Abstract

Purpose – The purpose of this paper is to understand the difference in purchase decision behavior of compression sportswear by Baby Boomers and Generation Y.

Design/methodology/approach – Two methods were used for data collection: a simulation study with 17 Baby Boomers and 23 Generation Y subjects using eye-tracking technology; and a questionnaire from a sample of 82 Baby Boomers and 84 Generation Y consumers.

Findings – Generation Y are more inquisitive and focus greatly on technical information. Baby Boomers are more confident with their choices, taking a shorter time to reach a purchase decision; they are more concerned with aspects that protect the wearer.

Research limitations/implications – Limited demographic information was collected from participants in the simulation study, further research is required in this area.

Practical implications – This study provides important insights into the purchase decision behavior of Baby Boomers and Generation Y for compression sportswear. By providing better understanding of some of the key drivers for purchase decisions it enables marketers to develop more effective marketing plans to engage with these important consumer groups.

Social implications – The focus and findings of this study provide further understanding of the motivations of two significant consumer cohorts. This study provides further momentum to the body of cohort research already available.

Originality/value – This study addresses a gap in literature with reference to the comparison of consumer behavior of generational cohorts when purchasing compression sportswear. Findings can be applied in other areas of sportswear and to other countries.

Keywords Consumer behaviour, Baby boomer, Compression sportswear, Eye-tracking, Generational cohort, Purchase decision behavior

Paper type Research paper

Introduction

The sportswear market is expanding as the trend of the promotion of healthy and active living grows. This is a trend that is expected to continue to grow internationally (Edwards and Tsouros, 2006). Therefore it is imperative for marketers to understand clearly the needs of their target customers in order to exploit them and increase their own market share.

Baby Boomer consumers are a growing force in the market; with more money and greater concern for living longer, they care about being healthy and looking good and are willing to spend to get what they want (Kumar and Lim, 2008). The Generation Y cohort is also a very powerful consumer group as they are highly knowledgeable and make decisions with a lot of research (Tsui and Hughes, 2001); they are highly influential on family members and peers (Glass, 2007; Jackson et al., 2010), and are therefore an important group for marketers.
Consumers have utilised compression garments for medical reasons for many years (Dascombe et al., 2007). The benefits provided by these garments have more recently been translated into the sportswear arena. Sports compression garments have been marketed to increase performance, decrease the likelihood of injury and promote the process of recovery (Choice, 2011). Initially a product for professional athletes; a wider use has now been found among sport enthusiasts of all abilities and ages (Higgins et al., 2009; Hill et al., 2014).

As the popularity and need for compression sports garments increases, there is a need to fill the gap in current literature as to whether there is a difference in purchase behavior of these products between these two powerful cohort groups. Additionally it is expected that the significance of the results from this research can be applied to understand differences in purchase behavior for sportswear in general.

**Relevant literature**
We begin by reviewing literature relevant to the study to provide a foundation in order to develop our theoretical framework.

**Generational cohort theory**
Generational cohort theory is used to group people born in certain years, in order to suggest likely behaviors according to shared values (Schewe and Meredith, 2004); describe cohorts as groups born during the same time period who travel through life together; and therefore experience similar external events in their late adolescent and early adult years. Cole et al. (2008) explain that cohort effects relate to the long-term impact of events on people born in particular periods and remain with one during their life. The defining moments that these groups experience influence values, attitudes, preferences, expectations and buying behaviors; as a result these factors remain constant throughout the generation’s lifetime and constitute a generational identity (Jackson et al., 2010; Schewe and Meredith, 2004). Smith and Clurman (2010) emphasize that understanding the values and motivations of a generation has become essential to targeting particular consumers, as each generation is driven by unique ideas about the type of lifestyle to which they aspire. Hofstede (1984) disagrees with the notion that individuals can be defined and segmented with regard to generational influences and rather considers that factors such as skill level, educational background and education influence individual preference. Quester et al. (2007), define the following generational cohorts: Baby Boomers, born between 1946 and 1964, Generation X, born between 1965 and 1976 and Generation Y, born between 1977 and 1994. Researchers and historians have used different names and dates to define cohorts; however, the literature fundamentally agrees on the general attitudes and behaviors of the groups (Wellner, 2000; Norum, 2003).

