workshop sessions and open discussions groups.

Fabric Manipulation and Design Process

Fabric manipulation was crucial enabling the use of fabrics in different ways so as to create textural effects, which applied to fabric surfaces. Altering the existing texture of a fabric added a new dimension to the fabric surface. The methods of manipulation used were: tear, gathering, fraying, knotting pleating, weaving, stitching and slashing, embroidery (machine and hand made embroidery), patchwork and appliqué. Fabrics were experimented with clay, mud and coffee so as to achieve the ageing look. These natural dyes were used because they are environment friendly materials as well as non-toxic and non-allergic.

Design Developments

Based on the moodboard and initial research on peasant apparel style in the medieval ages, a series of designs were developed and proposed to the target group. The designs showed key elements like:

• Blouse with puffed sleeves (sleeves must be at least ¾ length or long)
• Skirt, gathered or pleated for fullness so as to give necessary volume to the silhouette (skirt can be either calf-length or knee length)
• Bodice, and corselet with laces and buttons
• Apron and Fitted Belt
The manipulated dyed and embroidered samples were applied to the design development of the peasant traditional wear.

RESULTS AND ANALYSIS

Physical Testing of Textiles

Fabrics were tested to determine their strength after manipulation and the wash ability of the dyed samples for evaluation. The aim of this step was to ascertain the quality of the fabrics for future use. The fabrics were analysed so as to know whether they could withstand washing, wearing, sunlight, and perspiration without losing an appreciable amount of colour.

In the experiments performed, only cotton fabrics had been used mainly because it was one of the main fabrics used by peasants in the medieval ages and the advantages which cotton fabric brought to them were absorption of perspiration, did not melt, had little crimp and could absorb many times it weight in water.

According to the experiments performed, it was found that dyeing done on a small scale, or craft dyeing, could have lasting effect.

Design Evaluation through surveys

According to the survey, the respondents wanted to look comfortable in their peasant traditional wear and the outfit should fit them properly. Overall the proposed collection of garments was accepted on the basis of its fresh appearance and creative use of embroidery. The merging of earth colours with their different shades gave an attractive and aesthetic look to the collection.

DISCUSSION AND RECOMMENDATION

Several areas were covered in this research, which could be more in depth and focused. For instance researching, designing and simultaneously conducting surveys and workshops restricted the section of the population targeted. This could be taken in a broader scale and nationalised the products.

Moreover in depth study can be made in the marketing and brand building of these types of products. Additionally research can be done in the possibility of integrating natural dyes to industrial level.

REFERENCE LIST


INTERNET LINKS
EVALUATIVE CRITERIA APPLIED BY SELECTED FEMALE FASHION CONSUMERS IN THE VAAL REGION WHEN PURCHASING CASUAL DAYWEAR

by

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INTRODUCTION AND JUSTIFICATION FOR THE RESEARCH

Consumers are becoming increasingly discerning, informed and knowledgeable about products, which they intend to buy and they tend to be more aware of the quality of products. Marketers are not always certain of consumers’ demands and needs. Consumers’ perception of garments which they consider to purchase, embrace garment analysis and the application of specific evaluative criteria in order to assess garment quality. Kadolph (1998:4, 13-14) points out that quality is a multidimensional concept, which cannot be addressed by a single definition in terms of all the dimensions, areas of impact, and concerns related to quality. Both intrinsic and extrinsic cues are used to assess perceived quality of apparel. Intrinsic cues are inherent to the product, such as the design/style, fabric, accessories, and construction, while extrinsic cues are not a part of the physical product, although product-related, such as price, brand name, product image, hangtags/labels, store image, country of origin and appropriateness for the intended purpose (Brown & Rice 2001:47-48). Although both intrinsic and extrinsic attributes seem to be used by consumers to assess textile product quality, Eckman et al. (1990:14) in their review of 21 studies found that intrinsic attributes were used more often.

Consumers use a number of cues to infer quality, including intrinsic and extrinsic product attributes (Eckman et al. 1990:13, Forsythe, Presley & Caton 1996:299, Brown & Rice 2001:47, Zhang, Li, Gong & Wu 2002:57, Retief & De Klerk 2003:24-25). If marketers have insufficient knowledge about the dimensions of fashion and technological quality, which apparel consumers apply to make their decisions, they may mistakenly focus their attention on product attributes which are not important to consumers. One problem is that very few studies on South African female apparel consumers’ application of comprehensive criteria to assess clothing quality could be located. This leads to the conclusion that there is an urgent need to investigate the South African consumer regarding criteria applied when evaluating apparel with the purpose of purchasing clothing.
OBJECTIVES

Objectives were to determine which evaluative criteria are used by female fashion consumers in the Vaal Region to assess apparel quality when purchasing casual daywear, and to which extent the various criteria are applied.

RESEARCH METHODOLOGY

The study can be described as quantitative, descriptive and explorative in nature. A self-administered, structured questionnaire was compiled and used to collect the data. The measuring instrument was found satisfactorily construct and content valid as well as reliable. The series of questions was comprehensive of all the evaluative criteria that were encountered in the literature on previous studies on the topic of evaluation of apparel. A representative sample of 105 respondents was chosen from the full-time female academic personnel at all seven tertiary institutions in the Vaal Region.

FINDINGS

Most of the respondents were 31-35 years old, white and married. They all had a tertiary qualification. These lecturers mostly spent between R100 and R300 per month on casual daywear. The majority had the perception that they fall into the middle to higher income group.

• Intrinsic attributes

The most important aspect of style or design seemed to be that it should compliment the figure. Highly fashionable styles or designs did not seem to be all that important. When evaluating materials, overall pleasingness of the fabric was rated most important, while fibre content seemed to be less important. Regarding construction, they were of the opinion that darts are very important when assessing the quality of casual wear, followed by fasteners and sleeves. The most important aesthetic requirement to the respondents was that colour should compliment the personal features. Functional requirements found important were durability, comfort and fit, and the respondents regarded the retention of shape and appearance of garments as the most important functional requirement, and ease of care least important.

• Extrinsic attributes

The majority of the respondents positively agreed with only one of the statements regarding price, namely that casual daywear should be worth the money paid for it. They did not esteem brand very important when evaluating clothing quality, but the majority were of the opinion that store name was an indicator of apparel quality. The consumers were positive about labels as an important criterion when purchasing casual wear. The correct size indication on the label seemed to be most important to them. They were not convinced that country of origin of garments was an important criterion when buying casual wear. The respondents found it quite important that outfits bought for casual daywear should be appropriate for the purpose.
DISCUSSION

Considering the fact that these respondents were all in a lecturing position and all had tertiary qualifications, it could be expected that they would put a high priority on appearance, which was confirmed by the fact that the correlation between design/style as well as fit and qualification was statistically significant. The fact that these respondents did not regard ease of care as of high priority could possibly be explained by the fact that they were predominantly married and in a professional career, so it would be likely that they would have personnel to take care of the laundering tasks. Comfort correlated positively and statistically significantly with income, possibly because specialised materials and styles that provide comfort without forfeiting elegance are more expensive and can be afforded by these respondents, who are in the middle to higher income group. Among the extrinsic attributes, appropriateness was rated most important, followed by labels and price, with little emphasis on brand and country of origin, possibly because these respondents are rational and reason cognitively about quality judgements.

RECOMMENDATIONS

Insufficient comprehensive theoretical models dealing with and explaining assessment criteria used for evaluating apparel quality, are available. Research on the development and explanation of such models as applicable to South African consumers is consequently urgently recommended and could contribute to consumer education.

Studies on various consumer groups could generate valuable information which could be used by manufacturers and retailers for segmenting future markets, especially as age, gender, career and cultural groups are currently emerging as very prominent apparel shopper groups.

REFERENCE LIST

INTRODUCTION AND JUSTIFICATION FOR THE RESEARCH

India, has a rich heritage of culture, tradition, art, music, literature, sculpture and exhibits “unity in diversity” through variegated charms of festivals, rituals, art, music, costumes and language. Costume plays an important role in the life of every individual. Costume is a symbol to identify of groups of people region wise, culture wise and designates the rank, role, occupation, status, and standard of living of community at large. Costume is not only used by people to cover their bodies, but part and parcel also serves as a form of art and decoration. Art is applied life. This includes dyeing, printing, paining, embroidery etc. India has inherited unique art that is rich and has been in existence for thousands of years. Most of the Indian textiles were designed and produced according to the rituals and ceremonial occasions. It excels in artistic designs, harmony and beautiful colours. Its exquisite beauty and fineness has attained an unrivalled position in the international textile trade.

Primitive man worshipped “nature” and it was one of the sources of inspiration from which he picked up motifs of floral, bird and animal kingdom available geographically. Dyeing and printing of various motifs through simple techniques and natural dyes was not an end but a start to embellish many handicrafts. The large Indian sub-continent encompasses all kinds of natural phenomenon like river, mountains, plains, deserts, a vast coastline and a variety of climates. This has an effect on the lives of the people, influencing everything from dresses to dwellings to habits and culture. A number of cultural influences like Jainism, Islam and Hindu religion and the great Indian epics like the Ramayana and the Mahabharata also have left their impact on the arts and crafts. Jainism, one of the world’s oldest sustained faith since ages developed many minutely defined and beautifully complex, symbols allowing interpretation of geometric proportions. From the beginning of time man has used symbols or iconography. These symbols have occurred in the production of specialized artistic endeavours as well as in common every day objects. These icons are a specialized form of communication. It offers up rich panoply of things known and unknown, spoken and unspoken, seen and unseen.
OBJECTIVES

The study was an attempt to explore the Indian arts of embellishing fabrics (i.e. tie and dye and batik) and religious motifs and fusing the two to create new designs. The inspiration of motifs was taken from Jain holy symbols.

Thus the objectives of the present study were to

• collect Holy symbols depicted in Jain religion,
• to study different techniques of Batik,
• to study different techniques of Tie and Dye and to
• select holy motifs suitable for Tie and Dye and Batik and to prepare samples.

RESEARCH METHODOLOGY

Twenty-four symbols related to twenty-four Jain Tirthankars having different meanings individually were used in the present experimental study: 100 respondents comprising of 75 consumers and 25 experts were selected using purposive random sampling. A questionnaire was used to collect the data. Six best symbols were selected. Six wooden blocks were prepared to embellish selected designs. Two different placements (i.e. border and center) were chosen and 12 samples were prepared embellishing those symbols with tie and dye and batik. The embellished design samples were evaluated by 100 respondents. The researcher analyzed the preference of the best-selected designs (i.e. one of each placement) i.e. one border and one center. Data was analyzed using SPSS using version 10.0.

FINDINGS AND DISCUSSIONS

The designs with highest values were considered as the best designs.

Some (12%) respondents found the motifs to be unusual where as 35% found them to be rare and 43% respondents found them to be common. Most of the population (93%) showed familiarity with the traditional are of Tie and Dyen and Batik. The majority of the respondents (87% of the population) showed acceptance for these fused designs on textiles. Motifs placed on the border was accepted by 36% of respondents, while 12% were of the opinion that motifs should be placed in the center, 10% of the respondents preferred all over placement of the motifs and 5% preferred that motifs should be placed in the corner.

The result reveals that 82% of the respondents were willing to purchase garments embellished by combination of these techniques. Technique of embellishment was a major factor (75% respondents) in selection of designs and motifs the second factor (25% respondents). On the other hand 81% respondents preferred the use of combination of two techniques (Tie and Dye and Batik) for increasing the esthetic appeal of Ladies kurta (shirt).

According to 54% of the respondents the designs were generally good while 44% respondents indicated that the designs were excellent and only 2% of the respondents indicated that designs were satisfactory. Almost half of the respondents (54%) were of the view that these designs will be accepted in the international market while 46% believed that the acceptability of these designs will be more lucrative in a national market.
The findings of the study showed that most of the prepared samples rated excellent or good in effectiveness; that in most of the samples the combination of batik and tie and dye was found to be appropriate and that most of the samples needed no improvement. Indications were that only a few needed slight variation in colour and design.
On the whole the respondents approved the combination of these two arts with Jain holy symbols as they created novel and interesting effects.

RECOMMENDATION

The study can be repeated to embellish other religious motifs using combination of Tie and Dye and Batik on garments as well for home furnishings. The use of African motifs and religious symbols on costumes and home decorations using Tie and Dye and Batik techniques as well as other African embellishing techniques (embroidery, appliqué, bead work and painting) should be investigated.
SESSION 4B – COMMUNITY DEVELOPMENT AND HOUSEHOLD WELL-BEING RELATED TOPICS
FAMILY PLANNING IN INDIA: HOW SUCCESSFUL IS IT?

by

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INTRODUCTION

India is often described as a collection of many countries held together by a common destiny and a successful democracy. Its diverse ethnic, linguistic, geographic, religious, and demographic features reflect its rich history and shape its present and future. The Indian subcontinent has long been one of the world’s most popular regions, but as in many of today’s developing countries, population growth took off in the 20th century. India has more people than Europe, more than the entire western hemisphere. Just one group, Indian boys below age 5, number 62 million—more than the total population of France. India’s annual increase of about 19 million contributes far more to annual world population growth than any other country. India’s population which passed the 1 billion mark in 2000 will exceed that of China before 2030 to become the world’s most populous country, a distinction it will currently never lose. Population explosion has been India’s major problem since independence. It is a major obstacle to the overall progress of the nation.

Thus, adoption of family planning methods is one of the best solutions to tackle this problem. Despite the obstacles, family planning use did slowly rise in India from 13 percent of couples in 1970 to 53 percent for the 2003-2004 periods. Despite of several governmental and non-governmental scheme contraceptive uses is lowest in India in comparison to other countries. Most women and men do not have access to a wide choice of contraceptives. Female sterilization is the most common method of family planning in India in comparison to other method of contraception. Thus this paper presents challenges and opportunities in India regarding family planning.

SITUATIONAL ANALYSIS

Background

The small family norm is widely accepted (the mean ideal family size currently reported by young people is 2.5 children) and general awareness of contraception is universal (99%) awareness of a contraceptive methods). India’s total fertility rate declined from six children per women in the 1960s to just under three. Contraceptive use is
generally rising. But even then lots have to be done in this field. There is societal preference in India for early marriage soon followed by child-bearing. Marriage is almost universal with little social acceptance of never-married women. Although the average age at marriage for women is 19 years, this conceals regional variations with some states having an average of only 16 years of age. Approximately half of all women have given birth by the time they reach 20 years. However, evidence has emerge indicating that young couples, despite community norms that favour a first child soon after marriage, would prefer delaying the first birth until they have spent more time together.

Contraception

In 2000 the contraceptive prevalence rate among married women was 48.3%. Contraceptive use in India is characterized by: The predominance of non-reversible methods particularly female sterilization; Limited use of male-/couple dependent methods; High discontinuation rates and Negligible use of contraceptives among both married and unmarried adolescents.

Three out of four users rely on sterilization in India. Sterilization accounts for 85% of all modern contraceptive methods used. Less than 7% married women use the officially sponsored spacing methods (pills, IUD, and condoms). The reported use of traditional contraceptive methods and male/couple dependent methods are low. Over the past decade, two new methods of contraception were introduced in India. The copper T-380A, which enables protection for a period of 10 years; and Emergency oral contraception, available by prescription, which is expected to decrease the number of unwanted births and unsafe abortions.

The public sectors of government provide five contraceptive methods- female sterilization, male sterilization, the IUD, oral contraceptive pills and condoms. Methods that are perceived as less effective (including pessaries, spermicides and diaphragms), or are controversial (such as injectibles and implants) are dropped from the public low priority by health worker.

Most women and men do not have access to a wide choice of contraceptives, particularly those who are dependent on public sectors. Inadequate knowledge of contraceptive methods and incomplete or erroneous information about where to obtain methods and how to use them are the main reasons cited for not accepting family planning. Contraceptive use is lowest in the states of Meghalaya (20%), Bihar (25%), and Uttar Pradesh (28%). Contraceptive use is higher in urban than rural areas and increases with a women educational attainment (figure3). Among religious groups, Sikhs and jains had the highest use, 65%, followed by Christians at 52% and Hindu at 49%. Muslims have the lowest rate of contraception use at 37%.

There is still a substantial unmet need for contraception despite improved availability and access to contraceptive services, a substantial proportion of pregnancies (21% of all pregnancies that results in live birth) are mistimed or unplanned. Young women are more likely to report an unmet need for contraception. The desire to limit family size and to space the next birth are the main reasons given by the majority of those who seek an abortion, highlighting the large unmet need for contraception among women.
Current family planning efforts

The national population policy provides a framework for achieving the twin objectives of population stabilization and promoting reproductive health within the wider context of sustainable development. The tenth five year plan (2002-2007) outlines efforts in three broad areas:

Meeting the unmet need for contraception; reducing infant and maternal mortality, enabling families to achieve their reproductive goals. With regards to addressing unmet need for contraception the government is focusing particularly in area where fertility declines have been lagging. Issues such as adolescent reproductive health, unintended pregnancy and access to safe abortion are addressed. Counseling, access to safe abortion is addressed. Counseling access to and provision of good quality services and follow-up care are emphasized.

Health and family planning workers are required to regularly visit households in their assigned areas in order to provide information related to health and family planning, counsel and motivate women to adopt appropriate health and family planning practices, and deliver other selected services. Uncertain of the consequences of the new target approach however, many states set local goals based on the previous years centrally assigned targets. Women's involvement in decentralized decision-making has yet to be fully operationalized at the grassroots level. In many states, the involvement of the community and other stakeholders, including Panchayati Raj institutions, in need assessments are reported to be minimal.

Contraceptives are supplied through the government's network of health care facilities and with the assistance of NGO's. There is also good social marketing program of condoms and oral contraceptives.

Challenges and opportunities

**Socio-economic constraints:** high levels of literacy, poor access to information, poverty, and gender-based disparities serve as significant barriers to family planning. These include social stereotyping, lack of male involvement in family planning, and continuing open discrimination against the girl child, adolescent girls and women. Programmatic constraints: major constraints include limited resources, lack of an integrated multi-sectoral approach, insufficient IEC support, and a weak health management information system. Limited awareness of reversible methods: awareness of reversible methods is relatively limited among women and men alike. Information given to clients by providers regarding contraceptive methods is typically inadequate, most providers have a bias towards sterilization and only a small proportion of clients are informed of reversible methods.

