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Dobbelstein, Roger B. Mason, Wayne  
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Wibke Heidig, Ph.D., Professor of  
Marketing, Department of Business  
Science and Management, Albstadt-  
Sigmaringen University of Applied  
Sciences, Sigmaringen, Germany.

Thomas Dobbelstein, Ph.D., Professor  
of Market Research, Baden-  
Württemberg Cooperative State  
University, Ravensburg, Germany.

Roger B. Mason, Ph.D., Wholesale  
& Retail Leadership Chair, Cape  
Peninsula University of Technology,  
South Africa.

Wayne Jooste, Lecturer, Department  
of Retail Business Management, Cape  
Peninsula University of Technology,  
South Africa.



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Wibke Heidig (Germany), Thomas Dobbelstein (Germany),  
Roger B. Mason (South Africa), Wayne Jooste (South Africa)

# FIRST CHOICE OR FALLBACK OPTION? THE ATTRACTIVENESS OF SOUTH AFRICA'S RETAIL INDUSTRY FOR GEN Y MEMBERS

## Abstract

The wholesale and retail industry is the fourth largest contributor to South Africa's Gross Domestic Product. However, it faces the major challenge of attracting highly skilled and motivated workers. Although South African universities launched programs in retail management, attracting young talents to a career in retailing remains a tough challenge. Drawing on previous findings from the field of graduate decision-making and industry image from other countries, this research examines the perceptions and expectations of Gen Y members with regard to their field of study and their prospective career. A nationwide survey with 1363 South African first year students, in their first week at university, shows significant differences between freshmen enrolled in retail business management and those enrolled in other business majors. While retail students, as compared to other participants, tend to hold stronger positive associations with their field of study and a retail career, majoring in retailing appears to be a fallback option. Over all participants, the analysis reveals that the perception of retailing careers primarily exceeds expectations on attributes that are only of minor importance. When it comes to important career attributes like payment, work-life balance and advancement issues, the retail image lags behind that of other industries. Comparing the field of study with the preferred industry, we identify four different segments of students that qualify to be targeted by companies and universities in different ways.

## Keywords

industry image, retailing, career, Generation Y, South Africa

## JEL Classification

I23, L81, M39, O55

## INTRODUCTION

The wholesale and retail industry worldwide, and in South Africa in particular, faces the major challenge of attracting and retaining highly skilled and motivated workers (Koyana & Mason, 2015). This has led to a shortage of knowledge workers who are considered the major sources of competitive advantage in industries like retailing, where its players tend towards standardizing processes and systems (Sutherland, Torricelli, & Karg, 2002; Templer & Cawsey, 1999). This development applies especially to the retail industry in South Africa, where 80% of local sales originate from four retailers that dominate the market (PricewaterhouseCoopers, 2012). The wholesale and retail industry is the fourth largest contributor to South Africa's Gross Domestic Product while employing approximately 21% of the total workforce (W&RSETA, 2014). As South African retailers are currently making efforts to expand their businesses to the rest of Africa (PricewaterhouseCoopers, 2012), their operating systems are likely

to become lean structures of specialists (Gush, 1996). This development indicates that university students will likely be in high demand for management positions in the future (Oh, Weitz, & Lim, 2016). Surprisingly, however, while some South African universities offer special programs on retail management, attracting young talents to a career in retailing remains a tough challenge.