This study will focus on two cohorts: Baby Boomers and Generation Y. They have been specifically chosen for the great power that both consumer groups possess. We thought it important to understand what the influences on purchase for compression sportswear were between these two distinct groups, who are both involved in sporting activity, but for differing motivations.

The formative years of the Baby Boomer cohort were characterized by economic progress and advances in education, science and employment (Strauss and Howe, 1991). Due to these factors, Baby Boomers are internally focussed, choosing self-satisfaction over the needs of the community. Jackson et al. (2010) expand on this
notion, describing the cohort as individualistic and competitive with interests in personal growth through self-fulfillment. Their strong work ethic and focus has gained them economic security and professional success (Lehto et al., 2008).

Kumar and Lim (2008) and Beldona et al. (2009) explain that Baby Boomers represent a group with great spending power and disposable income, particularly as they reach retirement age and their children move out of home. It has been found that staying healthy is of great importance to Baby Boomers, ranking in the top three of their greatest priorities (Del Webb, 2010).

Generation Y has grown up with the internet and highly advanced technology, they are considered as the first high-tech cohort (Norum, 2003). The cohort is said to be highly consumption oriented, particularly in regards to their shopping preferences and tastes (Wolburg and Pokryczynski, 2001; Holtshausen and Styrdom, 2006).

Due to their ability to easily access vast amounts of information, Generation Y’s are highly educated in many aspects (Wolburg and Pokryczynski, 2001) and usually make purchase decisions having undertaken prior research on the topic, this also makes them more aware of marketing tactics, and therefore more suspicious toward marketing compared to their predecessors (Tsui and Hughes, 2001).

Lim and Turco (1999) explain that this group experiences a level of financial security and material comfort above that of generations before them. Therefore Generation Y consumers have a great spending power, however, considering the time that they are entering in their lives and the responsibilities involved therein, they are more inclined to save their money in comparison to their Baby Boomer parents.

**Sports compression garments**

Compression garments have long been used in the health industry to treat patients with poor blood flow and conditions such as deep vein thrombosis (Dascombe et al., 2007). However, in recent years, the use of compression garments for sports and fitness has become increasingly widespread. Compression sports garments offer users engineered, graded compression to stimulate the flow of oxygen to muscles, reducing the build up of lactic acid (Cole, 2008). The benefits postulated by the majority of sport compression garments state that the wearer will benefit from increased blood flow, improved muscles oxygenation, reduced muscle fatigue, faster recovery, less muscle vibration and a reduction in muscle injury (Troynikov et al., 2010). In addition, most sports compression garment brands offer garment attributes such as UV protection, anti-bacterial properties, moisture management, temperature regulation and even a better proprioceptive sensibility (Liu et al., 2011).

Some studies have found that the garments do in fact assist the wearer in increasing their performance and recovery time (Dascombe et al., 2007; Chatard et al., 2004; Duffield et al., 2009). However, a study by Higgins et al. (2009) found that any effects from compression garments on performance were minimal and Berry et al. (1990) indicated that compression tights would not significantly affect circulating lactate levels or post-exercise response. A study by Houghton et al. (2009) concluded that compression garments did not have any effect on the hockey players they tested on, although the increase in skin temperature may have caused discomfort for some of the players.

**Visual attention and eye-tracking**

Through the study of eye movements an understanding can be gained of how individuals acquire information (Duchowski, 2007). The movements of eyes consist of
two components, fixations and saccades. Saccades are rapid jumps that the eye makes when it is looking from one area to another, focussing new visual stimuli onto the fovea (Duchowski, 2007). Fixations are moments when the eye is relatively still and focussing on a specific object or location; during a fixation the area or object being viewed is projected onto the fovea for detailed processing (Wedel and Pieters, 2008). Using saccade movements and durations of fixation, a pattern of eye movements, called the scan path (Solso, 1994) can be determined. The path that is travelled, where the eyes pause, jump or return to, can then be analyzed to understand visual attention.

An eye tracker is a device used to measure eye movements. The use of eye-trackers makes it possible to record the movements of eyes and understand attention patterns over a visual stimulus (Pi, 2011). Eye tracking is most commonly analyzed using the total number of fixations, number of fixations over an area of interest, total fixation duration time and fixation duration time over an area of interest (Jacob and Karn, 2003). The greater the number of fixations and fixation duration time, the greater the amount of visual attention (Duchowski, 2007).

Theoretical framework

Although there are many influences on the purchase behavior of consumers, the following were the ones considered in the purchase of sports compression garments.