**Staff shortage and limitation:** staff shortages continue to plague the services at all levels. Where workers are available, they are generally poorly trained and have little knowledge of the methods they are promoting. Only 13% of women report receiving a home visit from a health and family planning worker during the last year, and only 11% of those visited report receiving family planning services. Women without any children are least likely to receive a home visit. Limited access to quality health services: access to quality health services is limited in both urban and rural areas. A substantial population residing in slum areas has no access to family planning services owing to poor health infrastructure. Furthermore, only 37% of rural women live in a village with a primary health centre or sub-
contraceptive choice, and the quality of and access to care are limited within the programme.

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INFANT CARE PRACTICES IN AN URBAN SLUM OF VARANASI: CASE STUDY OF INDIA

by

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INTRODUCTION AND JUSTIFICATION

Although infant mortality has fallen in many developing countries over the past four decades, the decrease has been slower in the neonatal period than in the remaining months of infancy. About two-thirds of all infant deaths and 38% of all under five deaths occur during the neonatal period, resulting in about 4 million neonatal deaths globally per year. About 1.2 million newborns die each year in India alone, accounting for about one-fourth of global neonatal deaths. Despite efforts by government and other agencies, neonatal morbidity and mortality continues to be high in India. Among other reasons, newborn care practices are major contributors for such high rates. As infant mortality contributes to over 64% of infant deaths in India, interventions to improve child survival must address the neonatal period. The most critical period for the infants is the first hour of extrauterine life, when the drastic change from intrauterine to extrauterine existence occurs. Thus, the main Aim of the study is to find out the newborn care practices in an urban slum of Varanasi, India.

OBJECTIVE

To describe selected newborn care practices related to place and mode of delivery, care at birth, cord care, prelacteal feeding, breast feeding practices and immunization and to assess how far WHO guidelines are being implemented in an urban slum of Varanasi, India for newborn care.

RESEARCH METHODOLOGY

Community based, cross sectional survey in an urban slum of Varanasi. The population in the area was characterized by low-income group. They are mostly migrated from other states and utilization of health facilities provided by qualified personnel is poor in the group. This area was chosen purposely because of slums populations that are known for poor living standards, unhealthy behaviour and practices.
All live births with the help of anganwadi workers of that area were followed up. Mothers of 102 neonates were interviewed within 1 week of birth using a semi-structured, pre tested schedule containing both open-ended and close ended questions pertaining to place and mode of delivery, care at birth, cord care, prelacteal feeding, breastfeeding practices and immunization.

Data were analyzed using Epi-info version 6.04. Fischer exact test and chi square test were applied wherever applicable to find out significant difference between comparable groups. P value of less than 0.05 was considered.

FINDINGS

The study population consisted of 78% Hindu religion, 15% Christians and 7% Muslims. Joint family system was the predominant type (70%) and nuclear families accounted for 30%. Education levels of such areas are usually low because of low economic conditions. Most mothers (75%) were educated up to primary level, followed by senior secondary (21%). Graduate and above were only 4%. Less than one in every five women (17%) received at least one antenatal check-up. A small proportion of the women reported that they received information about clean cord care (5%). Home deliveries were most common place to deliver child (87%) as compared to institutional deliveries (13%). Family members or friends conducts deliveries in such areas, while doctors with a medical degree, nurses or auxiliary nurse midwives assist very few. Home deliveries were basically conducted by dais (88%) or old lady of a family (12%). Most (80%) home deliveries were normal in comparison of 53% of caesarian in institutional deliveries. Most of the babies (94.5%) during home as well as institutional deliveries cried immediately after birth while 5.5% failed to do so.

According to WHO immediate care of the newborn includes gentleness and prevention of infection, establishment and maintenance of respiration, care of the umbilical cord, care of the eyes, stabilization of temperature, identification of the infant and maintaining a cord. Bathing the infant immediately after birth seemed to be a common practice as a majority (69%) of home delivered newborns was given a bath after birth. None of institutional deliveries reported immediate bath after birth. Air passage was cleaned by using a finger in 79% home deliveries and rest of them were not cleaned at all. While 15% institutional deliveries applied milking the trachea methods to clean air passage, 38% applied stroking the neck in the direction of the mouth and 46% is done through suction method. Eyes of the newborns were cleaned (wiped) by unsterile cloth or cotton in 79% of home deliveries and by boiled and different cotton swabs for each eye in 13% case, whereas in 10% of home delivered newborns, eyes were not cleaned at all. Of the home delivered babies, 15% was weighed at birth compared to weighing in all cases of institutional deliveries.

Rooming in of babies was practiced more often in home deliveries than institutional deliveries. BOG, OPV and hepatitis B vaccine were given to 45% newborns that were delivered at home. Majority of this immunization was done at urban health centre, situated in the study area. In the institutional deliveries BCG and OPV were given to most of the newborn but hepatitis B vaccine was given only to 65% babies. Surprisingly, 60% home delivered newborns were given injection tetanus toxoid by unqualified practitioners of that area. This was on the recommendation of the dai conducting the delivery.

Out of 89 home deliveries, a new shaving blade was used to cut the cord in 64% of home deliveries. Surgical blade available in the delivery kit was used in 16% cases. In three cases each, old blade or a shaving razor or a kitchen
knife was used to cut the cord. Cord of the newborn was tied using a clip (45%) or a rubber band (55%) in institutional deliveries. In rest of the cases threads, available at home, were used which can be presumed to be unsterile. Nothing was applied to the cord in the institutional (84%) deliveries than the home (53%). This difference was significant. Povidine iodine or tincture iodine was applied in 16% cases of institutional deliveries. Other applicants like turmeric with oil or ghee (27%) other than cold cream (20%) is applied. First feed given to the baby after birth was breast milk in (12%) home deliveries and (62%) institutional deliveries. In other cases babies were given prelectal feeds such as ghutti (45%), honey (32%) or jaggery (7%) or even top milk (4%). Breast feeding was initiated within 4 hours in only 24% of home deliveries against 85% of institutional deliveries. The difference was statistically significant. In case breast feeding initiated later than 4 hours, a reasons for this were enquired into. Traditional practices such as baby to be fed on a starlit night or in the presence of paternal aunt etc were cited a reason in 22% of cases. Other reason cited were advice of dai’s, 12%, no milk secretion, 16%, no knowledge regarding early breast feeding, 16% in home deliveries and operative reason 53%, staff instruction 27%, or babies nap 20% in institutional deliveries. Colostrums were given to the baby in 86% of hospital deliveries as against 75% of home deliveries. Nearly 39% of all newborns were not given colostrums.

DISCUSSION

This study has described five essential newborn care practices in a Varanasi slum, India. Thorough cleansing of the body immediately after delivery is generally not done, for the vernix caseosa is believed to have a beneficial effect upon the tender skin. The vernix is dissipated in a few days. The majority of pediatrician accepted the theory that the less the skin is handled and abraded by even gentle friction; the better is its condition. The infant’s respiration must be established and maintained. A prophylactic treatment against newborn gonococcal ophthalmia is required by state law. A germicide may be instilled into the eyes of the newborn shortly after delivery. Silver nitrate has been used for many years. Penicillin, which is gonococci, has been used more recently. Such a practice reported elsewhere too should be discouraged as it can lead to hypothermia. Bathing the newborn in the first hour after deliveries resulted in significantly increased prevalence of hypothermia in a randomized controlled trial conducted in Uganda. In 79% home deliveries, finger was used to clear the air passage of the newborn shortly after delivery. This can lead to introduction of infection and injury. Unsterile cloth or cotton or even fingers were used in large proportion of cases to wipe the eyes of the newborn. These unhygienic practices should be discouraged as these can be a potential source of infection. Only a little more than one third of the new born delivered at home was weight at birth. Weighing at birth is essential activity carried out to determine babies at higher risk and accordingly, determine need for extra care. Although weighing the newborn is emphasized in integrated management of neonatal and childhood illness, it is not practiced. It was also essential to find out that rooming-in was practiced in 25% of institutional deliveries.

Even 45% of the home delivered newborns were immunized with BCG, OPV and hepatitis B within a day or two at the urban health center in the area. It was revealing to know that 12 newborns delivered at home were injected tetanus toxoid on the recommendation of the traditional birth attendant by unqualified practitioners. Mothers should be made aware of the correct and complete immunization schedule to enhance immunization coverage and to avoid such a malpractice. A new surgical blade was used to cut the cord in 16% home deliveries. Such a good practice was found to be more common in the present study than earlier studies. Use of a used blade or a shaving razor or a kitchen knife calls for urgent intervention.
Training of traditional birth attendant has been shown to be effective in reducing perinatal mortality. Antenatal mothers and family members (especially women) should be made aware of the adverse consequences of using such instruments for cutting the cord, during the antenatal period itself. The same result was obtained from the study done in rural India. Most women reported that the instrument used to cut the umbilical cord was sterilized, but sterilizing the cord tie was practices less widely, so that in combination only 32% of women reported clean cord care. In 64% home deliveries, any thread available at home was used to tie the cord. Mothers should be educated to at least boil the thread before use. Cord cutting and tying practices have been identified as risk factors for neonatal infection. Other studies suggest low coverage of clean cord care practices among home deliveries in South Asia. Application of oil and ghee with or without turmeric to the cord was common in home deliveries. It was surprising to observe that even 5 institutional deliveries; these were applied after the baby was brought home. Such a practice may predispose the newborn to risk of neonatal tetanus as topical application of ghee to the umbilical wound has been shown to pose a significant risk of neonatal tetanus. This issue should be discussed and clarified not only with mothers and family members but also with the birth attendant conducting the delivering as her advice to the family has serious implications on neonatal health.

Prelecteal feeding was almost universal and it was common to delay breast feeding initiation for several days. About 12% newborns were given breast milk as the first feed in the present study as compared to 47.5% in a study conducted in Ho Chi Minh City in Vietnam. Although breast milk was the first feed given to higher proportion of babies delivered in the intuitions, the practice of pre-lacteal feeds in the form of ghatti, honey, jaggery, dates was still in high prevalent in India. Many studies from India and other South Asian countries have indicated that women commonly wait several days after birth to begin breastfeeding, avoid giving colostrums, or supplement breastfeeding with other foods or liquids. Such a practice, by delaying initiation of breast feeding, may adversely affect establishment of lactation and introduce enteric infections if pre-lacteal feeds are not given in hygienic manner. Although in the current study, colostrums was given to babies more commonly than other studies still about one-third mothers has discarded colostrums, which needs to be stopped. Similar to other studies, most mothers in institutional deliveries as well as home did not initiate breast-feeding within one hour of birth. The protection provided by early initiation of breast-feeding against the risk of neonatal mortality was established in the study of Ghana. It showed that 16% of neonatal deaths could be averted if all infants were breast-fed from day 1 and 22% if breast-feeding started within the first hour. As the bay is most active during the first hour of the birth and sucks more vigorously during this period, lactation is more likely to be successful established if breastfeeding is initiated early. Common reasons like quasi-religious rituals, not enough milk, ill health and fatigue of mother and lactation failure need to be addressed through suitable IEC and counseling. Besides health care providers conducting deliveries, should also focus on these aspects.

RECOMMENDATIONS

There is an urgent need to reorient health care providers and to educate mothers on clean delivery practices and early infant care. Mothers should be made aware of the correct and complete immunization coverage.
WOMEN’S INCOME-GENERATING ACTIVITIES IN A DISADVANTAGED FARMING COMMUNITY: TOWARDS SUSTAINABILITY

by

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BACKGROUND

A multi-disciplinary study, referred to as the THUSA Project, (Transition, Health and Urbanisation of South Africans) was conducted in the North-West University between 1996 and 1999. This study identified farm dwellers in the North West Province as a particularly vulnerable group concerning nutrition as well as physical and mental health. During 2001-2002 a needs assessment was further conducted in two farming communities in the province and it was found that the workers and their families lacked in quality of life and were not able to generate an additional income. Based on the results of the THUSA study and the needs assessment, a threefold training and education intervention was implemented to educate female farm dwellers in basic resource management, repairing and recycling of worn textile items and manufacturing crafts from available items. The aim was income-generation. Results obtained from the threefold study indicated the need for additional, intensive training of women to enable them to generate an income by applying newly acquired skills. An additional training intervention, aimed at product development, was therefore designed. The intention was to enhance competency with regard to the possibilities that could be attached to the generation of an income from product sales. It was apparent that business and practical training would have to receive attention if quality products were to be produced. After the initial training of 30 women, 12 women took up the challenge to start their own business and formed the “Holding Hands” women’s group.

AIM

The aim of this study was to investigate sustainable indicators that would contribute to and enhance sustainable income-generating projects applicable to a farming community.
SPECIFIC OBJECTIVES

The specific objectives of this study included the following:

- Identification of criteria from the literature and other income-generating projects similar to our aim that could be regarded as indicators for sustainability.
- Identification of indicators for sustainability within the “Holing Hands” project, making use of participatory action research (PAR).
- Formulation of recommendations for sustainability indicators for income-generating projects similar to the “Holding Hands” project.

METHODS

We defined “sustainable development” for the purpose of the study as: “Development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland Commission Report, 1987).

A literature survey was conducted to identify sustainability indicators, as a result gaining information from various sewing related income-generating projects.

A qualitative research design was followed to determine the factors that would contribute to the projection of sustainability. Data was obtained by making use of informal telephonic and face-to-face interviews with project facilitators.

To identify and recommend sustainability indicators, a PAR approach was applied within the “Holding Hands” project.

RESULTS

From the literature and data from other projects a number of project cycles and indicators for sustainability were identified. These included traditional measures of sustainability and also true sustainability indicators, where the main difference between traditional measures and true indicators was the level of overlap between project cycles. The project cycles included a needs and livelihoods assessments, empowerment and capacity building, income-generation and sustainability. Each project cycle should as a result not be viewed as a separate entity with a definite beginning and end, but rather an integrated process moving backwards and forwards between project cycles.

The guidelines from Hart (1998) were applied to assist the facilitator of the “Holding Hands” project to design a set of practical sustainability indicators. These indicators were tailored according to information obtained from the project members by making use of PAR. The conceptual framework followed included planning, acting, observing, reflection and re-planning (Bless & Higson-Smith, 2000; Collins, 1999; Kahn, 1994; McNicoll, 1999; McTaggart, 1989; Miles, 2004; Morse, 1997; Schurink, 1998; Van Rooyen, 1998; Whyte et al., 1989 and Wysocki et al., 2000).
Indicators identified included the following:

- Education and training opportunities
- Marketing and business skills improvement
- Religious and cultural support
- Skills assessment for re-training purposes
- Available skills for income-generation
- Social networks
- Productive capacity of women
- Re-training requirements
- Skills evaluation for new members
- Number of women generating an income
- Traditional skills (indigenous knowledge)
- Innovativeness and creativity of women
- Support structures such as child care
- Saving opportunities
- Availability and affordability of transport to markets and shops
- Internet and telephone facilities
- Sources of credit
- Stimulation of innovative thinking to follow market trends
- Introduce new products

These sustainability indicators were characterised into types of indicators, types of capital or resources and ranked according to relevance. The types of indicators included state, response and pressure indicators. The type of resources included natural or environmental resources, social resources and financial resources. Each indicator was ranked according to their carrying capacity and whether it could compromise global sustainability.

RECOMMENDATIONS

The following main recommendations can be made for income-generating projects similar to the “Holding Hands” project:

- A participative approach must be followed, allowing the community to take ownership and responsibility for their own development.
- Sustainability indicators must be developed as a measuring tool, which will assist the community to monitor and evaluate their project progress, detect problems well in advance and take timely corrective measures.
- Facilitators of income-generating projects must be patient at all times and they must be willing to learn from community members and they should have an open mind.
- Checklists and evaluations are vital for both the facilitator and project members.
- Constant re-training of project members must occur in order to ensure continuity and sustainability.
CONCLUSION

Income-generation goes hand in hand with the empowerment of a person from a holistic perspective. It includes business practices and therefore a fine distinction had to be made between social empowerment and business strategies. Besides continues training, the sustainability of a project required regular contact sessions with the community. These sessions are to motivate, help to solve problems and for social support. Depending on community demand, these sessions can be scaled down.

From the analysis of the studies it can be recommended that a good start with reasonable start-up capital, business training, exploring of existing markets and finding new ones are necessary to ensure sustainability.

In this project it was found that to train a facilitator from the community, played a crucial role to guide the project team and provide training to new members. The project members would therefore rely less on the researcher.

This project therefore provided valuable recommendations and lessons learnt to align income-generating activities of rural, previously disadvantaged women with the needs and demands of the consumer of the future.

REFERENCE LIST


ENTREPRENEURSHIP AND ITS CONTRIBUTION TO HOUSEHOLD ECONOMIC WELL-BEING:
A MULTINATIONAL STUDY

by

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JUSTIFICATION AND RESEARCH OBJECTIVES

The economic impact of business venturing on individuals, families, or households has received little attention in entrepreneurship research. While much is known about the conditions for entrepreneurship, management, motives, personal traits, and success/failure of businesses, little is known about the household economic well-being of entrepreneurs. This study examined the entrepreneurial process and how it impacts household economic well-being in five countries. Secondary survey data from Argentina, India, Russia, South Africa, and the U.S. were obtained from the Global Entrepreneurship Monitor (GEM) research consortium. Using multi-group structural equation modelling, the purpose was to study country differences on: (1) the influence of individual attributes on perceived entrepreneurial opportunities, and entrepreneurial activity, and (2) the contribution of entrepreneurial activity to household well-being.

CONCEPTUAL FRAMEWORK

The conceptual model depicted in Figure 1 was theoretically and conceptually informed. Human capital and demographic factors such as age, education, career experience, and, social networks influence the perception and exploitation of entrepreneurial opportunities (Becker, 1967, Davidsson & Honig, 2003; Shane, 2003). Psychologically, attitude towards business failure and self-reported entrepreneurial skills influence perception and participation (Shane, 2003). Market opportunities, financial hardship, and lack of employment opportunities can lead to entrepreneurship (Bygrave, Hay, Lopez-Garcia, & Reynolds, 2001; Shane, 2003; Singh & DeNoble, 2003). Taxation and government regulations, economic conditions such as interest rates, infrastructure, and market openness, and cultural tolerance can influence business creation (Kent, 1984; OECD, 2003). Deacon and Firebaugh (1988) modelled external environmental factors filtering through the personal subsystem to influence family resource-use behaviour. Family and business are each a ‘purposive social system’ transforming resources and constraints through processes that deliver objective and subjective achievement (Stafford, Duncan, Dane, and
The present study investigates objective personal achievement (economic well-being) through entrepreneurship in an environment (country).