This problem can be attributed to a number of factors, some of which have gained particular interest in recent studies conducted in the US, UK and Malaysia. Research has found that students and graduates appear to hold negative perceptions towards careers in retailing. In former studies, working in retailing was often associated with store-based activities, requiring low training needs, poor working hours, low compensation, dull and boring work content, and limited advancement (Broadbridge, 2003; Mokhlis, 2014a; Rhoads, Swinyard, Geurts, & Price, 2002; Swinyard, 1981; Swinyard, Langrehr, & Smith, 1991). While some of these associations might stem from retail work experience (Broadbridge, 2003) and poor communication between the industry and its prospective employees (Broadbridge, Maxwell, & Ogden, 2009), it seems that most of them emerge from a stereotypical industry image that is hard to change in the short-run. This “retailing myth” persists stubbornly even in the light of growing graduate recruits and retail course implementation (Broadbridge, 2003). As graduate’s intentions to follow a career in any company will be determined by their expectations and attitude towards working in that particular industry (Richardson, 2009), it can be argued that the retailing industry finds it hard to compete with other industries in the often-cited “war for talent” (Michaels, Handfield-Jones, & Axelrod, 2001). This circumstance might be reinforced by changes in the Generation Y’s (Gen Y) attitude towards work content and career (Mokhlis, 2014a), with graduates being more focused on enjoyable work and a sense of accomplishment, good pay and skill development (Knight, Crutsinger, & Kim, 2006). Since Gen Y university learners build the current and future talent base for retail companies, they represent the starting point for our research in order to investigate their perceptions of a career in retailing in South Africa.

Drawing on previous findings from the field of graduate decision-making and industry image, this research sets out to (1) explore the image newly enrolled students hold of the wholesale and retail industry in South Africa; (2) outline the key factors that are important to South African Gen Y members in choosing their field of study and prospective career; (3) identify student segments that are either more or less likely to strive for a career in retailing. The findings provide a contemporary overview of the attractiveness of retailing careers, thereby filling the literature gap by addressing the South African market. Understanding freshmen’s attitudes towards retailing is beneficial for educators to help them prepare the students for retail careers, for each retail company to assess the career opportunities they provide and for the retail industry as a whole in order to communicate effectively to their prospective workforce. In sum, the insights from our study help retailers to strengthen their employer branding efforts, to unfold their potential as employer of first choice and thus to get on the shortlist of high quality candidates. In what follows, we will first review extant literature on students’ career choices, its determinants and consequences. In the subsequent empirical part, we will first highlight the procedure of our two-step methodological approach before moving on to the survey results. The study concludes with implications for the retail industry in South Africa.

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## 1. LITERATURE REVIEW

In his seminal work on the appeal of retailing to university-trained applicants in the 1980s, Swinyard (1981) portrayed a sobering picture. His study revealed that compared to other marketing disciplines, retailing and sales bring up the rear of the list. Students whose university performance was above average rated a retailing career as signif-

icantly less appealing than their fellow students with lower grades did. The same observation held true for more mature students. Students of 23 years and older found retailing to be more unattractive than their younger counterparts. With open-ended questions Swinyard (1981) encouraged the study participants to unveil their most prominent associations with their preferred career and with a career in retailing. Whereas the

most preferred career was described in terms of “challenging”, “interesting” and “good salary” (in order of importance), retailing was primarily characterized as “dull”, “people-oriented” and “poor salary”. In a follow-up study ten years later, Swinyard et al. (1991) showed that although retailers had become more sophisticated, retailing was evaluated as even less appealing as compared to the earlier study. However, both surveys also revealed that once students had attended a course on retailing, they had a greater preference for a career in retail management, although the rating also decreased between both studies. While these students were more likely to describe retailing careers as positive, the association with “poor working hours”, “poor salary” and “dull” persisted (Broadbridge, 2003; Swinyard, 1981; Swinyard et al., 1991). Swinyard et al. (1991) concluded that the associated characteristics of the job were more decisive for the appeal of retailing than functional aspects of the job itself. The distorted view of the retail industry and its opportunities was termed the “retailing myth” (Swinyard et al., 1991).

Benchmarking these results, Broadbridge (2003) conducted a subsequent study more than another ten years later. Unlike the prior studies, demographic variables and academic ability had no significant influence on the appeal of retailing. Overall, the general assertion of retailing as being perceived as an unattractive career option was strongly supported by the data. Only 2.6% of the undergraduate sample nominated retailing as their first career choice (Broadbridge, 2003). She found that beneath the still existing “retailing myth”, many students already had negative work experiences with retail companies that reinforced their poor image with this industry. Consequently, the question arises as to which factors were found to influence the appeal of the retail industry to university students.