1. Product benefits
The advantages a product provides to the consumer will be a major influence to whether the product is purchased. Consumers require both functionality and aesthetic appeal from their sportswear, no matter their level of involvement in sport or fitness (Shishoo, 2005). According to Braddock and O’Mahony (2002), professional and leisure sports enthusiasts alike, demand and expect the highest quality, comfort and style from their sports garments. Shishoo (2005) also adds that fit and durability is important to those purchasing performance sportswear. Technologies such as anti-bacterial, moisture wicking, water resistant and those that have been scientifically modified to enhance the performance of the wearer are also attractive to sportswear consumers (Gale and Kaur, 2004; Cole, 2008). Therefore there are a wide variety of benefits that a consumer can seek from their sportswear; their choice will be dependent on their needs.

We were unable to locate specific comparisons between the preferences in sportswear benefits required from Baby Boomers and Generation Y, however, there are some indications that requirements would differ. Baby Boomers are physically ageing, a problem of much less concern for Generation Y. There have been an increasing number of sports injuries from Baby Boomers, as many of them, in an attempt to defy the ageing process, maintain or even increase their physical exercise regiment, resulting in injury (Euromonitor International, 2012).

It has been found that the quality and comfort of garments are of high importance to Baby Boomers. Baby Boomer women in particular are unsatisfied with the range of clothing available to them, and are concerned that it has not been designed with them in mind (Peters et al., 2011; Holmlund et al., 2011; Howarton and Lee, 2010). On the other hand, Generation Ys when considering the product benefits of sportswear are more likely to be influenced by technical attributes and branding (Lim and Turco, 1999). This cohort spends more on branded clothing (Chao and Schor, 1998), wearing those brands that they feel emulate a certain persona and give a clear message about what they aspire to be (Morton, 2002).
Generation Ys are early adopters of new technologies (Kumar and Lim, 2008), thus the garments which are technologically advanced are highly attractive to them. The opinions of their peers are also very important. Consumer Generated Media is a key factor in their decision making process (Quester et al., 2007). This cohort places greater importance on having control over their own actions and their ability to form opinions independently, being more interested in learning the benefits of products through personal experience (Dawson, 2010).

Given that we found no clear comparison between the product benefits preferred for sportswear between the Baby Boomers and Generation Y, we propose:

**H1.** Different generational cohort groups purchase sports compression garments based on varying product benefits.

### Method of communication

The methods used by brands to convey messages to consumers define who they reach and those who may purchase their products. Although consumers are very receptive to clothing that will improve their performance (Keynote, 2008), the message must reach the consumer in order for them to respond. The use of magazines, catalogues and online communication vary the effectiveness of the message in reaching the intended audience (Quester et al., 2007).

Though it may be assumed that Baby Boomers would be averse to new technologies, studies show the opposite: Baby Boomers’ internet usage and online purchase patterns are similar to those of younger generations (Kumar and Lim, 2008; Beldona et al., 2009; Jorgensen, 2003). Despite this willingness of Baby Boomers to adopt new technologies, Generation Y, however, remains more knowledgeable and more active within the spheres of internet usage and online purchasing (Kumar and Lim, 2008). Thus it is evident that an online presence is essential for brands to be able to effectively communicate with two studied cohorts.

Female Baby Boomers are bored by the current advertising aimed at them, and are unable to identify with the models in the ads (Holmlund et al., 2011). They prefer to see cognitively aged women, rather than chronologically aged women in their sportswear advertisements (Wray and Hodges, 2008). Celebrity endorsements and careful advertising model selection is paramount to connect with consumers. Endorsements have shown a greater ability to influence the Generation Y consumer and reflect the values and aspirational lifestyle they wish to live up to (Lazarevic, 2012).

The literature suggests that different forms of communication will be effective when targeting Baby Boomers and Generation Y, therefore we propose:

**H2.** Generational cohort groups will be influenced by different methods of communication as part of their purchase behavior.

### Availability

Sufficient market saturation must be achieved in the appropriate retail medium to reach the intended consumer. There are ever increasing channels in which to present and deliver retail opportunities to consumers, whether it is a physical store, online store, catalogues or social media (Quester et al., 2007).