FIGURE 1: A MODEL OF ENTREPRENEURIAL ACTIVITY AND HOUSEHOLD ECONOMIC WELL-BEING

METHOD

Data were from 2001 random adult telephone surveys of the GEM. The sample sizes were 1,992 for Argentina, 2,011 for India, 2,012 for Russia, 4,926 for South Africa, and 2,954 for the U.S. The GEM applies standardised measures and data processing procedures in all countries. Demographic attributes were age, gender, education, working activity, social network with other entrepreneurs. Psychological motivation was self-reported entrepreneurial skill and attitude was fear of business failure. Age was measured in three categories: 18-34 years; 35-54 years; and, 55 years and older. Education was ordered from some high school to graduate experience. All the other attributes were dummies. A reliable four-item cumulative scale was used to measure perceived opportunity. Individual entrepreneurial activity levels were categorically ordered: (0) no involvement; (1) start-ups; (2) new firms; and (3) both start-ups and new firms. Start-ups are new businesses that have not paid wages or salaries including the respondent's own within the first three months of establishment. New firms have been paying wages for 3 months to 42 months.

In calibration, the hypothesized structural model failed to fit the Argentine data, which was chosen arbitrarily (Bryne, 2001). The model was re-specified using a series of theoretically based modifications and estimated across the multisample (see Figure 2). The results were validated by imposing equality constraints on the regression weights of paths with similar effects in more than one country. To compare relationships across the countries, the final results are based on the unstandardised estimates of the constrained models. The standardized estimates provided the relative importance of determinants within each country.
FIGURE 2: CALIBRATED HYPOTHEZIZED STRUCTURAL EQUATION MODEL WITH MODIFICATIONS

FINDINGS, RECOMMENDATIONS, AND FUTURE RESEARCH

The peak age group for entrepreneurial activity in South Africa was 35-54 years as hypothesized. Contrary, younger adults were most active in India. Entrepreneurship participation did not vary significantly across all generations in Argentina and Russia. There was no significant difference between the young adults and middle-aged adults in the U.S. In all the countries, women were less likely to be entrepreneurial even though literature suggests the gap in participation by men and women is closing (Minniti, Arenius, & Langowitz, 2005). The gender gap had the least impact in all the countries.

Education attained had no significant impact on start-ups but self-reported entrepreneurial skill was the most important determinant in India, Russia, South Africa, and the U.S. The second most important factor in South Africa and the U.S. was knowing an entrepreneur and fear of business failure which was the third most important factor in South Africa. Nations may consider entrepreneurial training as part of school curriculum to increase cultural entrepreneurial orientation.

In scholarly conundrum, one camp says non-workers are more likely to be entrepreneurial. Another camp suggests workers are more entrepreneurial because of their professional experience and access to start-up resources. There was evidence to support the second camp in all the countries except the U.S. Employment was the most important
predictor in Argentina. Policy makers should encourage and support entrepreneurship by non-workers especially in countries with high levels of unemployment such as South Africa. Non-workers who may need the income from entrepreneurial ventures were not involved because the lack of entrepreneurial skills and fear of business failure.

Entrepreneurial activity was associated with higher incomes only in Russia. However, this study was limited to nascent entrepreneurship because of data limitations. Confidence in start-up skills and social ties with entrepreneurs was related to higher incomes in all the countries except South Africa. This could imply necessity-based entrepreneurship among lower income groups in South Africa. The benefits of the relationships with other entrepreneurs need further examination to assess the relative importance of social capital, shared resources, or clientele.

Individual attributes did not influence the perception of entrepreneurial opportunities in the environment. Perhaps environmental factors play an even more significant role. A multinational sample was used to proxy the influence of varying macro-conditions. With appropriate data and theoretical application, hierarchical structural equation models can estimate multi-level interrelationships between economic indicators, infrastructural and market conditions, cultural conditions, and individual-level characteristics. In addition, future research can examine family economic well-being by business type, of established entrepreneurs, and over time.

**REFERENCE LIST**


COMMUNITY EMPOWERMENT IN BOTSWANA: THE PRACTITIONER’S PERSPECTIVE

by

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INTRODUCTION AND JUSTIFICATION FOR THE RESEARCH

Joshi and Moore (2000:1) accused development organizations of choosing to believe that they manage their development programmes in ways that empower the poor, which is not reflected in their practices. This exemplifies a predicament that occurs when the community workers’ or extension officers’ good intentions to develop communities are nullified by distorted assumptions of empowerment and obstacles caused by external factors. There is, according to Lekoko (2002), a gap between policy makers’ intentions, (to make a contribution to development through extension services), and the reality in Botswana.

In this study, we underscore the importance of a common understanding of the word empowerment for home economics extension officers (HEEOs) in Botswana, because it is from the way they understand it, that will inevitably determine what they do to support and advance empowerment of local communities. We believe that issues of empowerment are so intricate that pliability and vagueness in understanding concepts advanced in this area may end up frustrating the very efforts directed towards community empowerment. Thus, HEEOs should make all efforts to have a common working definition of empowerment that will lead to responsible community empowerment practices. Since different people are likely to see empowerment through various spectra of practices and thoughts, our interest was in HEEOs in Botswana.

PURPOSE AND OBJECTIVES

The purpose of this research was to explore Home Economics Extension Officers’ (HEEOs) understanding of the concept of empowerment and determine the extent to which their understanding of empowerment drives activities geared to empower local communities. More specific objectives were:
• To describe Home economics extension officers’ understanding of the concept of empowerment and how this understanding relates to their practices.
• To describe the empowerment approaches that are used by the HEEOs in Botswana
• To identify the hindrances that affect HEEOs’ empowerment practices

RESEARCH METHODOLOGY

Qualitative data gathering methods were employed. Semi-structured questionnaires were mailed to all twenty-one HEEOs deployed in various city, town and district councils throughout Botswana. Fifteen were returned completed. Ten HEEOs were then conveniently sampled and interviewed. A focus group discussion was conducted with a community sewing group.

Data obtained through semi-structured questionnaires, interviews and focus group discussions were thematically coded. The themes identified were: empowerment definitions, activities/projects where home economics extension officers are involved, empowerment approaches applied by HEEOs and the hindrances which HEEOs experience in their work.

FINDINGS AND DISCUSSION

HEEOs viewed empowerment merely as a result of education, which is also reflected in the nature of practices and projects in which communities are involved. The two main practices they described are related to 1) skill training for women, orphans and the destitute and 2) the coordination and assistance of day-care centers and home-based care centers.

The HEEOs mentioned several outcomes they expect as a result of education (skill and knowledge impartation) such as the community’s ability to speak and stand for themselves, improved standard of living and ability to help themselves and not rely on Government. These outcomes, according to literature, are not a primary outcome of the teaching of skills and knowledge. Rather, they are related to participatory approaches where there is less emphasis on skill training and more emphasis on the interaction in groups. All the HEEO’s described the communities they are working with as disempowered, which is contrary to their (HEEO’s) description of the outcomes of skill training.

HEEOs’ empowerment practices remained at the development stage (teaching of skills with no purposeful attempt to involve participants in their own development process) without actual empowerment taking place at the liberation and transformational levels. It was clear that the HEEOs did not use the welfare approach (giving of handouts) as an empowerment strategy and they were all aware of the consequences of applying the welfare approach when working with poor communities. Throughout the interviews, there was no evidence cited by the HEEOs that suggests that indeed, transformation took place in any of the communities. Hence, it can be concluded that no real empowerment took place in the communities.

Various constraints that impede HEEOs work were cited during the interviews. Firstly, the structures under which HEEOs operate were found not to be always conducive to empowerment. Conflicting interests among the various stakeholders, e.g. on what funds should be used for, were common. Secondly, HEEOs were found to be somewhat lacking in project monitoring and mentoring strategies, and this partly causes projects not to be sustainable.
Thirdly, despite efforts by HEEOs to develop the communities, the people showed preference for government handouts which they viewed as the only constant thing they have.

CONCLUSION

While all the HEEOs were found to be empowered and sharing a somewhat similar understanding of the concept of empowerment, the empowerment practices and processes they engaged in tended to differ. According to Kindervatter (1997) community empowerment is all about helping local communities to gain an understanding and control over their social, economic, and/or political forces, and other challenges of their lives. Contrary to these essential elements of real empowerment, most development efforts in this study remained at the welfare and development stages without actual empowerment taking place at the liberation and transformational levels.

The information contributed by this study is relevant and meaningful because it comes from HEEOs, who are major players in issues of empowerment in Botswana. Through this study, HEEOs’ voices can be heard in the literature that contributes to informing people about community development.

RECOMMENDATIONS

Recommendations about policy and practice that will better prepare and guide HEEOs’ work of empowering communities thereby realizing Botswana’s Vision 2016 were made.

- Organizations that employ development workers (including HEEOs in Botswana) need to critically assess the structures in which they expect empowerment to occur and formulate relevant policies.
- Training organizations need to realize the importance of developing development/extension workers who have grounded understanding and practices of empowerment, together with implementation know-how.

REFERENCE LIST


SESSION 4C – NUTRITION AND FOODS RELATED TOPICS
ANAEMIA PREVALENCE AND DIETARY INTAKE OF ELDERLY LIVING IN A PERI-URBAN SETTLEMENT IN SOUTH AFRICA

by

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BACKGROUND

In the elderly, anaemia is a very common problem that is associated with increased mortality and poorer health-related quality of life, regardless of the underlying cause of the low haemoglobin levels (Steenisma and Tefferi, 2007:960). In South Africa (SA), a prevalence of 13.9% in a population of elderly persons of mixed ancestry (Afro-Euro-Malay) was documented (Charlton et al., 1997:425). The elderly living in peri-urban settlements are particularly at risk, owing to food and nutrition insecurity linked to poverty (Ezekowitz et al., 2003:223; Horwich et al., 2002:1785).

OBJECTIVE

This study investigated the prevalence of anaemia and its association with the dietary intake of a randomly selected sample of 235 black elderly (≥ 60 years) respondents attending a care centre (n=450) in Sharpeville, a peri-urban settlement in SA.

METHODS

Anthropometric, haematological and dietary data were obtained from the elderly sample. Weight and height were measured using standard measurements, and body mass index (BMI) was calculated as weight (kg) divided by height squared (m²). Venous blood samples were drawn and analysed for serum iron, ferritin, haemoglobin (Hb), haematocrit (Hct), red cell count (RCC), transferrin, serum folate and serum vitamin B_{12}. Dietary intake was measured using a 24-hour recall. Means, standard deviations and medians were computed for each variable. Data analysis was done using the Statistical Package for Social Sciences (SPSS) for Windows version 14,0. Dietary intake and food consumption data were analysed by a registered dietitian using the Foodfinder® version 3 program, developed by the Medical Research Council of SA. The Levene’s t-test for equality of variances was used to
evaluate differences in means between men and women, and Pearson’s correlation was used to examine associations between the study variables. Biochemical indicators were compared to cut-offs.

RESULTS

The results showed more women than men in the sample, and the mean age (±SD) was 73.4(±8.16). While the majority of the men (65.8%) had normal body mass index (BMI) values, only 20.8% of the women had normal BMI values while 47.2% were obese. Mean BMI was significantly higher (p=0.000) for women compared to the men. The men had significantly higher mean values (p<0.05) of Hb, Hct, RCC and serum iron than the women. The prevalence of anaemia was 3.8% in men and 12.1% in women. Depleted iron reserves (serum ferritin <15µg/L) occurred in 7.7% of men and 6.5% of women, while a higher percentage of men had increased levels (>300 µg/L). The prevalence of macrocytosis was similar for both sexes. Low serum folate was more prevalent among the women (42.5%) than men (20.5%), while low serum vitamin B_{12} was observed in 25.6% of male- and 23.1% of female respondents. The dietary assessment showed the main source of food intake was carbohydrates. Chicken, beef and milk appeared as protein sources, although these were consumed by a minority of the elderly. Fruit (apples and oranges) and vegetables (cabbage and spinach) also appeared on the top 20 food consumption list, but both the frequency of vegetable and fruit intake as well as portion sizes, was very low. The nutrient intakes showed the women had a higher mean daily energy, protein and vitamin C intake than men, though not at statistically significant levels, but for iron, zinc and vitamin B_{12}, mean daily intake was significantly higher for men than for women. A larger proportion of women than men did not meet 100% of the dietary reference intakes for several micronutrients. The diets of approximately 16% of men and 88% of women did not meet the dietary reference intake for folate (400 µg/day), while for zinc, vitamin B_{12} and Vitamin C, the data also revealed deficiencies in intake, particularly for the women. Correlation analysis showed there was no relationship between biochemical variables and nutrient intake except for serum vitamin B_{12}, which was positively associated with intakes of dietary folate (r=0.252, p=0.002), zinc (r=0.411, p=0.000) and vitamin B_{12} (r=0.607, p=0.00). In addition, serum folate was positively related to intake of dietary vitamin B_{12} only (r=0.217, p=0.001).

CONCLUSIONS

This study is one of few in the last ten years which provide data on biochemical and haematological indices of older black South African citizens. It can be concluded that anaemia, together with deficiencies of folate and vitamin B_{12}, is an important issue facing the elderly studied in this poor peri-urban community. This is particularly so for the women, who have the additional problem of a predominantly unhealthy body mass index. This may imply associated health risks and a resultant economic burden for these low-income elderly females.

RECOMMENDATIONS

More research is needed in this regard in order to provide information upon which to base intervention strategies for this vulnerable section of the population. These findings thus have important implications in the light of the growing role of elderly black South Africans as primary caregivers for their grandchildren in future. Improving the nutritional status of the elderly through appropriate interventions is thus needed to improve physical and cognitive functional ability to care for their grandchildren.
REFERENCE LIST


THE EFFECT OF MENARCHE ONSET ON THE DEVELOPMENT OF EATING DISORDERS AND ITS IMPACT ON CERTAIN HEALTH ASPECTS OF FEMALE ADOLESCENTS – CASE REPORTS

by

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BACKGROUND

Adolescence is accompanied by comprehensive growth and physical development. The result of these body changes is usually an obsession with mass that can become a problem during adolescence. Norms prevalent in a specific society determine the ideal beauty. In Western orientated cultures attractiveness for women is generally associated with a slender figure. As girls mature cognitively they become more aware of the societal pressures to attain the ideal thin body shape. Sometimes adolescents would go to extreme eating behaviour to maintain slender figures. Also, young adolescent girls often are athletes or performers exercising excessively with very limited food intakes aiming for unrealistic weight goals resulting in the dangerous female athlete triad. Young adolescent women with anorexia nervosa (AN), who have amenorrhea and also partake in extreme and strenuous physical activity, can impair bone health.

PURPOSE

The aim of this case report was to describe the link between the onset of menarche as a critical stage in the development of eating disorders in female adolescents and the subsequent negative outcomes on their nutritional health. The worst case scenario is the development of severe eating disorders, but also the harmful permanent effect it may have on general health.

METHOD

An exploratory and descriptive approach was followed regarding the influences on eating behaviour perceived by the female adolescent with AN. An ideographic research strategy was used, following an inductive approach, emphasizing new interpretations and comprehension. A qualitative research style was used aiming to understand and describe the anorexic adolescent’s experience and perception of her inner self. The three women (aged 23...
years) who were used for this case study had been diagnosed during adolescence with AN according to recognized diagnostic criteria: DSM IV. Intentional sampling was used to avoid interference with treatment. These women had completed therapy and could therefore have a better perspective about their disease. Women at that stage have the psychological capacity to express abstract concepts such as self awareness and feelings.

Identifying and selecting suitable candidates was extremely difficult due to sensitive nature and stigmatization linked to the disease. Secrecy is often a characteristic of the disease.

PROCEDURES AND METHODS

Structured in-depth interviewing and personal documentation were used to gather data. These methods served as cross-validation to ensure credibility and reliability. Four different interviews were conducted employing two forms of interviewing techniques. Structured interviewing with a schedule that was used during the first and the fourth interview sessions and in-depth interviews during the second and third sessions. Themes for the interviews were based on the aims of the study and were merely used as guidelines. A relationship based on trust was cultivated with each respondent during the first interview, which contributed to the credibility of the research. The fourth interview took place in a restaurant. This visit served as stimulus for a discussion about a respondent’s choice of food during her illness.

Personal documentation gave the respondent the opportunity to express her views of the world or the situation in which she found herself. At the end of the first session the respondents were asked to write a letter about “Anorexia my friend and anorexia my adversary”. The value of this technique is that the respondents could give free reign to their own thoughts and experiences. These letters served as a source of data, but were also used during the third interview as a stimulus to initiate discussions.

RESULTS

At the onset of menarche they all experienced weight gain which was a normal biological process, but was unacceptable for all of them. In an attempt to escape menarche, they started with dieting practises to lose weight and eventually their menses ceased. Unfortunately it ended with negative effects on their nutritional status, bone density and growth. Their tremendous underweight and low body fat percentage were most probably the cause of their amenorrhea.

Although it seemed as if social feedback from the peer group did not play a significant role in the causation or development of the disease, the social comparison, however, had an appreciable role. They considered themselves as superior because they had better control over their food intake than the peer group. The respondents indicated that the mass media didn’t have an influence on them. However, it could be argued that the mass media as supporter of the “thin” stereotype being the prerequisite for success, and the “idealized figure” as the only norm for success, could have had an indirect effect on them. They didn’t compare themselves with the thin, emaciated female propagated by the media, but it was most probably a norm for the father, sport coach and peer group against which the adolescent could compare her physical self.
Sport was an important aspect in the development / experiencing of the illness. They participated in sport to compensate for eating and to feel in control after being forced to start eating again. Sport can also be applied positively in the treatment of AN using it as a motivator for healthier eating practises. Food had a greater meaning than just being a source of nutrients. They believed that food should be deserved and not consumed at random. Emphasis in the family was apparently put on the importance of a thin body, linked to excellence. They not only wanted the body their fathers (who were very important to them) preferred, but they also sought after the spiritual qualities (perseverance and self-discipline) to show him that they were in control and could make a success of life.