Summarizing prior research, three different categories of factors can be identified that determine the appeal of the retail industry and thus the decision to major in retailing. These factors are inter-related with each other and can be shown to either directly or indirectly influence retail career appeal and intentions. The three categories are: expected job attributes, generation, and the industry image.

### 1.1. Expected job attribute

Because different individuals hold different values and needs, job expectations and job choices differ greatly between applicants (Oh et al., 2016). According to the literature stream on person-organization-fit, applicants choose their employer according to the extent that the organizational and personal characteristics, such as values and goals match each other (Cable & Judge, 1996). This implies that the individual value system and job expectations greatly influence the attractiveness of a retail career. Research has found that as long as expected job attributes (i.e., preferred job attributes) meet job characteristics, commitment, and job satisfaction are high while leaving intentions are low (Verquer, Beehr, & Wagner, 2003). With regard to college students, Gush (1996) found that study participants expected good training and structured development, good career prospects, rapid opportunities for advancement, and responsibility in the long-run. While the retail industry in the sample was able to meet these expectations in the short term, the need for achievement and development was hard to meet in the long run as the daily business routine started to dominate over time (Gush, 1996). Against this background, we strive to disclose the attributes of preferred careers that are important to South African university learners.

### 1.2. Generation

Job expectations do not only differ between individuals, they also depend upon the cohort a person belongs to (Ng, Schweitzer, & Lyons, 2010). Research has shown that members of one generation share specific job expectations due to similar experiences (Eisner, 2005). Today’s graduates largely belong to Generation Y, a collective term for people born between 1980 and 2003 (also referred to as Millennials or Echo Boomers) (Broadbridge et al., 2009; Hurst & Good, 2009). As compared to other business sectors, retailing has traditionally been a youthful industry, where senior positions can be reached at a young age (Broadbridge, Maxwell, & Ogden, 2007). Against this backdrop, understanding the career expectations of Gen Y is crucial in order to form recommendations for the retail industry. Although stereotypic media images still dominate the public impression of this generation, there is a growing body of academic

literature providing a more reliable picture of Gen Y characteristics (see e.g., Broadbridge et al., 2007; Martin, 2005; Mokhlis, 2014b). Some of these distinguishing attributes are confidence, self-reliance and passion. In contrast to other generations, Gen Y members hold a distinct desire to achieve work-life balance and fast success in their employment (Broadbridge et al., 2009; Eisner, 2005; Retail Merchandiser, 2003). A study conducted by Broadbridge et al. (2009) showed that some characteristics of retail jobs aligned with these generation specific expectations (e.g., lively and fast paced environment), while others (e.g., few career prospects and poor payment) were quite the opposite, thereby diminishing the perceived attractiveness of retail careers. Because South African society faces high socio-economic inequalities (UNDP, 2015), there is reason to expect that South African Millennials hold expectations that are partly different than those of their American counterparts (Dicey, 2016). An international study conducted by Deloitte (2016) gives a first impression of South African Gen Y's expectations. While, for the majority of countries included in the survey, a good work-life balance was the most important priority when evaluating job opportunities (while excluding salary), the opportunity for career progression was the strongest driver for the 200 South African participants. Towards this end, an academic study on career specific expectations of Gen Y members in South Africa is missing. Our research intends to provide the first insight into this topic.

### 1.3. Industry image

In the replication study of Swinyard et al. (1991), the authors found that the appeal of retailing was influenced more by associated characteristics than by functional aspects of the job. These retail-specific associations form the "retail industry image". According to Burmann, Schaefer, and Maloney (2007), an industry image "is a set of associations that is firmly anchored, condensed, and evaluated in the minds of people concerning a group of companies, which, from the point of view of an individual, supplies the same customer groups with the same technologies for the fulfilment of the same customer needs" (p. 159). An industry image is not solely the sum of all corporate images within this industry; it is rather the result of social interactions and beliefs that exist

within a certain group of stakeholders (Podnar, 2004). The industry image has an influence on the corporate brand image and reputation (Cable & Graham, 2000) of each company within this industry (Burmann et al., 2007), which in turn affects interest and application intentions (Barber, 1998; Manpower, 2011; Rynes, 1991). As documented in prior research from the US and UK, the retail industry image is largely stereotyped as providing long work-hours, monotonous work, poor payment, limited advancement and being people oriented (Broadbridge, 2003). While some of these aspects are rooted in the previous job experiences of the study participants, others may be attributed to poor or missing communication efforts between the retail industry and the prospective applicants (Broadbridge, 2003; Broadbridge et al., 2009). The current study builds upon these insights and strives to determine the key attributes South African students associate with the South African retail industry.