Both male and female Generation Y consumers see shopping as a social activity (Martin and Turley, 2004). This social dynamic must be catered to by the retailer, regardless if it is an online or brick and mortar format. Baby Boomers are less concerned with the establishment of a social space and prefer fewer choices than the younger generation (Mikels et al., 2009). The Baby Boomers appear overconfident
about their ability to make right decisions, often not committing additional time to the research of other options. (De Bruin et al., 2007). Female Baby Boomers are particularly confident of their wants and needs, and insist that they already know what is right for them. They tend to require less time in making a purchase decision (Holmlund et al., 2011; Peters et al., 2011). It is imperative that brands ensure the appropriate range of sportswear is available on hand so the Baby Boomers are able to confidently and quickly assess their choices.

Online retail presence is also key to reaching maximum availability. Internet based social media and peer review are frontiers that are familiar to Generation Y but are also being increasingly used by Baby Boomers (Kumar and Lim, 2008; Beldona et al., 2009). The need to cater to both online presence of experienced Generation Y’s use and Baby Boomer’s online behavior is paramount.

In light of this we feel there is a need to further understand where Baby Boomers and Generation Y shop; therefore we test that:

H3. Different generational cohort groups require varying avenues to purchase sports compression garments.

4. Generational factors
If the any of the above hypotheses are upheld, it will also indicate that overall there is a difference in the purchase behavior of Baby Boomers and Generation Y; therefore we also test that:

H4. There will be significant differences in purchase behavior of compression sportswear among different generational cohorts.

Methodology
Two methods were utilized to test the hypotheses and understand the consumer purchase behavior for compression sportswear. A simulation study was conducted in Germany and an online questionnaire was distributed throughout Australia; providing a cross-national comparison.

Simulation study
1. Participants and procedure
A simulation of consumer purchase behavior for compression sportswear was carried out in Munich, Germany, during May 2012. In order to have an appropriate sample size two venues were utilized for the study, a large university in Munich and the LaVida Gym, a gym close to the university. Students and staff from the university and patrons of the gym who belonged to the appropriate cohorts were invited to take part. There were a total of 40 participants, consisting of 17 Baby Boomers and 23 Generation Y. This sample size was considered sufficient to provide tentative outcomes, being consistent with similar studies previously conducted (Pan et al., 2004; McCarthy et al., 2003; Dixson et al., 2011). The sample had a good representation of both males and females, with 52.9 percent of the Baby Boomers and 60.9 percent of the Generation Y group being male.

Participants were fitted with a head mounted eye-tracking system, which would monitor and record their eye movements over visual stimuli. The simulation had four parts:

- Part 1: observation of 7 different promotional images in succession on a computer screen. Participants had no time restraint.
• Part 2: participants were instructed to engage in a purchase situation and observe for one minute three pairs of compression leggings with their respective packaging beside them.

• Part 3: participants were instructed to browse and handle the leggings and packaging as if they were intending to purchase them. Participants had no time restraint.

• Part 4: a questionnaire was administered by an examiner about the products.

Measures
The videos produced from the simulation study were analyzed using the Dikablis D-Lab software. Studies conducted by Ju and Johnson (2010) and Park et al. (2012) were used as a basis for the design and analysis of the study. Ju and Johnson (2010) utilized eye-tracking technology to study the visual attention of young women on different types of fashion advertisements, particularly focussing on areas of interest, total time viewing each advertisement and the number of fixations. Similarly Park et al. (2012) used eye-tracking technology to study how participants viewed particular fashion images, creating areas of interest on the images to analyze gaze duration and the density of fixations.

The first part consisted of seven promotional images. The images were of athletes wearing compression sportswear whilst being active in various sporting activities; they showed both male and female models of varying ages, some images with descriptive text, others with less information rich areas. These images were collected from the web sites of well-known compression sportswear brands: Skins (www.skins.net), 2XU (www.2xu.com.au) and Under Armour (www.underarmour.com). By providing images with a variety of different details, more measures were available with which to analyze the visual interest of the participants. Measurements were taken of the total time of observation, time spent observing each image and the scan path developed over each image. A longer observation time indicated a greater interest in the promotional materials, likewise over each image. The scan path indicates specific areas of interest for each promotional material.

The second part consisted of a one minute viewing of three compression leggings and their packaging. Subjects were presented with products corresponding with their particular gender and the details of the products were: Skins Compression Long Tights, 2XU Elite Compression Tights and Diadora Compression Clothing Long Tights. The study measured the average number of glances at leggings and the average number of glances at packaging. The glances at which of the three leggings and which packaging was not taken into account. The measure focussed on the number of glances of leggings to packaging and the overall number of glances. A higher number of glances indicates a higher level of interest.