CONCLUSION

Body dissatisfaction due to weight gain, which is part of menarche, could spiral into negative eating patterns which may have serious negative effects on their nutritional status and health. Between the onset of dieting due to body dissatisfaction and the diagnosis of anorexia nervosa there could be a period of several years. During this stage of negative eating, undernutrition could be prevalent which could result in a very low percentage of body fat. It may cause amenorrhea and osteoporosis in later life or even in the adolescence stage. Especially athletes are very vulnerable to low bone density in this critical stage of life.

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AN INVESTIGATION INTO THE KNOWLEDGE AND BELIEFS OF WOMEN IN THE GILGAL AREA
(SWAZILAND) WITH REGARD TO INFANT FEEDING PRACTICES IN THE CONTEXT OF HIV/AIDS

by

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INTRODUCTION

The Human Immune-deficiency Virus/Acquired Immune-deficiency Syndrome (HIV/AIDS) prevalence continues to escalate in Southern African countries, particularly in the population of Swaziland where the rate of HIV infection was found to be 42.6% among pregnant women (Swaziland Ministry of Health and Social Welfare, 2003:1). The incidence of Mother-To-Child-Transmission (MTCT) is increasing and breastfeeding is accountable for about 30-50% (Coutsoudis, 2005; UNICEF, UNAIDS, WHO & UNFPA, 2004). Upon recognition that an HIV infected mother can transmit the virus to the infant, the World Health Assembly developed an infant feeding guideline in the context of HIV. This guideline recommended that breastfeeding be avoided completely by HIV positive mothers (IBFAN, 2002; Lathan & Greiner, 1998). After conducting intensive research on the HIV epidemic the recommendation was discovered to be flawed. The guideline had overlooked that in most African countries exclusive breastfeeding outweighs the risk of not breastfeeding due to poverty, poor living conditions and tropical diseases in these countries. Therefore promoting infant formula feeding to prevent HIV infection in such situations might increase infant morbidity, mortality and malnutrition. Moreover the guideline had overlooked that exclusive breastfeeding carries a lower risk of transmission of HIV from mother to child than mixed feeding. The recommendation was reviewed to recommend the following: when replacement feeding is acceptable, feasible, affordable, sustainable and safe, avoidance of all breastfeeding by HIV infected mothers is recommended. Otherwise, exclusive breastfeeding is recommended during the first six months of life (Ross & Labbok, 2004; WHO, 2003).

Infant feeding practices are influenced by the mother’s level of knowledge and beliefs/attitude regarding each infant feeding method (Ogden, 2000). An investigation of knowledge and attitude would aid in understanding the infant feeding practice adopted by the mother. There is little information available on Knowledge, Attitude and Practices (KAP) on infant feeding in Swaziland. In Swaziland the problem identified was the lack of information on infant feeding practices in the context of HIV/AIDS. There is paucity of information on the level of knowledge of mothers regarding infant feeding practices, and also their beliefs and attitudes related to infant feeding practices and infant feeding decisions in the context of HIV/AIDS.
OBJECTIVE

To describe the knowledge and beliefs of mothers of infants aged 0 – 6 months attending at a clinic in Manzini region regarding infant feeding practices in the context of HIV/AIDS and to investigate the various interrelationships that exist among these three concepts.

DESIGN

This was a cross-sectional, descriptive survey, including a qualitative research technique (focus groups) for support purposes. A stratified (age) and convenience (clinic attendance) sampling technique was used to select the sample from mothers of infants (0-6 months) attending at Gilgal clinic, Swaziland. Data collection methods included an adapted 24-h recall (assess infant feeding practices), questionnaires (assess knowledge and beliefs), and focus group discussions (in-depth data on feeding practices, knowledge and beliefs). Descriptive, inferential and multivariate statistics were used on the quantitative data and content analysis and ethnography on qualitative data.

RESULTS AND DISCUSSION

Breastfeeding is still the norm (94.5%), however, exclusive breastfeeding (11%) is rarely understood and practiced. Focus group data revealed complications as some mothers fed oral rehydration therapy to their babies immediately after birth. The typical feeding pattern involved breastfeeding throughout the day, mostly at breakfast and twice in the afternoon. In addition feeding soft maize meal porridge and infant formula also formed part of the typical pattern. The reasons given for generally feeding soft maize meal porridge and formula because was that breastmilk alone was inadequate to satisfy the baby. This concurs with previous studies that reflect that most mothers mentioned ‘breastmilk was not enough to satisfy the baby’ and that ‘the baby cried’ as part of the major reasons for early introduction complementary food (Kiarie, Richardson, Mbori-Ngacha, Nduati & John-Stewart, 2004; Kruger & Gericke, 2002). Complementary feeding was highly prevalent in mothers with older infants. An average score of 10.5 (70%) was obtained out of the score of fifteen. Rating the level of knowledge, mothers were most knowledgeable on maternal and infant health (82.7%), followed by ways of HIV transmission (76.2%), then general infant feeding practices (71.8%) and least knowledgeable on infant feeding practices by HIV positive mothers (54.8%). The overall high level of knowledge in this study shows that the mothers received information on infant feeding and HIV. A majority of mothers reported the clinic and radio as their major sources of information. Generally knowledge on HIV and infant feeding practices was high and beliefs were negative. The average belief score for all mothers was 6.5 (38%) out of 17 questions. The mothers’ beliefs were most negative on infant feeding by an HIV positive mother (38.5%), followed by beliefs on maternal health (43.6), then general infant feeding (60.1%). Most mothers gave the misconception that an HIV positive mother should not breastfeed. Partners’ and nurses’ advice on infant feeding was most regarded by mothers. Findings from this study coincide with other studies that found that mothers rated the views of fathers as most important in their infant feeding practices (Kong & Lee, 2004; Swanson & Power, 2005). The influence is probably due to fathers being the main decision makers in the families in most African countries. No significant relationship existed between knowledge and beliefs. These findings are not consistent with the basic theory of reasoned and planned behavior positing that knowledge can indirectly influence behavior by influencing attitudes through encouraging a different set of beliefs among individuals. Results from the Gilgal study suggest that knowledge does not always influence attitudes. Attitudes could be influenced by other factors such as social, cultural, economic and physiological factors (Swanson &
Power, 2005; Martens & Kue Young, 1997). However in several feeding groups (predominant breastfeeding, complementary and replacement feeding) the relationship between knowledge and beliefs were significant, but weak and negative, proving the necessity to strengthen the relationship between knowledge and attitudes. No statistical relationship was found for those practicing exclusive breastfeeding.

**CONCLUSIONS**

Beliefs were dominant predictors of behavior compared to knowledge. Knowledge does not warrant positive beliefs/attitudes and appropriate behavior. It is therefore vital to investigate other factors influencing beliefs/attitudes in efforts to improve infant feeding. The KAP approach adopted for the study was successful in identifying gaps that supported the recommendation for the Prevention of Mother-To-Child transfer program focusing on nutritional aspects. The study indicated that attitudes were dominant predictors of behavior rather than knowledge. Therefore it is vital to investigate other factors that influence attitudes in efforts to improve infant feeding.

**REFERENCE LIST**


CONSUMPTION PATTERNS OF VITAMIN A-RICH FOODS OF 10-13 YEAR OLD CHILDREN LIVING IN A RURAL AREA IN VENDA, SOUTH AFRICA.

by

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INTRODUCTION

Vitamin A deficiency (VAD) continues to be a major health problem in developing countries (Faber, Venter & Benade, 2001:1). The South African National Food Consumption Survey (SANFCS, 1999) found that the majority (74%) of South African households live in poverty, with a limited variety of food available in their homes (Labadarios, Steyn, Maunder, Macintyre, Gericke, Swart, Huskisson, Dannhauser, Vorster, Nesamvuni & Nel, 1999:921). Also that one third of children younger than six years had poor/marginal vitamin A status even though an abundance of plant sources rich in β-carotene is available to most households (SAVACG, 1995). Limpopo Province was most affected by vitamin A deficiency (VAD) probably due to either lack of knowledge, care or lower vitamin A activity of pro-vitamin (β-carotene-rich) foods mostly consumed (Louw, 2001:4) (Internet: Nicus: 1999:1; Labadarios et al, 1999:936). Pre-adolescent school children are at greatest risk of VAD due to the impending adolescent growth spurt (Department of Health, 2002:1). In the rural areas of South Africa, people depend on locally produced foods, and only small quantities of vegetables, fruits and animal protein foods are consumed. The rural diet therefore lacks variety and predisposes the children to low micronutrient intakes and higher risk of multiple micronutrient deficiencies (Faber et al, 2001:13; Kruger, Kruger, Vorster, Jooste & Wolmarans, 2005:366).

AIM

To explore and describe the consumption patterns of vitamin A-rich foods of 10-13 year old children living in a rural area in Venda, and consequently making recommendations on nutrition education in this regard.

METHODS

A cross-sectional survey was conducted in Vyeboom Village in Limpopo Province, at Makhado local municipality in the Vhembe District. About 155 school children aged 10-13 years (boys and girls) participated in this study, using convenience (area and schools), random (30 per age group) and stratified (ages) sampling to draw the sample from three primary schools. Methods included an adapted 24-h recall (eating patterns), a non-quantitative food
frequency questionnaire (vitamin A-rich foods), and questionnaires on food habits, availability, and consumption patterns. The SAS statistical analysis (version 8.2) software was used to analyze the data from the questionnaire by means of descriptive statistics (percentages, frequencies, means and summary of the tables). Inferential statistics (two way tables and chi-square tests) were used to test the associations between two categorical variables.

RESULTS AND DISCUSSION

Mothers were the caretakers in the families, because she mostly played a major role in the decision-making, preparation and serving of the food that were consumed by these children. Families got their vegetables and fruit mostly from home gardens and the veldt (cultivated and indigenous sources). Seasonal availability affected children’s intake e.g. guavas (home) - highly available; apples, bananas, oranges (school tuck shop / feeding scheme) - easily and/or cheaply acquired. This agreed with the results of Hendriks & Msaki (2005:2), who indicated that seasonal availability had a strong influence on consumption patterns, especially in seasonal items like peanuts, legumes and vegetables. Molaison et al (2005:248) also indicated that lack of availability (environmental factor) impacted on fruit and vegetable consumption.

Socio-cultural practices influenced the children’s food intake. Family food rules affected consumption patterns of vitamin A, because the foods that were allocated as children’s food were mostly junk foods with poor nutritional value e.g. sweets and Twiggles. This was similar to the results of De Bourdeaudhuij, (1997:49), who confirmed that family food rules could be identified as relevant predictors of adolescents’ eating behavior. Adults’ food, which was forbidden to this age group, was mostly good in nutrients, especially vitamin A-rich items like liver. Children were forced to eat was dark green leafy vegetables, and subsequently most of the children didn’t like vegetables, especially when they had to eat it every day. However, this indicated the positive influences in play when parents forced their children to eat these foods as it led to higher intakes of beta-carotene rich foods. Children mostly believed it was important to eat fruit and vegetables, however without specific reasons. Children had only general nutritional knowledge about the importance of vegetable and fruit intake. Foods and snacks believed to be healthiest were porridge, tea, bread, chicken, dark green leafy vegetables and sweets or Twiggles (maize snacks).

Dark green leafy vegetables played an important role in supplying beta-carotene to these children, while the intake of retinol-rich foods was poor because they are expensive and labeled as highly allergenic, whilst others was forbidden. Intake of fortified foods was very high because maize meal porridge was the staple food and commonly consumed during lunch and supper. The most frequently eaten food sources were: beta-carotene – spinach, avocado pear; retinol – chicken giblets milk; fortified - margarine, maize meal, bread.

The general meal pattern of these children was three meals a day with two, one or no snacks in between meals – two of these meals were consumed at home and one at school in the feeding scheme. Labadarios et al (1999:537) indicated that the main meal pattern for SA children (aged 1-9 years) was primarily three daily meals, with (44%) or without (31%) snacks between meals. The foods forming their diet were mostly starchy foods (maize meal porridge and bread) and vegetables (Chinese cabbage, and cabbage), whereas proteins were gained mainly from chicken. Twiggles, sweets, naartjies and apples were the snacks eaten most often during the mornings (9h00 to 12h00), and afternoons (15h00 to 17h00), and were poor in vitamin A. Stiff maize meal porridge was repeatedly eaten for
breakfast, lunch and supper, with its accompanying items; however, bread with tea was for the most part eaten for breakfast.

Correlations of the results revealed that food habits influenced vitamin A rich-food intakes, especially that of beta-carotene-rich fruit and wild vegetables. Because wild vegetables are easily accessible and mostly prepared as a supplement for porridge, the children ate what had been prepared for that meal. There was no relationship between food habits and retinol foods intake, because family rules favor adults’ intake, especially that of the head of the family, who is allowed to eat liver. However food habits also influenced the intake of fortified foods, because the more children eat starchy foods, the more they are following family rules. When children were forced to eat food, they were eating more meals, but when they were restricted to eating certain foods they also ate more meals, which meant they mostly consumed what was allocated to them as children.

CONCLUSION

There was poor consumption of vegetables and fruit at school compared with home. Seasonal availability influenced cultivated and indigenous food intakes. Generally, children consumed two meals at home and one at school including very little vitamin A-rich foods and unhealthy snacks. Dark green leafy vegetables (spinach and merogo) were both popular and highly consumed beta-carotene vegetables, while encouragement is needed regarding the consumption of yellow-orange vegetables. Also, the cost of both yellow vegetables and retinol-rich foods, contributed to poor intakes. Cultural and family rules dictated children’s food choice and habits. These results were used to compile nutrition education recommendations aimed at school children for improvement of vitamin A-rich food intake by focusing on the different kinds of nutrients found in various fruit and vegetables and their importance in the diet and to health.

REFERENCE LIST


INTRODUCTION

The green leafy vegetable's chief nutritive contribution in the diet is to provide vitamins and minerals. They are particularly important sources of Vitamin C (Ascorbic acid and vitamin A (beta carotene) that are both easily lost through unfavorable post harvest handling conditions such as exposure to air and long storage (Williams, 1995) and (Bennion, 1995). Losses of vitamin A occur during cooking, among others by the formation of carotene isomers with a lower vitamin A activity than β-carotene. According to Gates (1987) Vitamin C is required for the formation of collagen in connective tissues such as bone, cartilage, dentine, collagen, and capillary walls.

Pumpkin leaves are recommended for their rich supply of beta-carotene to prevent vitamin A deficiency which is reported to be a widespread disease in developing countries, particularly among young children (Renqvist et al 1978). In Lesotho, street vendors have to walk long distances to collect green pumpkin leaves for selling in the market stalls. The collected green pumpkin leaves and other vegetables always show signs of wilting and damages by the time they get to the market place. The street vendors usually dip the wilting leafy green vegetables in water or sprinkle them with water to keep them fresh so that they can be sold for several days. Holdsworth (1983) noted that one of the most important changes that occur in green vegetables is the colour and consumers have strong preferences for products that have appearances which appeal to the eye.

The effect of postharvest conditions on the nutritional value of the pumpkin leaves, which are consumed by almost every mosotho, needs to be studied in order to provide the Basotho nation with more information on improved post harvest handling practices.

OBJECTIVES

The study had a dual purpose. Firstly it aimed to determine the stability of Vitamin C and Vitamin A when green vegetables (green pumpkin leaves and kale) are exposed to different post harvest conditions (storage and cooking). Secondly to compare the retention of vitamin C and Vitamin A in two types of green vegetables (green...
pumpkin leaves and kale) under different post harvest conditions.

**RESEARCH METHODOLOGY**

To accomplish the stated objectives green pumpkin leaves (*Cucurbita maxima*) and kale were harvested. The samples were washed thoroughly to remove dirt and foreign bodies. Analysis of vitamin C and β-carotene were done immediately on fresh samples before they were exposed to unfavourable conditions. To maintain freshness the vegetables were sprinkled or dipped in water at intervals for several days, in the process the quality of vegetables in relation to appearance, texture and weight was analyzed. Vegetables were then divided into small bundles and displayed on the tables outside: some exposed to the sun and some placed under the shade for several days as done by street vendors. Vegetables were also cooked for different lengths of time (5, 10, 15 and 20 minutes) using the same method of cooking.

**Total Ascorbic Acid Determination**

Five grams of each sample was crushed in a mortar and pestle with about 2 grams of acid-washed sand and some 10% trichloroacetic acid (TCA) solution, to form a fine paste. The paste was transferred into a beaker. The mixture was thoroughly stirred and then filtered into a 100ml volumetric flask and the filtrate made up to a mark with more TCA solution.

**Determination of Chlorophyll Content**

To extract chlorophyll from pumpkin leaves and kale, 4g of samples were homogenized with about 16 ml of cold 80% acetone in a mortar and pestle in the presence of some acid washed sand. The homogenate was filtered through filter paper and the residue rewarshed with 80% acetone until the filtrate was colourless. The filtrate was brought to 40 ml with 80% acetone. An aliquot of the crude extract was measured at 645 and 663 nm and the total chlorophyll concentration in the crude extract was calculated from absorbance at 645 and 663 nm in 80% acetone by the Arnon's formula (Arnon).

**Determination of β-carotene**

Two grams of the sample was chopped and placed in a mortar with about 10ml of acetone. The sample was ground thoroughly and the extract was transferred to a 100ml volumetric flask. The extraction was continued with subsequent 10ml portions of acetone until the residue was colourless. The combined extract was evaporated to dryness on a rotary evaporator. The residue was then dissolved in about 1-2ml of petroleum ether to ensure that the entire pigment residue is washed from the flask and the solution into a chromatographic column. The β-carotene was eluted with petroleum ether and collected in a flask as a yellow pigment

**FINDINGS AND DISCUSSIONS**

The results revealed that the ascorbic acid content of two different vegetables decreased rapidly with storage time and also with the amount of light. These results are in line with the results obtained by (Faboya, 1990). That is more ascorbic acid was lost on the vegetables which were exposed to the sun (66 -76%) compared to the ones
that were under the shade (43 – 55%). On the other hand Fresh Kale contained higher percentage of both ascorbic acid and beta carotene than pumpkin leaves. Higher percentage losses of ascorbic acid were recorded for both vegetables after 20 minutes cooking time. Mathooko and Imungi (1994), found that the percentage loss of ascorbic acid during cooking increases with cooking time. It was also observed that pumpkin leaves have high retention percentage of ascorbic acid than kale on both wilting treatment and cooking treatment.