## 2. METHODOLOGY

To address the proposed research questions, a two-step methodological approach was applied. First, a qualitative pre-study was conducted to provide a more comprehensive picture of South African university learners' study choice behavior and industry intentions. The qualitative study served a major purpose: because prior studies in the field of students' industry intentions primarily concentrated on the British and American markets, existing items and scales needed a check on appropriateness in the South African context. Therefore, we conducted narrative telephone interviews with twelve first year students majoring in retail management and six human resource managers from South African retailers. The student participants were asked to reflect on their decision process in selecting a field of study, the factors that drove their decision and the key associations they hold of the South African retail industry. In order to enrich these insights with third party perceptions, we also interviewed human resource representatives on applicants' motivations and relevant information sources. The results of these interviews were used to adapt the measures in the subsequent survey (where necessary) in order to ensure sound validity.

Second, a quantitative study was conducted. The survey consisted of self-administered paper-and-pencil questionnaires that were sent to the business departments of five participating South African universities, namely Cape Peninsula University of Technology, Durban University of Technology, Tshwane University of Technology, University of Johannesburg and Vaal University of Technology. These universities were chosen, as they all offered a three-year course in retail. In each university, newly enrolled management students were accessed during class time in their first week to ensure high participation. In a letter of information and informed consent on the first page of the questionnaire, the students were informed about the purpose of the study, the estimated completion time of 15 minutes, anonymity and voluntariness of participation. This collection method resulted in 1426 returned questionnaires. After eliminating 63 questionnaires due to incomplete or unlikely response pattern (for this procedure also see Mokhlis, 2014a), the final non-probability sample consisted of 1363 usable questionnaires.

In general, the aim of the questionnaire was to gain a better understanding of students' decision for a field of study and its driving factors, as well as to explore the image of the retail industry and the most preferred industry. Because a comparative study from South Africa is missing, we refrained from proposing hypotheses. Instead, the structure of the questionnaire was guided by our research questions.

### 3. RESULTS

#### 3.1. Description of the sample

The last section of the questionnaire was used to obtain demographic information about the participating subjects. As can be seen in Table 1, more than half of our participants were female (54.9%). The largest number of participants study at the Cape Peninsula University of Technology (39.3%) followed by the Vaal University of Technology (30.6%). The age distribution shows that 99.6% of all participants can be classified as being Gen Y members, while most of them were born in 1997 (28.8%).

**Table 1.** Demographics

Variable	Category	Sample % <sup>a</sup>
Gender	Female	54.9
	Male	45.1
Race	Black	83.8
	White	1.9
	Colored	11.0
	Indian	2.7
	Other	.7
Institution	Cape Peninsula University of Technology	39.3
	Durban University of Technology	13.3
	Tshwane University of Technology	9.8
	University of Johannesburg	7.0
	Vaal University of Technology	30.6

Note: N = 1363. <sup>a</sup> Adjusted (valid) percentages excluding missing observations.

At the beginning of the questionnaire, we asked the students to indicate their current field of study. The list was limited to management majors only and encompassed 30 options that represent all available business majors in South African universities (plus an "other" – option that could be named). As Table 2 shows 26.5% of all respondents are enrolled in retail business management as their major field of study. This overproportioned representation of retail students in the sample is due to the fact that we only included universities in the sample that offered retail management as a business major. This procedure ensured a sample size of retail students (as compared to non-retail students) that was big enough to allow for comparisons to be made.