The third set of measurements took into account the time spend before taking a purchasing decision: time spent browsing and handling the leggings and packaging; time for the actions performed on the leggings; and the time for the actions performed on the packaging. The sum of these times indicates the swiftness of each cohort to reach a purchase decision. The nature of actions performed indicates important attributes influencing the process of reaching of a purchase decision.

The final measurements take into account seven questions appearing on the questionnaire. The questionnaire asked the participants the following questions about
the leggings they had observed and handled: Most preferred, which they would purchase, which they perceived to have the highest and lowest quality, which had the most appealing packaging and whether the price of the leggings would affect which one they would purchase. The questionnaire was completed with the participant being asked if they already owned compression sportswear, and if not, whether they were now more inclined to make a purchase. Descriptive answers were provided by respondents and are examined to determine the preference of leggings and packaging for each participant, as well as their likelihood to purchase compression sportswear.

Online questionnaire
Data were collected through an online questionnaire. The target population consisted of Baby Boomers and Generation Y sporting enthusiasts who owned or were considering the purchase of compression sportswear. The link for the questionnaire was distributed via email to mailing lists of Australian gyms and sporting clubs. Initially the questionnaire did not receive many responses from Baby Boomers, therefore a local YMCA gym was visited and patrons from the cohort were approached to complete the questionnaire on site. The total number of usable questionnaires was 166, with 82 Baby Boomers and 84 Generation Y respondents. This sample size was considered sufficient to provide tentative outcomes, being consistent with questionnaires conducted by Jin and Black (2012) and Jeon and Ridinger (2009). Considering the limitations of the study, the sample had a good representation of both males and females, with 48 percent of the Baby Boomers and 63 percent of the Generation Y group being male.

The participants answered questions in a multiple-choice method, initially covering general demographic information (gender, age, marital status, household income, education, work status), then the aspects of the number of sports activities they are involved in (frequency per week, hours per session, types of sport and fitness activities, reason for being active). Participants were asked to specify if they owned sports compression garments (number of items, types of garments, brands owned, brand recognition, particular sports compression garments are utilized in, frequency of purchase, mode of purchase, the importance of price) and answers were sought as to the importance of specific attributes of the garments (comfort, quality, technical attributes). Their buying habits were also obtained by inquiring about their buying approach, influences on purchase decisions, in store purchase behavior, and the attributes of advertising.

Measures
A measurement of overall experience and activeness is obtained with the type, number, and frequency of sporting activities in which participants engage. A five-point Likert scale was used to determine level of agreement, influence and importance (a measure of 1 marking the lowest or least and a measure of 5 marking the highest or most). To test \( H1 \) the participants marked responses in regard to comfort, quality, and technical attributes. Braddock and O'Mahony (2002) and Cole (2008) described these factors to represent product benefits to consumers of sportswear. To test \( H2 \) participants marked responses regarding the importance of different advertising techniques, including the use of sport specific sponsors and activities. To test \( H3 \) questions sought answers to their buying approach, in-store purchase behaviors, and mode of purchase.
Results
The study found that both generations of cohorts are active approximately three to four times a week. It was found that the main reason for activity was fitness as marked on the online questionnaire by over 80 percent of participants from both groups. Generation Y did include leisure, competition, and stress relief as other important reasons for their activity. When asked about specific activities Baby Boomers at a rate of 60 percent chose walking as their preferred method of activity. Also marked by this group were running, jogging, and weight training. This is consistent with findings of Wray and Hodges (2008) in regards to the preferred activities of Baby Boomers. Johnson (1996) and Steinhaus and Lapitsky (1986), found that the number one fitness activity that Baby Boomers partake in is walking, followed by aerobics and weight lifting.

Product benefits influencing purchase behavior (H1)
Both generational cohorts ranked running and jogging high in their preferred sporting and fitness activities. Walking was the number one preferred activity of Baby Boomers at over 60 percent with running and jogging coming in second at 48 percent. Generation Y ranked running and jogging at just over 50 percent with cycling a close second at 50 percent. Unlike their Baby Boomer counterparts, Generation Y did have some representation of team sports in their preferred activities. In total, 30 percent of Generation Y participated in Soccer/football and about 10 percent in both netball and basketball. Baby Boomers had rates at or less than 5 percent for any particular team sport. The distinct needs for diverse types of activities will require different product benefits.