CONCLUSIONS AND RECOMMENDATIONS

The results of this study revealed that fresh kale contain more ascorbic acid and beta carotene than pumpkin leaves. The pumpkin leaves have a high retention percentage of both Vitamin C and A than kale under the same post harvest conditions. The storage and cooking time significantly reduced the amount of ascorbic acid in the vegetables. It was recommended that for nutritional purposes green leafy vegetables should be consumed as fresh as possible and the cooking time should be very short.

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FACTORS INFLUENCING WOMEN’S DECISIONS TO PURCHASE SPECIFIC CHILDREN’S MULTI-NUTRIENT SUPPLEMENTS

by

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BACKGROUND

Dietary supplement use is extensive and continues to grow worldwide. Previously available in mainly pharmacies, multivitamin and mineral supplements are now ubiquitous in the marketplace, found in large discount stores, supermarkets, speciality stores and on the Internet. The Third National Health and Nutrition Examination Survey (NHANES III, 1988-1994) found that among two to eleven month old infants, the use of dietary supplements was 28% for boys and 25% for girls. This survey also reported that 42-51% of children one to five years of age and 24-38% of children aged six to 12 years took supplements. Scant statistics for these groups are available in South Africa.

Faced with an extensive array of various children’s multi-nutrient supplements, all with their “unique” properties and formulation, mothers are expected to select one which best meets their children’s needs. Little research has been done to identify the factors women use to select a particular multinutrient supplement for their children.

AIM

To establish which factors influenced women’s decisions most often when selecting children’s multi-nutrient supplements, what choice tactics were used in the decision making process, and what groups women could be classified into according to the factors used to select specific brands.

SETTING

A point-of-purchase survey was conducted among 128 women who were interviewed in large discount pharmacies in three different regions in Gauteng (South Africa), namely Fourways, East Rand mall, and Northgate. Permission to conduct the survey was obtained from the General Manager of the discount store.
SAMPLE

Purposive sampling was used. Women of any age and race, who selected a children’s multinutrient supplement with the intention of purchasing it and who were willing to participate in the survey, were included in the study.

METHODS

A cross-sectional descriptive survey at point of purchase was done in the quantitative research domain. Development of the questionnaire: Initially a mini pre-questionnaire had been developed to determine the use of children’s dietary supplements among mothers of children at a nursery school in Sunninghill, Sandton (Johannesburg); 25 completed questionnaires were returned. The main questionnaire was then compiled to determine factors influencing the decision to purchase children’s multinutrient supplements. This was developed using the responses given in the pre-questionnaires, literature on factors that play a role in consumer choice (Miller et al., 2003), and a questionnaire previously used to determine decision making patterns in women purchasing dietary supplements (Miller et al., 2003). A pilot study had been conducted where after the questionnaire was finalised.

The first section of the questionnaire comprised questions designed to determine factors possibly influencing women’s decisions to purchase the particular products selected. Section two included one question that related to the factor having the greatest influence on subjects’ decisions to purchase particular children’s supplements. The third section included questions relating to the specific children’s multinutrient supplement selected. Section four included questions on the biographics of the subjects. Face validity was controlled for during the pilot study. Content validity was controlled by dieticians with research experience, and a biostatistician from the MRC (SA). There was no external validity due to the small sample size and the sampling technique. Reliability was enhanced by the researcher ensuring that all interviews were conducted in a consistent fashion by the researcher herself; that there was standardization in the use of the questionnaire from one situation or person to the next; and that interviews were conducted at the time products were selected, i.e. when thought processes used in decision making were still fresh in subjects’ minds.

The protocol was approved by the Research Ethics Committee of the Faculty of Health Sciences, University of Pretoria (number S102/2004).

RESULTS

The women who purchased multinutrient supplements for their children were mostly working, white women, between the ages of 34-49 years, and were better educated and more affluent. Subjects were influenced by 12 factors (form, nutrient content, child’s preference, packaging, price, health benefits, advice from others, free from certain ingredients, organic or natural properties, herbal content, advertisements, and promotions). The findings also revealed which of these factors had the greatest influence on the decision to purchase, which form (chewable tablets, liquid/syrup, gums, capsules) was the most popular, which brands were most often selected, and whose advice (friends, family members, pharmacy employees, doctors, dietitians, other health professionals, teachers) was most often used as a choice tactic. Four groups which women could be classified into (quality shopper/information gatherer, bargain shopper, convenience shopper, child-sensitive shopper) were identified.
CONCLUSION

To show competence in the field of children's dietary supplements, nutrition professionals ought to determine which factors play a role in a client’s decision to purchase a particular brand, i.e. free from certain ingredients, etc., and whether their children will take a particular form, e.g. syrup. Once this has been determined, and after having assessed the child’s usual dietary intake, the nutrition professional can identify the most appropriate dietary supplement in a particular supplement delivery category. Since product information is not always read or interpreted correctly, it is important that nutrition professionals effectively communicate information to clients relating to recommended products. The information relayed to a client should be related to what is important to her in a children’s multinutrient supplement. Nutrition professionals should have adequate knowledge and understanding of the content and characteristics of various children’s multinutrient supplements available to the public to effectively advise clients on multinutrient supplements for their children. Consumers can only make informed health care choices when fully informed about the safety, efficacy, and quality of nutritional supplements.

REFERENCE LIST


DEVELOPMENT AND IMPLEMENTATION OF NUTRITION STRATEGIES TO IMPROVE THE APPLICATION OF A FOOD BASED DIETARY GUIDELINE (FBDG) BY CRÈCHE CAREGIVERS TO ENHANCE THE CONSUMPTION OF VITAMIN A RICH FRUITS AND VEGETABLES BY PRESCHOOL CHILDREN IN THE THULAMELA MUNICIPALITY AREA

by

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BACKGROUND AND JUSTIFICATION

A large proportion of the world’s children, particularly those living in developing countries and subsisting on diets that often lack diversity, are affected to some degree by vitamin A deficiency (VAD), which in turn impairs their growth and development. VAD, which is primarily caused by inadequate vitamin A diets, lack of access to a variety of foods, lack of knowledge of optimal dietary practices and high incidence of food insecurity, is the main nutritional problem facing preschool children in South Africa. The nutrient content of meals provided to children at crèches seems to be inadequate, particularly of micronutrients. Implementation of strategies that will increase the consumption of fruits and vegetables will have a major impact on the lives of children, as it will contribute to the combat of diseases and death rate as a result of VAD. Food Based Dietary Guidelines (FBDG) for increased fruit and vegetables consumption should therefore be supported as they can be effective in promoting appropriate diets for preschool children. The FBDG will provide practical advice for choosing optimal diets and indicate dietary modification to address VAD among children. This can be advanced by providing caregivers with knowledge and skills on increasing the broad availability and access to food rich in vitamin A through production and proper utilization.

AIM

To develop and implement nutrition strategies to improve the application of a Food Based Dietary Guideline (FBDG) by crèche caregivers to enhance the consumption of vitamin A rich fruits and vegetables by preschool children in the Thulamela municipality area in the Limpopo Province, South Africa.
METHODOLOGY

A quantitative research paradigm was employed and questionnaires and observation techniques were used to gather data. The study was done in three phases based on the triple A cycle. An initial study of situation assessment and analysis was undertaken where baseline information was gathered. The second phase focused on the development and implementation of nutrition strategies. Training of crèche caregivers by the researcher took place by means of lecturing, discussions demonstrations, and playing a game to improve their knowledge on vitamin A. Caregivers were also trained on how to start a vegetable garden. The third phase was based on evaluation, where caregivers were assessed on how they were implementing the devised strategies after they have been trained. A cross-sectional survey enables the researcher to gather data from a sample of 100 caregivers from 20 crèches who completed both baseline and follow-up questionnaires. Data were gathered on demographics, nutrition information, Availability and access, menu planning and food preparation and storage and preservation. The statistical analysis system was used to analyse data.

PRELIMINARY RESULTS

Data collection followed the triple-A cycle of assessment, analysis and action. Findings of baseline data showed that crèche children have a low intake of vitamin A from fruits and vegetables, confirming VAD as the main nutritional problems in South Africa. Lack of knowledge and information about vitamin A was a major contributory factor coupled by poor availability resulting from lack of production and funds. Preparation, storage and preservation posed moderate challenges to caregivers. Follow-up data which was collected after training the caregivers showed changes in knowledge, access, availability and utilization of fruit and vegetables. This was observed in planned menus and in prepared meals. Improvements in the application of a Food Based Dietary Guideline were evident as more fruits and vegetables were given to children.

CONCLUSION

Meals and snacks given to children at crèches are still not adequate especially those fruit and vegetables rich in vitamin A. This continues to increase the risk of VAD in children. Implementation of nutrition strategies contributed to the quality of meals and possibly to the consumption of vitamin A rich fruit and vegetables by crèche children. Monitoring are however needed to encourage and to ensure that caregivers continue to increase the broad availability and utilization of vitamin A precursors through the application of a Food Based Dietary Guideline.

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INTRODUCTION

The recent increase in the number of black working women has meant that time has become an even more precious commodity in the majority of households with working women than before. Growth in women's participation in the labour market has tended to stimulate the demand for time-saving goods and services, especially convenience foods to cope with time pressure in the preparation of meals. South African working women are moving towards the consumption of convenience foods as they become busier, managing both work and household chores, and also having more disposable income.

AIMS

This study aimed at gathering ideas and insight on the acceptability and use of convenience foods by black working women employed by government in Mpumalanga. It investigated the consumption frequency of convenience foods in four categories, the contributing sensory attributes and the influence of resources, the socio-cultural environment and the occasion or situation on the acceptability and use of convenience foods. Food outlets used by black working women for the purchase of convenience foods were also identified.

METHODOLOGY

In order to respond to the objectives of the study, the convenience foods understudy were classified into the following categories:
Category A: Fully prepared ready to eat convenience foods, i.e. consumed as purchased, and requiring no prior preparation;
Category B: Fully prepared ready to eat convenience foods i.e. requiring only mild heating before consumption;  
Category C: Partially or fully prepared convenience foods i.e. that need additional ingredients e.g. milk or hot/boiling water or salad dressing, which after mixing or cooking are ready to eat; and  
Category D: Partially prepared ready to cook, bake or fry convenience foods i.e. that have been minimally prepared for cooking but still require full cooking of some or all of their components.

To elicit relevant information, a quantitative research design and survey research techniques using structured questionnaires, with open and closed-ended questions were used to gather information. With the literature review and the objectives of the study in mind, 200 working women employed by government at the government Boulevard complex in Nelspruit formed the sample group. The Statistical Package for the Social Sciences Version 9.0.1 (SPSS), a computer statistical data programme, and descriptive and inferential statistics facilitated data analysis.

RESULTS AND DISCUSSION

From the discussion and interpretation of the results of the sample survey it is clear that black working women tend to either use certain types of convenience foods in the four convenience food categories less frequent (not more than twice in a week) or to use certain types of convenience foods, frequently (3 - 4 times in a week or 5 - 6 times and every day of the week). The results show clearly that there are relatively high proportions of working women (more than 56.5% of the respondents) who are low users of almost each type of the convenience foods in the four convenience food categories except for baked products, cereal dishes, fried/grilled/roasted meat, and fully prepared refrigerated salads in category A; meat stews and fully prepared vegetable dishes in category B; breakfast cereals, vegetable salad ingredients, instant soups and instant sauces in category C and cleaned/pealed ready to cook vegetable items, pre-cut frozen vegetables, crumbed frozen fish and crumbed frozen or refrigerated meat portions in category D.

Several major patterns can be seen in the overall results. First, it is apparent that all the variables in the study have important links to convenience food usage, suggesting that decisions about the use of these products is intricately linked to the entire life situation i.e. work and family and circumstances of the working woman. Variables from the demographic information of the working woman such as, her education level, income, money available for food purchasing in a month, marital status, number of children and their ages, number of people preparing meals for, the meal preparation time during the week, weekend and when preparing meals for guests and the availability of time saving equipment and appliances in the household. These variables showed a positive link towards the acceptability and use of certain convenience food products.

Second, the results also reveal some very interesting patterns of correlates of use of certain food items used as examples of convenience food products in the different convenience food categories. The choices and consumption of the convenience foods showed an orientation towards choices of food items based on knowledge of the basic food groups.

Thirdly, it appeared from the study, that the convenience food items that showed a medium and high frequency of use are those that take less time and less skill in their preparation. Women who took part in this survey indicated that they would like to spend only about 30 minutes when preparing meals.
Fourth, it is evident from the results that cultural eating habits still persist amongst the black working women in Mpumalanga as women surveyed made choices of convenience food products that seem to be familiar to them and culturally acceptable.

Finally, the choices of the convenience food items in the different convenience food categories reveal that the convenience foods that are accepted are those that are cheaper, for example, baked products, cereals, vegetables and breakfast cereals. The convenience food items that are less used are mostly those that are more expensive than their raw ingredient counter types. Therefore it can be deduced that the cost of certain convenience food products have an effect on their acceptability and use.

Moreover, the findings confirmed that the sensory attributes, appearance, texture, smell and taste and flavour were considered very important in the acceptability and use of convenience foods. Resources, the socio-cultural environment and occasion or situation were also seen to have had a positive influence on the acceptability and use of convenience foods by the black working women employed by government in Mpumalanga.

The study has contributed to the limited literature on the use of convenience foods by black working women. Moreover, food product developers and retailers will gain insight into the provision of convenience foods relevant to the needs and desires of time pressed consumers.

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SESSION 5C – CONSUMER RELATED TOPICS
THE PATH TO ENVIRONMENTALLY SIGNIFICANT CONSUMER BEHAVIOUR:  
A COMPARISON OF MODELS

by

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INTRODUCTION

Recycling, buying organically grown food as well as opting for products that reduce waste and save energy are just a few examples of behaviour that have been described as proenvironmental (Milfont et al, 2006:745; Oreg & Katz-Gerro, 2006:462), environmentally responsible (Follows & Jobber, 2000:723; Kaplan, 2000:491), environmentally friendly (Minton & Rose, 1997:37) and in some cases, environmentally or ecologically conscious (Lee & Holden, 1999:373; Roberts & Bacon, 1997:79). In using the term environmentally significant behaviour (ESB), Stern (2000:408) explains that it is necessary to discriminate between those actions that have impact (i.e. “…changes the availability of materials or energy from the environment or alters the structure and dynamics of ecosystems or the biosphere itself”) and those undertaken with the intention of making a positive change to the environment. Clarifying impact- and intent-oriented interpretations of ESB from the outset is important as most researchers contributing to this body of work underline the fact that environmental intent does not inexorably lead to behaviour that has environmental impact (Alwitt & Pitts, 1996:49; Follows & Jobber, 2000:723; Minton & Rose, 1997:38; Stern, 2000).

SUPPORTING LITERATURE

Apart from shedding light on the impact- and intent-oriented construal of ESB, Stern (2000:409) also provides a classification of such behaviour. Of particular interest to the body of Consumer research is the category of behaviours termed private-sphere environmentalism. Stern (2000) describes these behaviours in terms of decisions involving the acquisition, use and disposal of household products that are environmentally significant in their impact. Two aspects that are emphasized in this regard is that certain actions (such as the infrequent decisions to purchase major household appliances) have far greater environmental impact than others (Stern & Gardner in Stern, 2000) and, secondly, that various categories of private-sphere behaviours may have different sets of causal variables (Black, Stern & Elworth in Stern, 2000).
The view that some decisions have more significant impact than others is exemplified by the context in which the purchase and use of major household appliances occur. The infrequent decisions to purchase major household appliances have long-term implications due to the expected service life and repetitive use of such durables (Cox et al in Erasmus et al, 2005:92). Depending on the type of appliance, frequency of use and the household in question, service life is expected to extend over a ten to twenty year period (Erasmus, 1993; Erasmus et al, 2002). These so-called “white goods” (Erasmus et al, 2005), impact on the environment via the input of energy and raw materials and the output of waste and pollution (Cooper, 1998). As pointed out by Stern (2000), although the environmental impact of an individual household’s behaviour (in for example opting for an environmentally friendly appliance) may be small, the impact does become significant when many households independently execute the same proenvironmental behaviour and the implications span over an extended period of time.

One would think that proenvironmental behaviour such as the above has become commonplace when considering the extensive verification of a global increase in environmental concern (Bhate, 2001:169; Casimir & Dutilh, 2003:316; Hertwich, 2003:3; Moisander & Pesonen, 2002:329; O’Hara & Stagl, 2002:511; Sanne, 2002:273). Yet, a review of literature also provides ample support for the argument that environmental awareness or concern is associated, but not highly correlated to ESB (Oom Do Valle et al, 2005:365; Alwitt & Pitts, 2001:49; Bhate, 2001:169; Follows & Jobber, 2000:723; Minton & Rose, 1997:38; Roberts & Bacon, 1997: 81; Schlegelmilch et al, 1996:35). Burgess (2003:78) highlights that governments in many parts of the developed world still face the paradox that while the majority of citizens claim to be concerned about environmental issues, they remain deeply reluctant to adapt their everyday lives in support of these issues. This attitude-behaviour gap has been the topic of much debate in recent years and initiated substantial research effort to accurately predict the occurrence of ESB (Alwitt & Pitts, 2001; Follows & Jobber, 2000; Stern, 2000; Vermeir & Verbeke, 2006).

Research on environmental concern and ESB has been categorized into two key focus areas, namely sociodemographic variables and socio-psychological constructs (Dietz et al, 1998; Oreg & Katz-Gerro, 2006). Kinnear et al (1974) concluded three decades ago that demographic characteristics had limited statistical significance in relation to an ecological concern index and most recent evidence still remain largely inconclusive (Bodur & Sarigöllü, 2005:487; Deng et al, 2006:22). Studies focused on social-psychological constructs such as values, attitudes, and beliefs have been more successful in predicting ESB (Barr, 2007; Corral-Verdugo et al, 2006; Mannetti et al, 2004; Oreg & Katz-Gerro, 2006; Oskamp, 2000). Two behavioural theories have dominated in this field: Azjen’s (1991) Theory of Planned Behaviour and on the other hand, Schwartz’s (1977) Norm-Activation Theory of Altruism. Recent efforts have been focused on combining these models as several researchers (Oom Do Valle et al, 2005; Oreg & Katz-Gerro, 2006; Schuler & Cording, 2006; Wall et al, 2007) concluded that an amalgamation of these models could provide more accurate predictions of ESB.