Both groups saw aspects of comfort, quality and technical attributes as important, however, the order in which these aspects were ranked differed. Generation Y placed fit, ease of movement, and prevention of chaffing as the most important factors of comfort. It is evident that their preferred sport and fitness activities directly affected these rankings. The team sports identified in the preceding paragraph, along with cycling require high levels of movement and flexibility, areas in which fit and chaffing play a major role. On the other hand, the majority of Baby Boomers did not rank chaffing as important, which we conclude to be due to the types of activities they prefer. Baby Boomers placed durability as the most important, closely followed by size availability, ease of care and construction quality. Aspects relating to resilience are more important to this group. It is important to note the high score of size availability of Baby Boomer’s comes almost entirely from responses marked by females. This is consistent with Holmlund et al. (2011) who found fit to be the leading decision factor for female Baby Boomers. This correlates to the actions carried out by the Baby Boomer subjects in the simulation study, who stretched the garments in different ways and carefully inspected the fabric and stitching along the leggings. Generation Y were equally concerned about comfort, but gave aesthetic appeal and design a higher rank.

Technical attributes offer another difference in order of preference seen for our generational cohorts. They both stated that faster recovery and muscle support are of the highest importance, as to be expected as these are both hailed as unique benefits to compression sportswear garments (Troynikov et al., 2010; Kraemer et al., 1998). Preferences diverge in tertiary and quaternary points. Generation Y places the needs of their activities next utilizing sports compression garments for increased endurance and increased speed, strength, and power as the next important technical attributes.
This suggests that they value performance, as is necessary in team sports, and will use technology to achieve this end. The Baby Boomers believe that aspects other than performance are next in order of importance, odour resistance, and sun protection, respectively. The Baby Boomers are more concerned about personal hygiene and protection from possible sun exposure than Generation Y.

Further differences arose between the Baby Boomer and Generation Y groups when examining the garments during the simulation study. Here it was clearly seen that the Baby Boomers were more concerned about the textile and garment construction quality of the legging, stretching at the waistband, thigh and leg openings and spending much time inspecting the stitching on the garment. On the other hand the Generation Y groups tended to be more focussed on the visual information provided by the manufacturer, with most of the group reading the information on the hang tag and inspecting the printing on the garments. The Generation Y group also examined the stretch of the leggings, however, this was not as frequent an action for their group in comparison to the Baby Boomers.

Communication methods influence purchase behavior (H2)
During the simulation study of promotional images, on average, Generation Y subjects spent 81.52 seconds examining the images, whereas the Baby Boomers spent 63.00 seconds. Therefore, the Generation Y group spent approximately 23 percent longer on the images. It was found that that the results were statistically significant, with a p-value of 0.0299 at $\alpha = 0.05$ when conducting a student’s t-test with the null hypothesis being that there is no relationship between generational cohort and time taken to view promotional materials. As stated by Duchowski (2007) an increased viewing time indicates greater visual interest. This study along with Wolburg and Pokryvczynski (2001) find that the younger generation requires more visual information.

During physical examination of the garments, the Generation Y group took 40 percent longer than their Baby Boomer counterparts. This difference was also found to be statistically significant with a p-value of 0.048 at $\alpha = 0.05$, when conducting the student’s t-test. This is in accordance with previous research stating that Generation Y will be more inquisitive when making a purchase decision (Tsui and Hughes, 2001). It also shows that as previously described, Baby Boomers require less time to reach a decision, being more sure of themselves (De Bruin et al., 2007).

During physical examination of the garments, the Generation Y group took significantly longer than their Baby Boomer counterparts. This is in accordance with previous research stating that Generation Y will be more inquisitive when making a purchase decision (Tsui and Hughes, 2001). It also shows that as previously described, Baby Boomers require less time to reach a decision, being more sure of themselves (De Bruin et al., 2007).