THE CHALLENGE

These models have been tested and applied to a variety of private-sphere behaviours including recycling (Mannetti et al, 2004; Meneses & Palacio, 2005; Oom Do Valle et al, 2005) as well as green consumerism and purchase behaviour (Alwitt & Pitts, 2001; Follows & Jobber, 2000; Tanner et al, 2004; Vermeir & Verbeke, 2006). Even so, various authors (Nordlund & Garvill, 2002; Stern, 2000) have emphasized that various types of ESB may have different causes. As pointed out by Stern (2000) since causal factors may vary greatly across behaviours and...
individuals, each target behaviour should be theorized separately. To date, no evidence could be found of the application of any of the models to the environmentally significant purchase behaviour of major household appliances. Moreover, most databases and models of private-sphere environmentalism represent conditions in industrialized countries and can therefore not unequivocally reflect the status quo in developing and emerging countries (Bodur & Sarigöllü, 2005:487; Hertwich, 2003:282), especially those with unique cultural complexities and contextual circumstances, such as South Africa (Rousseau & Venter, 2001).

PURPOSE OF THE REVIEW AND RECOMMENDATIONS FOR RESEARCH

Considering all of the above, the purpose of this review is to compare various models of ESB, the causal factors included in each and to assess their possible relevance for empirical investigation into consumers' environmentally responsible acquisition of major household appliances in a South Africa context. Stern (2000) emphasizes that to gain a comprehensive understanding of ESB, the actor's point of view need to be taken into account. The lack of an appropriate theoretical framework to interpret environmentally significant buying behaviour from the actor's vantage point within a developing context such as South Africa is considered an important deterrent of initiatives to promote products or services that has positive environmental consequences. With reference to major household appliances, informed, responsible consumer decisions involve knowledge and understanding of product attributes (e.g. production processes and materials used), product performance (e.g. water and energy use) as well as eventual disposal of appliances. Limited findings and theoretical frameworks exist in this regard and nothing has been done to specifically facilitate such consumer decisions in the South African retail environment.

REFERENCE LIST


FACTORS INFLUENCING ADOLESCENTS’ PURCHASING DECISIONS IN BOTSWANA

by

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INTRODUCTION

This paper reports the findings on factors that influence purchasing decisions among adolescents in senior secondary schools in Botswana. The factors explored were product, quality, price, brand name, of a product, good service of the store, advertisement, familiarity with the store, and impressing friends. Demographic variables were gender, class level, and school location. The literature revealed that gender affects consumers’ purchasing decisions. Men and women shop and make purchasing decisions for varied reasons, hence differences on the influences of the factors by gender were determined.

JUSTIFICATION

Adolescents are impulsive by nature. They are brand loyal and conspicuous consumers. These purchasing behaviours expose them to be the most vulnerable group targeted by entrepreneurs. Understanding of differences in factors influencing adolescents purchasing decisions by gender, location of school, and class level will help consumer educators in secondary schools in Botswana and other countries to integrate the recommendations of this study in consumer education programs. This study will add knowledge to the literature.

OBJECTIVES OF THE STUDY

1. To determine factors that influence Botswana adolescents’ purchasing decisions.
2. To determine whether gender, school location, and class level affect adolescents’ purchasing decisions.
3. To provide feedback that could be integrated in consumer education programs by consumer educators in secondary schools and informal consumer education settings in Botswana and other countries.

RESEARCH METHODOLOGY

A questionnaire developed from reviewing other studies and suited to the objectives of the study was used to collect data. It was pilot tested and comments were used to modify the instructions. Responses were on a Likert scale, from strongly agree to strongly disagree and not sure. The questionnaires were administered by the
researcher and assistants during the students' study periods at each of the selected schools during a regular school session. The students were told orally and by cover letter that their participation was voluntary and that their responses would be anonymous.

The population was limited to senior secondary school students, that is, Form IV and V students. Eight classes from each school (four form IV and four form V) were randomly selected to participate in the study. The estimated population was 3,360 and 3,107 students responded. The complete list of 27 senior secondary schools within the country was obtained from the Ministry of Education in Botswana. Fourteen schools were randomly. A letter requesting permission to conduct the study and a list of classes and number of students in each class was obtained from each of the selected school's principals.

FINDINGS AND DISCUSSION

A total of 3,107 questionnaires were received and were all usable. Of those who responded 46% were male and 51.2% were female students and the majority (66.9%) were in rural schools. The number of students in Form IV and V classes was almost equal, (49.0% and 48.3% respectively. There were 19 rural and eight urban schools hence there were more female students than males.

Overall, more than two-thirds of the students' reported that their purchasing decisions were influenced by quality and price of products (M = 1.29 and 1.54) respectively and good service of store (M =1.98). Most of the students (87.8%) disagreed that their purchasing decisions were influenced by impressing friends (M = 3.46). The researcher assumed that adolescents purchasing decisions would be highly influenced by brand name of a product, advertisements, and impressing peers as revealed in the literature (Lachance, 2003). This was not found to be the case with Botswana adolescents.

T-tests were computed to determine differences in the level of agreement on each of the factors that influence adolescents’ purchasing decisions by gender, class level, and school location. Overall, female’s purchasing decisions were more likely to be influenced by service of the store (p = .000), quality of product (p = .003) and price of product (p = .004). Females’ agreement was higher than males. A statistical significant difference was also found in the level of disagreement for impressing friends (p = .000). The practical differences in the level of agreement and disagreement between female and male students were trivial because each of the four statistical significant differences produced effect sizes of d = 0.16, 0.09, 0.11, and 0.18, respectively, – all considered small Cohen, 1988, as cited in (Huck, 2004). Form V students were more likely to be influenced by quality of a product than were Form IV students (p = .018). Since the survey was conducted in July/August and the school year begins in January, it is likely that the Form IVs were the majority of students who reported that they did not complete a consumer education class.

Overall purchasing decisions for students in urban schools were more likely to be influenced by familiarity with the store (p = .001), brand name of a product (p = .007), and good service of the store (p = .031) than were those in rural schools. It could be concluded that the differences might be due to market structures. In urban areas there are a variety of shops as well as goods and services to choose from while in rural areas, in most cases, there is only one shop in a location leaving the consumer with no choice but to buy what is offered at that particular shop.
CONCLUSION

Gender affects purchasing decisions to a certain extent. Overall females’ purchasing decisions were more likely to be influenced by service of the store, quality, and price of a product than were males and less likely to be influenced by impressing friends than were males.

RECOMMENDATIONS

1. Consumer education teachers in secondary schools should in their consumer education programs, integrate factors that influence consumers’ purchasing decisions.
2. As consumer education continues in Botswana secondary schools, consumer purchasing decisions of subsequent cohorts should be studied to determine best practices and consumer literacy.

REFERENCE LIST


CONSUMERS’ PERCEPTION OF THE FUNCTIONAL AND SYMBOLIC PERFORMANCE FAILURE OF MAJOR ELECTRICAL HOUSEHOLD APPLIANCES

by

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INTRODUCTION AND JUSTIFICATION FOR THE RESEARCH

Previous research confirmed that consumers buy major electrical household appliances not only for functional but also for symbolic purposes (Donoghue and Erasmus, 1999). Functional performance relates to the physical functioning of the products, i.e. the ability of the product to perform its functional, utilitarian or physical purposes. For example, proper product performance is vital to the evaluation of a dishwasher or any other major electrical household appliance. Depending on the type of product, functional performance refers inter alia to durability, ease of use, ease of care and physical performance (how well the product does what it is supposed to do). Conversely, a product’s symbolic performance relates to a “psychological level of performance”, such as what the product “does for”, or symbolises to, the consumer – something that does not pertain to the direct properties of the physical product, but are derived from the consumer’s response to the physical product (Swan & Combs, 1976:26; Abraham-Murali & Littrell, 1995; Brown & Rice, 1998:38-39; Erasmus & Donoghue, 1998; Hawkins et al., 2001:641; Erasmus et al., 2005). For example, major electrical household appliances may fulfil the consumer’s emotional needs such as impressing others and winning admiration from those invited into their homes (Donoghue & Erasmus, 1999). Whereas evidence from the literature hints that for some products, determinant attributes may involve primarily functional performance, both symbolic and functional performance dimensions may be features for other products (Swan & Combs, 1976; Hawkins et al., 2001:641). The question arises whether the functional or the symbolic product performance dimension is more significant to consumers as they evaluate the performance of their major electrical household appliances.

Before purchasing and using major electrical household appliances, consumers form expectations regarding the functional and symbolic performance dimensions of such appliances in a particular use situation. Whether a particular item was purchased because of its presumed superior functional performance or for some other reason, consumers have some level of expected performance in mind, ranging from quite low to quite high, that it should
provide (Hawkins et al., 2001:639). Expectations in this context are therefore defined as beliefs or predictions about a product’s expected performance, and reflect “anticipated performance” or “what performance will (probably) be” (Laufer, 2002). After or while using an appliance item, consumers evaluate its perceived performance in terms of their initial expectations for product performance. When the appliance’s performance does not meet the consumer’s expectations (i.e. when a performance failure occurs or when the product performs poorly), negative disconfirmation occurs, leading to feelings of dissatisfaction.

**OBJECTIVES**

The purpose of this study was to explore and describe consumers’ perception of the performance failure of selected major electrical household appliances. The expectancy disconfirmation paradigm (Bearden & Teel, 1983) served as theoretical background to this study. In the confirmation/disconfirmation paradigm, post-consumption consumer satisfaction/dissatisfaction (CS/CD) can theoretically be described as the consumer’s response to the evaluation of the perceived discrepancy between prior expectations (or some other norm of performance) and the actual performance of the product as perceived after its consumption (Day, 1984). Differently stated, consumer satisfaction/dissatisfaction (CS/CD) is conceptualised as a positive/negative feeling (emotion), in response to, or following, a specific consumption experience (Woodruff et al., 1983; Day, 1984; Blodgett & Granbois, 1992; Erasmus & Donoghue, 1998; Brijball, 2000).

**RESEARCH METHODOLOGY**

A convenience sampling technique was employed. Respondents had to use their own appliances to have gained such experience, since their evaluation of the actual performance of household appliances would take longer compared to the evaluation of perishable products. Additionally, consumers had to be older than 25 years of age, had to belong to the Living Standards Measure (LSM) groups 5 to 10, and had to reside in the greater Pretoria area. Fieldworkers delivered self-administered questionnaires by hand to individual respondents after ascertaining whether the respondents complied with the criteria set for inclusion in the study. The respondents were pre-screened, and only those who had experienced dissatisfaction with a major electrical household appliance item within the prior four years, were included in this study. A total of 216 questionnaires were collected. Respondents had to select an appliance item from a list of appliances provided, that had caused them the most dissatisfaction within the last four years. Respondents had to indicate the type of product failure (i.e. what went wrong) in an open-ended question. Additionally, a Likert-type scale, with ten items (statements) (inferred from the exploratory research) concerning the functional and symbolic performance of major electrical household appliances, was used to determine the type of performance failure (functional or symbolic) that caused the dissatisfaction.

**FINDINGS AND DISCUSSION**

The results of the exploratory factor analysis show that respondents did not differentiate between the functional and symbolic performance failures of appliances. Therefore, from a theoretical point of view, consumers’ dissatisfaction with their appliances is determined by a combination of functional as well as symbolic performance results. Marketing analysts, manufacturers and retailers should keep in mind the fact that consumers do not differentiate between the functional and the symbolic performance dimensions of product performance when evaluating the actual performance of appliances. This has implications for the effective handling of complaints.
handling personnel should see complaints through the eyes of customers (i.e. as a combination of functional and symbolic performance failures) to improve their understanding of the customers' dissatisfaction. Significantly more respondents were very dissatisfied to extremely dissatisfied (76.28%) with the performance of their major electrical household appliances, compared to the respondents who were slightly to moderately dissatisfied (23.72%).

RECOMMENDATIONS

It would be worthwhile to investigate the association between demographic variables (i.e. gender, age, level of education, household monthly income and culture) and the functional/symbolic performance failure of major electrical household appliances to explain the role of consumers’ demographics in their interpretation (evaluation) of functional and symbolic product performance failures. Future research on the disparities between the different gender groups and the different cultural groupings concerning consumers’ interpretation of product failures (i.e. cognition) and their dissatisfaction (i.e. emotion), can improve manufacturers’, retailers’ and consumer organisations’ comprehension of consumers’ complaint behaviour. Hence, it is recommended that conceptions of attribution theory be integrated (aligned) with the expectancy disconfirmation paradigm to develop a theoretical basis for studying consumers’ complaint behaviour concerning appliance performance failures.

REFERENCE LIST


INTRODUCTION AND JUSTIFICATION

Significant differences between the perception and practical implementation of the dimensions of Service Quality (SQ) between developed and developing countries imply that different countries should guard against a standardized marketing approach. Extant research unfortunately largely reflects on scenarios in first world circumstances and generally emphasize only selected aspects of customer service, such as price. Research on the sales of household appliances that represent a category of complex, durable and expensive merchandise is equally limited despite the distribution of sophisticated household technology to all corners of the globe, even where consumers not necessarily possess the product knowledge or experience to conclude informed buyer decisions. In South Africa, major department stores have to deal with third world elements as well as characteristics of a sophisticated first world environment. An understanding of consumers’ interpretation of SQ in this context will provide guidelines to augment the service offering so that the seemingly paradoxical situation where the supply of merchandise and consumers’ ability to make informed product judgments, could be addressed appropriately.

CONCEPTUAL BACKGROUND

SQ is determined by the evidence, reliability, responsiveness, assurance and empathy of the actual shopping experience, which occurs in interaction with customers. It is judged by a consumer during a buying encounter as well as part of the post purchase evaluation of the service. Because of the intangibility, heterogeneity and the inseparability of the various elements of customer service, SQ is difficult to evaluate. Parasaruman and co workers’ Service Quality Model (SERVQUAL) is based on the comparison of perceived performance with expected performance, based on the disconfirmation paradigm. Dabholkar and co workers (1996) later proposed an adapted SERVQUAL scale for use in retail settings where a mix of merchandise and services are offered. This model proposes a hierarchical factor structure with five dimensions that are central to SQ, i.e.: Physical aspects, Reliability, Personal interaction, Problem solving and Policy. Consumers in developed countries are apparently satisfied with SQ when the service offering extends benefits beyond the functional. Consumers in developing
countries, however, due to personality factors that are shaped by culture related characteristics and philosophy of life tend to focus on core benefits, i.e. functional aspects of the service.

OBJECTIVES

Customers’ judgment of the SQ of appliance sales departments was related to the gender, age, years of experience of respondents as well as difficulty experienced with the buying encounter. The outcome was explained in terms of their product knowledge.

METHODOLOGY

A survey was done in 2007. A pre tested structured questionnaire was used: 20 branches of five prominent department stores in Gauteng, RSA, were involved through liaison with industry. Questionnaires were filled in on the spot under supervision. Three sections of the questionnaire are relevant for this report. (1) An adapted version of the Dabholkar SQ scale (Dabholkar et al., 1996); (2) A product knowledge test (3) Demographic information.

Only 296 of the 331 completed questionnaires [201 female and 93 respondents (missing: n=2)] were useful for further analysis. In terms of age, 47 respondents were between 17 and 25 years; 75 were 26 to 35 years; 100 were 36 years and older. In terms of their experience of managing a household, 35 respondents had 0 to 2 years' experience; 70 had 3 to 8 years'; 80 had 9 to 15 years'; 62 had 16 to 25 years' and 46 indicated 26 years’ and more experience.

The wording of the Dabholkar SQ scale was adapted for the context of an appliance sales retail setting. Factor analysis was done to ascertain the reliability of the scale. The five dimensional scale collapsed into two distinct dimensions (labeled Supportiveness and Excellence) and represented by 13 and 12 attributes respectively. The simpler two-dimensional scale suggests a less intricate evaluation of SQ in the context of this research.

Considering a maximum possible mean of 5.0, calculated means for the newly identified dimensions of SQ (Dimension 1: 3.88; Dimension 2; 4.08) suggest an above average positive judgment of both. This indicates that the service offerings coincide with respondents’ expectations or that their expectations are not very high, which concurs with the view of Malholtra et al. (1994), namely that SQ is judged differently in developed and developing countries and that consumers in developing countries are more tolerant of ineffectiveness, have lower expectations and will probably be satisfied if the core benefits of the service offering is satisfactory.

ANOVA indicated no significant difference in the interpretation of either of the dimensions of SQ by gender, neither did years of experience or respondents’ experience of the difficulty to conclude a buyer decision have a significant influence on respondents' judgment of dimension 1: Supportiveness. The same applied for dimension 2: Excellence, except for respondents who considered it easy to conclude the buyer decision: they were significantly more impressed with the Excellence dimension of SQ. Non-effect of increased experience may be explained within a lower expectations framework.
Mean scores for the knowledge tests were low considering a maximum possible score of 10: scores ranged from 3.29 (dishwashers) to 5.46 (microwave ovens). This indicates that consumers’ knowledge will not support an informed buyer decision, despite high means calculated for the judgment of both dimensions of SQ.

In the interest of informed and responsible buyer behaviour that has consequences for proper use and maintenance of appliances within an expected service life of ten years and more, retail stores that serve a broad customer base should attend to in store assistance to their customers during the pre-purchase phase, despite positive SQ judgments. Non-formal consumer education is required to encourage evaluative rational product judgment based on attributes that would address households’ needs, requirements and preferences on the long term.

In a context where less sophisticated consumers are involved, it might be useful to divert the focus to tangible aspects of customer service, i.e. their judgment of the visible presence and conduct of personnel; the physical environment in terms of store display, product range; availability of product information in written format, etcetera. This might provide clear guidelines in terms of how to augment the service offering.

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THE EFFECT OF PERIOD OF STORE CARD OWNERSHIP ON CONSUMERS’ BUYER BEHAVIOUR AND SATISFACTION WITH THE FACILITY

by

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INTRODUCTION

Extant research indicates that the use of credit, including bank credit cards and store cards, is fast becoming the predominant payment system at point of sale (POS) worldwide. This has unfortunately also resulted in increased debt, which could have major consequences for households and countries’ economies. Some suggest that certain forms of credit, especially store cards, are approved too easily and that consumers tend to misuse these facilities to their own detriment. This research arose from the notion that less experienced consumers, for example those in African countries where major shopping malls and related facilities have been introduced only in recent years, could fall prey to the misuse of these generously issued facilities.

LITERATURE REVIEW

A store card account represents a convenient open-ended transactional medium that charges no annual fees and provides interest free pre-approved credit (Portrait Report, 2004) that can be paid in more affordable monthly installments (Lee & Kwon, 2002). Store cardholders enjoy additional benefits e.g. discounts that may appear more rewarding than the credit facility itself (Benavent et al., 2004). Most store cards provide access to consolidated stores where customers might have been hesitant to apply for credit in the first place (Holbrook & Hirschman, 1985 in Holt, 1995). Because store cards are issued to consumers over the whole socio economic spectrum, they pose no social threat at point of sale (Shallat, 2006).

Research however indicates that store cards encourage lavish spending and consequently contribute to an increase in debt (Evans & Schmalensee, 2005). Store cardholders admit that they spend larger amounts per shopping trip because the facility diminishes financial limitations amidst increased desirability (Hirschman, 2001).

Consumers’ satisfaction with store cards can apparently not be deduced from the number of store cards owned, frequency of use or ongoing use of the facility because many store cardholders simply cannot afford to settle their accounts and therefore continue using them (Shallat, 2006).
METHODOLOGY

The retrospective judgment of two divergent groups of store-cardholders was compared in terms of their buyer behaviour, their management of credit limits and consequent satisfaction with store-cards. The research is exploratory and descriptive in kind and the data set is cross-sectional. A structured questionnaire was used and data was collected during August 2006 from 100 respondents in Gabarone and Francistown in Botswana (sample B) where store cards were introduced after 1995 when large shopping malls were erected as part of the “African Renaissance” project. This sample was selected as a less experienced group of store cardholders. Respondents were recruited with the permission of store managers by one of the researchers when they exited selected stores. Questionnaires were completed in interview format to compensate for respondents’ inexperience with the procedure. The more experienced sample (n=167) was recruited in South Africa in Gauteng where store cards have been in use for decades (sample RSA). Convenient sampling was used and questionnaires were distributed to the homes of respondents in selected suburbs on a drop-down-collect-later basis because store managers in large shopping centers were reluctant to approve data collection in the centers.

RESULTS

Noticeable differences between the two sample groups are related mainly to their respective credit status and their ability to honour payments over time. More than 80% of the less experienced sample was “heavy revolvers”, or cardholders who had to revert to the more expensive payment option, including interest, over a longer period because they were struggling to cope with increased instalments. Although the majority of both groups admitted that the increase in their instalments was mainly the result of impulsive buying, the more experienced respondents apparently did not experience this as intimidating or problematic and the majority still benefited from the interest-free, or six-month-interest-free payment option.

Both samples were satisfied with store cards and indicated that they would not hesitate to adopt the facility again. Both sample groups agreed that they would recommend store cards as a payment facility because of their convenience, the interest-free credit and their usefulness in emergency situations. Results showed that consumers find it difficult to quit using store cards. The rapid re-use of the facility after the settlement of accounts supports the notion that self-control over spending is effortful and requires a cardholder to adhere to a set of well-defined rules to curb expenditure. An upward trend in monthly payments for both samples, and agreement about impulsive buying and poor planning as the main reasons for continual increases in instalments, confirm an almost inevitable outcome for store-card holders.

CONCLUSION

Despite evidence of increasing debt and problems to maintain store card accounts, both samples willingly recommended store cards as a utility. Within a system’s perspective (Spears & Gregoire, 2003), it can be explained that respondents’ satisfaction with store cards culminates as an evaluation of all of the attributes of the commodity. Financial problems and a negative evaluation of additional benefits are thus probably negated by the positive attributes of store cards. A positive evaluation of store cards by both samples and the number of store cards possessed by the more experienced sample suggest that store cards have come to stay as part of an anticipated
future “cashless society”. Of particular concern however, is the inclination of less experienced store cardholders to overspend and the percentage of them that was “heavy revolvers” (i.e. cardholders who extend the payment option to the maximum) who had to face the burden of interest. Store cards should thus be issued with greater caution and credit limits should be monitored regularly to prevent misuse of the facility. Less experienced consumers apparently tend to use a credit limit as an indication of trust in their ability to afford related instalments, and spend accordingly.

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POSTER SESSION
A PROPOSED CLASSIFICATION SYSTEM FOR SOUTH AFRICAN POTATO CULTIVARS TO GUIDE CONSUMERS

by

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BACKGROUND AND JUSTIFICATION

The potato (solanum tuberosum) is one of the world’s major agricultural crops, consumed by people around the world on a daily basis. Numerous cultivars are available world-wide and more are added continuously. South Africa annually produces approximately 1 716 453 tons of potatoes (in 2005). The major producing provinces in South Africa are the Free State, Limpopo, Western Cape and Mpumalanga (Potato South Africa (2005) in NAMC Research Report 2007). Potatoes are regarded as one of the most popular vegetable crops in South Africa. There are currently approximately 21 cultivars available in South Africa (Potato South Africa). These potato cultivars are produced throughout the year in South Africa in various regions with different climatic conditions. Mealiness and waxiness are descriptors used to categorise potatoes

Cultivation methods (e.g. soil, climate, irrigation, fertilization) differ amongst countries and even within regions of a country. This contributes to differences in quality attributes observed in cultivars grown in different regions of the world. The eating quality (such as texture, appearance and other sensory attributes) of potatoes grown in South Africa differs from the eating quality of potatoes produced in any other part of the world. Each South African cultivar is assumed to have specific characteristics with regard to appearance, size, shape, cooking- and eating qualities in comparison to other cultivars from the same region (Redmond, et al., 2003:86). As a result of varying growing conditions due to climatic and soil conditions in the various regions, certain cultivars are only available from certain regions.

Each cultivar thus has different culinary applications. It is important for the consumer to know what the culinary applications of a particular cultivar are to consequently be able to make an informed decision. As potatoes are one of our significant vegetable products and considering the large volumes consumed, the need exists for a guide to assist the consumer in the decision-making process to be able to choose the most suitable potato cultivar for the
intended use. In a number of countries abroad such as Australia, Britain, Denmark and Norway, guidelines to assist the consumer have already been formulated. Unfortunately there is no scientific information available to serve as guide to the South African consumer with regard to the cultivar selected and the most suitable culinary applications for each cultivar. Therefore the need exist to determine the eating quality of South African potato cultivars in order to compile a classification system. Such a classification system or guide would not only benefit the Potato Industry but the South African consumer as well.

**AIM**

The aim of the study was to develop a classification system for South African potato cultivars to guide the consumer in choosing the right cultivar for its intended use, using eating quality as determinant of the classification system.

**METHODS**

To reach this goal of a South African classification system for potatoes, the first step was to compile a ‘databank’ with relevant information on the different quality attributes (including both sensory and physical attributes) regarding each of these cultivars cultivated in the various potato growing regions of South Africa. This study was the second in a series to determine and describe the eating quality of potato cultivars from a specific South African production region in order to compile the databank.

A quantitative research approach was employed and involved the phenomena of ‘cause and effect’ and the research design can be described as experimental (Walliman, 2005:118).

The eating quality of potatoes is determined by two broad categories of attributes, namely the physical and sensory attributes. Physical attributes are those attributes that deal with the structure of the potato (dry matter and specific gravity) as well as the chemical composition of the potato (i.e. the starch composition). The physical and chemical compositions contribute to the overall quality and sensory acceptance of potatoes (Charley, 1982:20, 21).

Sensory attributes are the attributes appearance, aroma, texture, flavour, after-taste and colour that contribute to the characteristics of food. Eating quality is mainly determined by texture, flavour and colour (Chiavaro et al., 2005:1) and are the fundamental sensory attributes in consumer quality and acceptance evaluations of potato cultivars. Consumers commonly base purchasing decisions of a potato cultivar mainly on the desired textural qualities (McCormber, Homer, Chamberlin, & Cox., 1994:2433). Consumer preference of potatoes is thus influenced by a combination of flavour, texture and appearance qualities (Canet, Alvarez, Fernández, & Tortosa, 2005:481).

The eating quality of seven potato cultivars from one particular production region was determined and described through descriptive sensory evaluation methods. The classification of the different cultivars’ eating quality was based on the ratings of the different sensory attributes. A trained panel consisting out of ten (10) members evaluated the potato samples according to standardised descriptive sensory evaluation methods as described in the Annual Book of the American Society for Testing and Materials Standards (ASTM, 1989).
DATA ANALYSIS

Descriptive statistics were used to quantify and describe the physical and sensory attributes of the seven potato cultivars. The physical and sensory data collected were statistically analysed with Analysis of Variance (ANOVA), multivariate- and correlation analysis and principal component analysis.

DEVELOPMENT OF THE CONSUMER GUIDE

Results from both the sensory and physical attributes were used to compile a proposed South African consumer guide for potato cultivars. The guide focuses on informing and educating the consumer with regard to the different cultivars and their appropriate cooking method(s). Pictures are used to indicate the appropriate cooking methods for each of the different potato cultivars.

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FACTORS THAT CONTRIBUTE TO PREGNANCY AND TEENAGE SCHOOL DROP-OUT AT KUTAMA SECONDARY SCHOOL, SOUTH AFRICA

by

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INTRODUCTION AND JUSTIFICATION FOR RESEARCH

Every year many unmarried women aged 19 years or younger unintentionally become pregnant. South Africa has a high rate of teenage pregnancies. These have resulted in an upsurge of sexually transmitted diseases and unplanned and unwanted pregnancies among adolescents too young to assume the psychological and physical burden of parenthood. South Africa has value systems that are not uniform and the health care setting isn’t always perceived as receptive or conducive to those seeking help, especially teenagers.

Poverty, low levels of education, lack of parental guidance, peer pressure, availability of child grants, lack of birth control information, the breakdown of traditional parental and community structures, and unemployment are some of the major reasons contributing to high teenage pregnancies. Clearly this information indicates that there are numerous factors that need to be taken into account when addressing issues of sexuality and pregnancy in adolescents.

OBJECTIVE

The aim of this study was to explore factors that contribute to pregnancy and teenage school drop out.

RESEARCH METHODOLOGY

The study was conducted at Kutama Secondary School in Mudulini Village, in the Limpopo Province. The study sample was made up of teenage mothers aged 13-19 years from grade 8-12. In each grade, four teenage mothers who have children were selected resulting in a total sample of 16. Twenty teachers teaching these grades from the same school were also interviewed. Two questionnaires were used to collect data from the teenage mothers and teachers in face to face interviews. The questionnaires collected the following data: biographic data; factors contributing to teenage pregnancy; how having a child has affected the lives of the teenage mothers; type of support received from parent/community/school; and suggestions on the type of support that parent/community/school can offer teenage mothers.
FINDINGS

Teenage mothers experience shame and blame from other people, and are often afraid to admit that they are pregnant; many of them keep away from the doctor, clinic or antenatal class until the pregnancy is advanced. Teenage mothers also find parenting difficult and are less able to meet the emotional needs of a baby and less willing to accept parental responsibility.

The findings revealed that the factors that contribute to high teenage pregnancy are lack of parental guidance (especially where teenagers were not living with their parents); peer pressure which forced teenagers to engage in sexual activities; poverty; child-grants (teenagers use these as a source of income); lack of birth-control knowledge; and ignorance on sexual matters. Pregnancy negatively affected teenage mothers as they were unhappy; had no time to study; performed poorly at school; and were eventually forced to drop out of school.

DISCUSSION

Pregnancy is just one of many factors that might disrupt a young girl's education. When a girl leaves school early, her career opportunities is limited and she may fail to establish her independence. It appears that at least half of South African girls that fall pregnant hope to return to school. Studies done have revealed that most pregnant teenagers had already given up on school before they became pregnant.

The study findings reveal that there are many factors which contribute to the high rate of teenage pregnancies. The limited fragmented involvement of parents, schools, health services and community members in teenagers’ sexual guidance seems to be the main contributing factors to teenage pregnancies. Provision of knowledge, support structures, skills and information to schools and all stakeholders by the Department of Education can provide a forum for a sustainable alternative to the management of teenage pregnancy.

RECOMMENDATION

The veil of secrecy associated with teenage pregnancy prevents both the family and health services from providing a secure and trusting environment that promotes open communication. Both Parents and health services may require training to enable them to have capacity of creating an environment conducive to communication with teenagers.

All mothers need emotional, physical, financial and parenting support. Support programmes need to look closely at the factors which tend to isolate young mothers and how these can be overcome.

The findings underscore the need for an integrated approach to preventing teenage pregnancy in schools. Programmes need to include the provision of recreational facilities, sex education and the involvement of parents and community based structures in guidance of teenagers on sexual matters. The involvement of teenagers in income generating activities to overcome poverty and as part of the life-skills school programmes can provide the much needed income for the teenagers.
REFERENCE LIST


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INFANT FEEDING AND CHILDCARE PRACTICES OF YOUNG MOTHERS IN TSHILATA VILLAGE, VUWANl, IN THE LIMPOPO PROVINCE, SOUTH AFRICA

by

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INTRODUCTION AND JUSTIFICATION FOR RESEARCH

Teenage pregnancy is extremely common in South Africa. Sexual activity puts teenagers at risk of HIV. Currently some pregnant teenagers are also infected with the HIV virus. The major problem related to teenage pregnancy and parenthood is the impact it has on the mothers’ education and economic status. Young mothers are often deprived of education that would have helped them to qualify for better jobs, thus leading to better means of looking after themselves and their children.

OBJECTIVE

The aim of this study was to investigate child feeding and child care practices of young mothers.

RESEARCH METHODOLOGY

The study was conducted at Tshilata village, Vuwani, in the Limpopo Province, South Africa. The study sample was made up of 20 teenage mothers aged 16-19 years with children between the ages of 6 months and 3 years. A questionnaire was used to collect the following data in face to face interviews from the young mothers: biographic data, source of childcare and child feeding practices before and after delivery; breast feeding practices; childcare and weaning practices, type of support received with childcare; and suggestions for the type of support needed by the young mothers.

FINDINGS

The findings revealed that the young mothers were taught nutrition and child-care by the nurse and relatives before and after the birth of the child. All young mothers were unmarried, unemployed, had dropped out of school and were staying with their mothers. Children were taken to the clinic once a month. Sixty percent of the children were introduced to solid foods before the age of 6 months on the advice of the mothers of young mothers. All the young mothers breastfed their children. A 24 hour food recall revealed that there was lack of variety in the food given to
the infants and that only 30% included meat/meat products and only 50% included fruits and vegetables in the children’s diet.

DISCUSSION

The study findings have shown that some child feeding and child care practices advised by the nurses and relatives were incorrect and that there is a need to provide correct nutrition and child care practices at the clinics and within the communities. At the moment there seems to be a gap in nutrition education taught by the nurses to pregnant mothers and mothers of infants attending the clinic. As a result many mothers do not breastfeed for longer periods; introduce solids early; do not feed children a variety of food from the different food groups; follow a low feeding frequency; and lack knowledge on types of foods that are good for infants and young children.

The main problem facing young mothers is lack of employment, possibly as a result of low education levels and lack of skills. Fifty-five percent (55%) of the young mothers suggested that the government should create jobs so that they can earn an income. These findings reveal that mothers prefer broader, long term and sustainable programmes that can offer security in the form of skills, employment and income to meet both their immediate and long term needs.

RECOMMENDATIONS

The implication of these findings is that there is a need to provide continuous training in nutrition to nursing and health staff. After weaning onto a variety of food, parents must encourage children to eat a variety of foods (as snacks or part of the main meal) from each of the following food groups every day, fruit and vegetables, starchy foods/cereals, milk and dairy foods, meat/fish/legumes.

Nutrition Intervention Programmes that are offered need to be broader in nature to meet people's needs and this can be achieved if various disciplines are included at programme delivery level. The introduction of skills training programmes by the Departments of Labour, Social Welfare and other grassroots organization can help in improving young mothers’ employability in both the formal and informal sectors. The government must also increase the number of people from within the community trained as health/nutrition workers to assist the clinic in the delivery of nutrition and health education programmes in the community.

REFERENCE LIST

A QUALITATIVE INVESTIGATION INTO STUDENT CONSUMERS’ DECISION-MAKING PROCESS REGARDING FOOD PRODUCTS CONTAINING LIMITED LABEL INFORMATION

by

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INTRODUCTION

Consumers’ decision-making process is influenced while purchasing products, because they find the understanding and interpretation of nutritional information on food labels difficult (Baltas, 2001:712). Many young consumers develop their own individual food preference behaviour, but this individualism may have an effect on their decisions about what, when and where they eat (Brown et al., 2000:230).

Limited label information products (LLIP) as an influence on the consumers’ decision-making process have not received sufficient attention in the past. For the purpose of this study LLIP can be defined as a product label with a limited amount of product, brand, ingredient, nutritional and manufacturing information on the food label. Different categories of LLIP were identified and consisted out of product labels containing product name and price, product name and ingredients, brand name and product name, brand name or product name and ingredients.

AIM AND OBJECTIVES

The aim of this study was to investigate student consumers’ decision-making process regarding food products containing limited label information. To achieve this aim the following objectives were formulated: Firstly, to determine the importance of label information to student consumers. Secondly, to determine the student consumers’ decision-making process regarding LLIP. Lastly, to propose a model of the decision-making process, of student consumers when confronted with LLIP.

METHODOLOGY

Qualitative, exploratory and descriptive research approaches were applied to this study. The study population consisted of undergraduate male and female students from the North-West University, Potchefstroom Campus,
using the student cafeteria at least once a day for their food purchases. Purposive sampling was used to recruit the student consumers as participants. The students were observed and participants identified that entered the cafeteria, browsed through the products and paid attention to product labels and the packaging of food products.

One-on-one semi-structured interviews using open-ended questions as well as a vignette scenario were used as data-collection methods. Students were questioned on their decision-making process when purchasing LLIP from the cafeteria. The questions were pre-tested for suitability prior to the main study by means of a pilot study. A total of 52 participants were interviewed (including 31 semi-structured interviews and 21 vignette scenarios) until data were saturated.