There were similarities between the actions of the individuals in the simulation, and the responses in the questionnaire regarding the attributes of sportswear advertising that most influenced them. Generation Y placed technical attributes, general attributes and price as highest ranking, and this was supported by the fact that the Generation Y groups in the simulation all read the information on the packaging very thoroughly, as well as reading the information provided on the hang tag. This was also demonstrated in the scan path drawings developed from the viewing of promotional material. As can be seen in Figure 3, Generation Y was very focussed on the information rich areas of the material, whereas the Baby Boomers scan path was less so (Figure 2). It is clear that Generation Y, as suggested, is extremely tech savvy and knowledge hungry, they want
to collect the information available to them so that they can judge for themselves (Tsui and Hughes, 2001). The scan path results reinforce the longer time spent by Generation Y viewing the promotional material (Figures 1-3).

The simulation study suggested that packaging information should be translated into the appropriate language of the targeted market segment. Further during our study at the gym only 22 percent of the Baby Boomer group examined the packaging, some who did commented to the researcher it was in English and in small typeset, which made it difficult to understand. Little effort was made by the packaging manufacturer we used to target non-English speakers with difficulty of reading a small print. Generation Y did not mention having difficulty reading any of the print.

The simulation study found that Baby Boomers spent approximately 40 percent less time than Generation Y physically engaged with the products and packaging. This is a clear indication, along with the scan path data, that Baby Boomers and Generation Y

Figure 1.
A promotional image used in the simulation study

Source: www.skins.net/de-DE

Figure 2.
Scan path of the baby boomers in the simulation study

Figure 3.
Scan path of generation y in the simulation study

Consumer behavior of generational cohorts

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require different methods of communication from the manufacturer to make a purchase
decision. Generation Y require greater detail for inspection. Baby Boomers do not
spend as much time reading this detail to make it as significant in their purchase
decision. This difference in techniques enforces the notion that different communications
methods affect the cohorts differently, supporting $H_2$.

Purchasing avenues influence purchase behavior ($H_3$)
The most frequent mode of purchase for both generational cohorts was the traditional
sports store (Figure 4). A close second for Baby Boomers were department stores
followed last by online methods. Generation Y preferred online shopping after traditional
sports stores with department stores falling much farther down the list of preferred
avenues of purchase. As many as 52 percent of Generation Y indicated a willingness to
buy compression sportswear online while the Baby Boomers indicated percentages
< 30 percent. The greater online presence of Generation Y as found in this study and
supported by Kumar and Lim (2008), proves that the generational cohorts have different
alternate purchase methods. The primary avenue of purchase remains the same for both
generational cohorts: the traditional sports store. A comment made by the Baby Boomer
group was that in order to truly assess whether a garment would meet their quality
perceptions they would need to fit the garment on their bodies and assess. This further
suggests that they would be less likely to use online methods of purchase in comparison
to Generation Y. These generational cohorts use different avenues to purchase their
compression sportswear, supporting $H_3$. The large variations shown in Figure 4 for
purchase through a catalogue and “other” show the insignificance of these responses in
comparison to the other purchase modes. As there were significant responses for some
of the other modes, the large variance in these two options was not investigated further.

Generational cohort theory and purchase behavior ($H_4$)
With support for $H_1$, $H_2$ and $H_3$, the present study has found that there are significant
differences in purchase behavior of compression sportswear among the studied
generational cohorts, and therefore $H_4$ is also supported. One more additional generational
difference is the importance of price for purchasing behavior. This difference was clearly
present in the results of the questionnaire.

When asked about the importance of price in purchasing sports compression
garments it was seen as quite an important factor for Generation Y with over half of the
respondents (51 percent) believing that price is very important and 20 percent seeing it

![Figure 4. Mode of purchase](image-url)
as extremely important (Figure 5). On the other hand, it appeared that the Baby Boomer attitude toward price was more spread, with the largest group stating that it was neither important nor unimportant (32 percent), then an equal percentage stating that it was not at all important, and very important (22 percent). 15 percent of the Baby Boomers stated that price was a “Very Unimportant” factor. The responses from Generation Y for “Very Unimportant” and “Not at all Important” displayed a large variation, this was due to the majority of the cohort responding to the other options and those answers being insignificant in comparison; therefore this was not investigated further.

**Discussion and managerial implications**

The present study found significant differences in the purchase behavior of Baby Boomers and Generation Y for compression sportswear. Considering the two investigative methods undertaken, it was found that both groups were concerned about comfort, quality and the technical attributes of sports compression garments; however, the ranking of these values varied between the groups, with a particular difference being that Baby Boomers were concerned with protection whereas the Generation Y respondents cared more for performance enhancement. The German study found a similar result, with both groups caring for comfort and quality but having different priorities with the Baby Boomers showing concern for the resilience of the garment, and the Generation Y cohort focussing on technical information.