Some of the participants were given a vignette scenario on LLIP to read and were then asked questions regarding the scenario and their decision-making. All the participants’ gave informed consent to participate in the study and to be audio-recorded. Data analysis was done by identifying themes and concepts from the transcripts through a process of open coding. Strategies such as credibility, transferability and consistency (Lincoln & Guba, 1985), were used to ensure the trustworthiness of the study.

RESULTS AND DISCUSSION

Firstly, the importance of label information to the student consumers were determined. The student consumers’ had two decision strategies when confronted with LLIP, namely their internal related and product related strategies. Purchase and personal motivations emerged as the student consumers’ internal related strategies. Important product related strategies were the products features, such as label information and product appearance. Label information was an important internal related decision strategy for student consumers’ when doing food purchases in the cafeteria.

Secondly, the decision-making process of the student consumers regarding LLIP was determined. Two themes evolved from the data, namely the student consumers with a label interest and those with no label interest. Student consumers with an interest in food labels, mainly used product content and manufacturing information, such as brand, date and nutritional information when making a purchase decision. Those with no interest in labels made use of personal (e.g. time limitations) and physical (e.g. product availability) related reasons when deciding on a product.

Two themes evolved from the data when the student consumer is searching for information, namely physical (such as label information) and personal factors (such as health consciousness) affecting their search for information. When confronted with LLIP, student consumers’ evaluation of alternative products were influenced by product related factors (such product presentation and appealing products), label related factors (specific label information required) or personal related factors (such as habitual purchasing).

The last objective of this study was to propose a model of the decision-making process, of student consumers when confronted with LLIP. The process of the decision-making model of Schiffman and Kanuk (2004) was applied to the results of the student consumers. For the purpose of this study only the “process” (Schiffman & Kanuk, 2004) as part of the decision-making model was used. To begin the decision-making process the student consumer had to recognise a need, such as a need for energy or something nutritious to eat. When the student
consumer started their information search, they were confronted with LLIP and physical and personal factors influenced their information search. During the next step, evaluating alternatives, the product, label and personal related factors influenced their decision making process when confronted with LLIP.

CONCLUSION

The external related decision strategies of the student consumers revealed in this study could assist manufacturers in fulfilling student consumers' minimum label information requirements. The proposed decision-making process model can enable the retailers and manufacturers to understand the student consumers' decision-making process better and cater for their specific needs regarding LLIP.

RECOMMENDATIONS

Future research in this field of study can explore the external influences on the student consumers' process (input) as well as their post decision behaviour (output) when confronted with LLIP. This type of research was only exploratory and can also be performed quantitatively with a larger student sample from various cafeterias and canteens at tertiary institutions in South Africa.

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INTRODUCTION

As an initiative by the FLAGH (Farm Labour And General Health) project, a group of rural women in Venterskroon in the North-West Province of South Africa, was identified as a group that lived in poverty (Voster et al., 2000:505-514) and needed an intervention empowerment programme. The consumer Sciences Department of the North-West University trained these women in basic sewing skills inorder to generate an income. The Vredefort Dome was on 14 July 2005 declared South Africa’s seventh World Heritage Site (WHS) (Aucamp, 2007:3; Gibson, 2006:1) and has become a destination for local and international tourists. In the Vredefort Dome there are hospitality services that focus mainly on a combination of accommodation, conference venues, adventure and ecotourism activities (Saayman et al., 2007:20). These hospitality services make use of textile products. It is anticipated that the upcoming soccer World Cup in 2010 will bring many tourists to South Africa, and that it will also result in an increased need for hospitality services which will consequently increase the need for textile products.

JUSTIFICATION

Currently the hospitality services owners have to travel long distances to shops located at Potchefstroom, Parys and Vredefort to purchase these textile products. To be aligned for the future the need for more textile products by the hospitality services can be addressed by small home-based textile product manufacturing businesses. Since the late eighties there has been a move to smaller manufacturing enterprises in the informal sector to compensate for lost jobs in the formal sector (Van Aardt & Kroon 1999:3). However, there is inadequate information on who the consumers of these products are and what their preferences are in terms of product type and quality required. This lack of information on the home-based production of textile products raises the following question: How do the textile products produced by home-based manufacturers compete with similar commercially produced textile products obtained from large shops? Findings from research on the effect of country-of-origin (Wang et al.,
reveal that consumers have a general preference for domestic-made product rather than foreign products. The question is therefore whether these findings can be generalized to hold true in the South African context or not. Hence this research will explicitly ascertain consumer perceptions on the quality and price of the domestic-made textile products offered by the rural women entrepreneurs. Knight (1999:152) also reveals that consumers do not accept inferior quality domestic products when superior foreign products are available. The question then arises: Would the consumers purchase South African products that are of good quality at a reasonable price if they are available? It is against this background that this study seeks to investigate consumer perceptions and opinions of textile products offered by rural women entrepreneurs. Other questions may also emerge: Are the local entrepreneurs able to obtain good quality raw material to enable them to produce good quality articles that can compete strongly with the ones sold in the large shops or not. Whether home-based manufacturers, will be able to produce these textile products within a reasonable time to meet demand from consumers?

OBJECTIVES

This study sought to identify the current and potential consumers of textile products, assess consumer needs of textile products, establish the consumer perceptions and opinions towards textile products offered by the local rural women entrepreneurs and to provide recommendations for new textile products that the local rural women entrepreneurs can produce, based on consumers’ needs and suggestions.

METHODOLOGY

A combined quantitative and qualitative research design was employed which provides greater confidence that what is being targeted is being accurately measured (De Vos et al., 2005:357). Structured questionnaires were faxed to thirty-five product owners of which seventeen responded. It was followed up by ten semi-structured face to face interviews to further explore issues addressed in the questionnaires. During the interviews the consumers were shown some of the priced textile products manufactured by women entrepreneurs to enable them to assess the quality and prices of the products. The data from the questionnaires were analysed and summarised into graphs. The interviews were transcribed verbatim, colour coded and summarised into themes.

FINDINGS

Findings reveal that the hospitality services in the Vredefort Dome include 32% lodges, 15% bed and breakfast institutions, 13% guest houses, 10% camping sites, 3% outdoor centres, 6% shops, chalets and wedding venues, 9% conference centres and there were no hotels that participated in this study. All of these establishments use different types of textile products. Most of the textile products are replaced after six months to one year. The establishments purchase 49% of their textile products from department stores, 25% from exclusive shops, 4% from supermarkets, 5% from speciality shops, 6% from home-based businesses and 3% from other shops and outlets. Eight per cent of the textile products are made within the establishments. Most of the consumers remarked that the textile products manufactured by the rural women entrepreneurs are of good quality, reasonably priced and that they would consider purchasing them. The consumers expressed that they require good quality textile products at reasonable prices, excellent customer service and timely delivery. The consumers further suggested textile products that the women entrepreneurs can sew. The findings of this study will assist by identifying consumers of
the textile products. It was concluded that there is a need and a market for textile products around the Vredefort Dome.

LIMITATIONS

A majority of the owners of hospitality services do not reside in the establishments, and were therefore not available for the interviews and could not complete the questionnaires. Furthermore, the establishments are too busy and as a result the guests took priority over the researcher. Some establishments changed ownership and employees during the data collection process, resulting in inconsistent responses being given.

RECOMMENDATIONS FOR FURTHER RESEARCH

Another study could be conducted to include all hospitality industry consumers around the North West Province. A similar study could also be conducted, whose findings would assist other rural entrepreneurial activities.

REFERENCE LIST

INTRODUCTION

The method by which a food is cooked influences various factors, including sensory characteristics such as texture, flavour and colour, as well as the retention of the nutrients present in the raw food product (Driskell, Nunn, Giraud & Hamouz, 2006; Nunn, Giraud, Parkhurst, Hamouz & Driskell, 2006; Galgano, Favati, Caruso, Pietrafesa & Natella, 2007). These changes are due to a number of alterations in the chemical composition of the plant food (Turkmen, Sari & Velioglu, 2004). Various moist cooking methods are used in the preparation of vegetables including boiling, steaming and using the microwave oven. Steam cooking is a traditional moist heat cooking method. Heat is transferred from the steam to the food it touches, the steam condenses on the surface of the food, releasing the latent heat absorbed when the steam was formed from boiling water (Bennion & Scheule, 2004).

The 2007 Experimental foods class from the University of Pretoria was approached to evaluate a new innovative steam pot, designed to retain flavour and nutrients as well as minimize energy expenditure and cooking time. Evaluation was based on both subjective (sensory) and objective measurements of different vegetables cooked by means of the magic pot and three other cooking methods. The vegetables were prepared by means of boiling, traditional steaming and using a microwave oven, along with steaming in the new steam pot.

OBJECTIVES

- To analyze the quality of the different vegetables after cooking by means of the innovative steam pot, microwave oven, boiling and traditional steaming
- To determine if the new steam pot would be a better cooking method when preparing vegetables

EXPERIMENTAL PROCEDURE

Five vegetables, cabbage, greenbeans, beetroot, butternut and potatoes were prepared using the following experimental procedure:
RESULTS AND DISCUSSION

The present study, being the first phase of the experimental design, did not entail statistical analysis of the results obtained, and thus only broad descriptive data can be discussed. During the second phase statistical analysis will be performed, and consequentially more qualitative data will be evaluated.

Sensory evaluation

Cauliflower, butternut, potatoes, and beetroot showed the highest consumer scores when prepared by means of steaming, and in particular steaming within the new magic pot. The new steam pot scored highest in most attributes for cauliflower, butternut, potatoes and beetroot. During the consumer evaluation of green beans those prepared by means of the microwave oven and through boiling was scored higher than the steaming methods, but the new steaming method (with the new steam pot) was rated superior to the traditional steaming method of cooking.

Objective evaluation

When prepared with the new steam pot all vegetables’ degree of softening (determined through texture analysis) was either more or similar to the other methods, but never harder. The colour of the vegetables prepared in the
new steam pot were also closer to the raw product, and in all vegetables, accept green beans, also rated the highest for appearance by consumers.

CONCLUSION

Preparation of most vegetables in the new steam pot, with the exception of green beans, resulted in more sensory appealing products with a softer texture when compared to those prepared by means of microwave oven and boiling. Very similar results were obtained for vegetables prepared by means of the traditional vs. the new steaming method, with a slight preference towards the new steam pot.

REFERENCE LIST


ETHICS OF FOOD LABELING: A CONSUMER PERSPECTIVE

by

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INTRODUCTION

Food production and processing have become more complex in recent years, resulting in consumers eating more processed than fresh food (Davies, 2000). In addition, the avoidance of food-borne pathogens, allergens, toxins (Liakopoulos & Schroeder, 2003), ingredients due to ethical or religious reasons (Davies, 2000) are also issues to be taken into serious consideration when food purchasing decisions are made. Therefore, it is becoming increasingly difficult for the consumer to determine the ingredients and nutritional value of food products (Davies, 2000). Consequently, the label is one medium the consumer can use to acquire knowledge about food items (Wandel, 1997) and he/she has to rely on the label information to make decisions regarding food intake (Davies, 2000). The importance of accurate and dependable food labeling information is of even greater essence to consumers avoiding certain ingredients for religious and ethical reasons (Davies, 2000) and those experiencing problems with allergies (Abbott, 2004).

Health conscious consumers are another group of consumers who are dependent on the food label information for their decision making. With health considerations being the number one reason for consumers use of food labels (Wandel, 1997), these consumers are reliant on the availability of comprehensive, easily understandable, accurate and honest nutrition information on food labels (Davies, 2000). According to Baltas (2001) the intention with nutrition labeling is not only to enable consumer decision making, but also to encourage the consumption of healthy foods. Besides, nutritional information, food labels provide the main ingredients, as well as additives and condiments to consumers (Wandel, 1997).

AIM AND OBJECTIVES

The main objective of this paper was to study consumers’ perceptions of ethical food labeling and the role that the various food labeling parties can play to improve the situation. The paper presents a critical view on the ethics of food labeling and consumers’ consequent behavior through a study of the literature.
CONSUMERS’ PERCEPTIONS OF FOOD LABELING ETHICS

When consumers’ perceptions of food ethics and food labeling are considered a few ethical issues are raised in various studies, such as the trustworthiness of the food labels (Davies, 2000; Uusitalo & Oksanen, 2004), understandability of labels (Wandel, 1997), labeling of additives (Wandel, 1997), reliability of nutrition and health claims (Liakopoulos & Schroeder, 2003; Lazarowicz, 2005), labeling of functional (Liakopoulos & Schroeder, 2003) or genetically modified foods (Teisl et al., 2002). These perceptions are alarming to the food industry and retailers who are interested in increased sales of their products, especially since previous research indicates that most of these consumer insecurities about food labeling are indeed founded.

ROLE OF REGULATORS AND FOOD INDUSTRY IN ETHICAL FOOD LABELING

Consumers require corporations to be socially responsible (Uusitalo & Oksanen, 2004). However, literature reveal the declining trust of consumers in governments, public institutions and official decision making authorities (Liakopoulos & Schroeder, 2003) and towards the food industry (Frewer et al., 1996). In order for authorities in the food industry to regain the trust of the consumer, they have to provide independence, transparency and holistic risk communication (Liakopoulos & Schroeder, 2003), unmistakable information provision and conduct research to determine consumer interests (Davies, 2000).

CONCLUSION

This paper concludes that consumers are at the mercy of food labeling authorities whom they do not trust and that their purchasing decisions would therefore be influenced negatively by a lack of trust and reassurance in the information on labels. In order for this situation to be improved, consumers need to become aware of their rights and responsibilities.

REFERENCE LIST


THE AESTHETICS AND DAZZLE OF GEOMETRICS IN AFRO-CENTRIC WEARABLE ART

by

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INTRODUCTION

Fashion seeks inspiration from ethnic costume, cultural influences, art etc. that influence shapes and patterns for print ideas. Creative designers derive their inspiration from tangible and global influences past, present and future using a mixing pot of ideas to create innovative designs. Elements of design, the building blocks of products and environments, contribute to overall aesthetics; they are integral to all aspects of the apparel. Understanding and utilizing these elements of design helps enhance apparel products. Standard symbols are often highly geometric in shape. The colourful, intricate and decorative Ndebele murals are based on geometric patterns depicted in Ndebele artwork. Ndebele murals and beadwork share a common preference for shapes, and recently, bright, bold commercial colours have been increasingly used.

AIM AND OBJECTIVES

- Public display of creativity in fashion design for Afrika en Vogue 2002, an Alliance Francaise sponsored Fashion Show
- Creativity in effectively combining various elements and principles of design for exquisite and elegant ensembles by the young up-and-coming designers
- Portrayal of an ethereal, wearable art ensemble for the runaway, an advertising platform for student designers and Bulawayo Polytechnic Institute of Applied Art and Design

DESIGN INSPIRATION AND DISCUSSION

Functional items from the home found in Ndebele images/art forms were the source of inspiration for the wearable art ensemble. The ensemble’s three-dimensional shape simulates the rondavel’s oval shape; a broad base tapering to the roof top. A detachable peplum resembles the roof tier of the grass thatch over the cylindrical shape of the rondavel. The upper skirt and peplum lattice-reed design and the geometrics represent the colourful murals on walls of Ndebele houses. Brightly coloured and bold geometrics on lower skirt emphasises the domed design feature as well as contribute towards that elegant walk. The shawl is a contemporary version of the Ndebele
traditional blanket. Ball-shaped crochet hat signifies a common African custom of carrying clay pots (calabash) for fetching water, and baskets for carrying various items. Diamond prints on crocheted hat signify inbuilt geometrics woven in baskets and hats of Ndebele/Zulu/Batswana basket weaving trade and techniques. The choker is a modified version of the Ndebele neckband.

TECHNIQUES AND MEDIA EMPLOYED

Designers were assigned models and patterns drafted to individuals’ specific measurements; pattern making and draping techniques were used for pattern styling, toile were made to proof and refine patterns for perfecting the fit. The domed frame, made of cut panels of sturdy medium weight manila board/tag board glued together into a hexagon-like shape, was encased between the lining and outer skirt to maintain the desired shape and form. Reeds were cut into small pieces and hollowed while green, and sprayed brown when dry. Holes were pierced into wild beads, and gold sprayed when dry. Both the crocheted hat and choker were dyed brown and gold sprayed to simulate the lattice embellishment on the skirt. The starched hat was stuffed with crumpled newspapers to mould, then lattice design sprayed when completely dry. Great ingenuity is demonstrated in the successful use of different fabrics and various materials/objects and techniques for the sculpted ensemble.

CONCLUSION

The ensemble portrays success in aesthetically and creatively combining art forms/images in designing the exhibited wearable art (Exhibit 1 on poster) and a successful garment that has a comfortable relationship among shapes of parts and between parts and whole. It looks beautiful and presents a unified composition of well-combined structural and decorative shapes and forms. Various Ndebele art forms/images, which are also components of the principles and elements of design, were artistically and skillfully encapsulated into an exquisite work of wearable art. An analysis of the ensemble and its components shows the following were some of the elements ingeniously used on the design: triangle/square (print designs), hexagon (lower domed skirt), circle (crocheted hat), rectangle (upper skirt), trapezoid (skirt apron), and oval (body silhouette from head to toe). The principles of proportion demonstrated by a great difference between the sizes of bodice and skirt, and of formal balance (print designs on domed skirt section) and informal balance (reeds trim on bustier and lattice reeds trim on skirt) were ingeniously incorporated in the design. Despite its bulky lower skirt, the garment allowed for movement with ease, and yet held its shape. With each majestic step on the runaway, the model displayed the splendour of the avant garde ensemble and its undisputed regal look.

RECOMMENDATIONS

- Development of a metal frame for the dome-shaped lower skirt would improve the outline (silhouette) of the design.

- Duplicating the same design, using a metal-framed hoop would make it lighter in weight, and perhaps giving it a more defined and longer lasting silhouette, as well as make it easier to store.
Further design modifications can be made by substituting materials (e.g. reeds trim/hoop frame) with those that would withstand modes of cleaning to ensure garment is cleanable before storage after each exhibition.

REFERENCE LIST

Books

Journals

Magazines

Internet Websites