Baby Boomers were found to be confident in their choices, and spent a much shorter time making purchase decisions, which is consistent with the suggestions by Holmlund et al. (2011) and Peters et al. (2011) that Baby Boomer women have confidence in their purchase decisions and know what they want and need. Furthermore, this was also applicable for the study group in general, not only females, which indicates that Baby Boomer males are also relatively confident and sure of their decisions in comparison to their younger counterparts.

The Generation Y group were more inquisitive, taking a longer time to make a purchase decision and placing great importance on information search, which supports Wolburg and Pokryvczynski’s (2001) claims. The questionnaire results showed that the majority of respondents see that the most important factor of sportswear advertising was technical information, followed by general information. In addition, the simulation study demonstrated this in multiple ways, with Generation Y subjects spending more time reading hang tags and inspecting aesthetic printing and embellishment on the garments, as well as Generation Y as a whole spending a longer time reading all the information on the packaging.
It is critical for marketing professionals to consider the specific needs of cohorts in order to capture a wider audience in the compression sportswear market. Kumar and Lim (2008) and Beldona et al. (2009) suggest that Baby Boomers are a group with great spending power and disposable income, a cohort with great purchasing potential. The results of this study support this notion, with a larger percentage of the Baby Boomers reporting that price was very unimportant or not at all important when considering the purchase of compression sportswear. On the other hand the majority of Generation Y respondents stated that price was a very important consideration to them. In order to utilize this powerful group, a number of findings indicate areas that need focus.

Fit and size availability are factors that were ranked as important by female Baby Boomers. During the simulation many subjects stated that the garments do not fit them comfortably and were too tight. They preferred to wear something less skin-tight. Thus it is evident that ignorance on the nature of compression sportswear is prevalent in this cohort. Overall it is found that Baby Boomer women feel that they are a segment that is not catered to with regard to clothing and feel dissatisfied with the options offered by retailers (Holmlund et al., 2011; Wray and Hodges, 2008; Howarton and Lee, 2010). This suggests a need exists, especially for female Baby Boomers, to be better educated about the benefits and the nature of the fitting for compression garments. They are designed to be worn fitted and often at times underneath other garments (Liu and Little, 2009).

It is evident that Generation Y is the main target for the compression sportswear market. The models used in advertising and the amount of technical language are appropriate for their preferred sporting activities and eagerness to remain tech savvy. In addition, Generation Y respondents were highly active in team sports, laying the groundwork for rapid expansion soon after the initial entry of compression sportswear into local circles of sporting and fitness enthusiasts.

It is clear that the use of eye-tracking technology to study consumer purchase behavior provides marketers with valuable information that cannot be from the traditional means of consumer research. This is a technology that consumer marketers and other professionals can implement to gain a better understanding of the needs and wants of their targets, providing a more complete picture to better market and outfit their products to their audience.

Limitations and future research
Limited demographic information was collected from subjects in the simulation study. Hofstede’s (1984) claim that generational cohort theory was not an indicator of consumer behavior, and that skill level and educational background has a greater influence on behavior and preferences has to be taken into consideration. In the present study it was found that generational cohort theory was relevant, but the demographic differences in education was not taken into account.

Due to practical aspects, the questionnaire sample data consisted of internet users and those targeted at the YMCA gym personally, creating a limitation in the breadth of the sample population. The study took place in Australia and Germany, so it would be beneficial to expand research into other countries in order to gain a more comprehensive understanding of generational consumer behavior in the purchase of compression sportswear.

While this study provides a solid foundation of consumer purchase behavior of compression sportswear, a more extensive study of these generational groups and cultural regions would provide further benefit to marketers that focus on these two
important consumer groups. Greater understanding can be obtained from research through in-store observations, conducting focus groups, product trials, or other methods. One of the intentions of the study was to provide a cross-national comparison, however, due to limitations in time and resources this was something that was not addressed in this study. In order to compare and contrast the results that were collected in Germany, the eye-tracking simulation study should be conducted in Australia in order to provide a direct comparison between the countries. This should incorporate a more in depth demographic study of participants. The questionnaire would also need to be completed in Germany, with an appropriate sample size.

This is an early study into the field of compression sportswear for the generational consumer market, providing an important building block for further research into this significant and growing market segment.

References


**About the authors**

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