**Table 2.** Current field of study

Category	Sample % <sup>a</sup>
Retail Business Management	26.5
Marketing and Marketing Management	18.9
Human Resource Management	10.2
Management	9.6
Entrepreneurship	7.1
Logistics Management	6.4
Internal Auditing	5.8
Sports Management	4.4
Business Management	3.3
Tourism Management	2.7
Accountancy	1.9
Other	1.1

Note: N = 1363. <sup>a</sup> Adjusted (valid) percentages > 1% excluding missing observations.



### 3.2. Consideration set of studies

In order to understand if the chosen field of study was their top of mind alternative, we asked participants to indicate their level of agreement with the statement “The chosen field of study was my first and preferred choice” anchored with strongly disagree (1) and strongly agree (5). An independent samples t-test revealed a significant difference between retail and non-retail student ( $M_{\text{retail}} = 2.45$  vs.  $M_{\text{non-retail}} = 3.25$ ;  $t(1260) = -8.180$ ,  $p < .001$ ). That is, as compared to students from other subjects, retail students were less likely to label their current study as their preferred choice. We assume that similar to the product choice context (see e.g., Nedungadi, 1990), future students form sets of alternative majors to choose between. Therefore, we also asked the respondents to specify all other subjects they also considered relevant before starting their studies using the same list as for the current field of study. On average, the consideration set size encompassed 1.8 different majors. Table 3 shows the differences between students currently studying retail management and students enrolled in other majors. While “business management”, “logistics management” and “retail business management” form the top consideration set for retail students, non-retail students especially considered “accountancy”, “business management” and “human resource management” as attractive fields of studies. For this group of students, only 3.6% of the respondents considered retail business management as a prospective major. These results indicate that retail and non-retail students differ in terms of their consideration set, which might result from differences in the underlying decision process.

**Table 3.** TOP 3 consideration set of majors

Retail Students	% Cases <sup>a</sup>	Non-retail students	% Cases <sup>a</sup>
Business Management	32.0	Business Management	19.3
Logistics Management	22.3	Accountancy	14.2
Retail Business Management	21.7	Human Resource Management	13.5

Note: N = 1363. <sup>a</sup> Multiple responses possible.

Accordingly, we also asked the participants to evaluate the extent to which they regard retailing as a field of study as sensible, wise and useful. Again, using an independent samples t-test depicts significant differences between retail and non-retail students. That is, retail students assess the decision in favor of a study in retail management as significantly more sensible ( $M_{\text{retail}} = 3.69$  vs.  $M_{\text{non-retail}} = 3.09$ ;  $t(672) = 6.168$ ,  $p < .001$ ), wise ( $M_{\text{retail}} = 3.99$  vs.  $M_{\text{non-retail}} = 3.28$ ;  $t(722) = 7.518$ ,  $p < .001$ ) and useful ( $M_{\text{retail}} = 4.23$  vs.  $M_{\text{non-retail}} = 3.50$ ;  $t(724) = 7.919$ ,  $p < .001$ ) than students from other business disciplines.

### 3.3. Study decision influences

Students were asked about various people and factors that influenced their decision to choose a specific field of study. Participants were prompted to assess the role that each of the eleven given information sources played in their decision process on a five-point Likert scale with one corresponding to “no role” and five corresponding to “critical role”. The list of sources was adapted from Mokhlis (2014a) and extended to the South African context. That is, based on the results of the narrative interviews we also included “career guidance of the SETA” and “company visits to TVET colleges to explain their industry” as possible sources in the list.<sup>1</sup> Table 4 shows that company websites play the biggest role in the decision on what to study, followed by career guidance at school and consulting family/friends/acquaintances (e.g., employees from the industry). The finding that company websites, offering information on careers in a specific industry, represent the most important factor in the decision process offers great opportunity for retailers to provide their industry with a positive image through their marketing efforts. As opposed to this, traditional information material provided by companies and career guidance offered by the SETA played the least important role in the decision.

1 The SETAs (Sector Education and Training Authorities) were re-established in South Africa in 2005 to increase sector specific skills and thus to implement the National Skills Development Strategy. They offer various information and training programs for each of the representing 23 sectors in South Africa ([www.seta-southafrica.com](http://www.seta-southafrica.com)).

**Table 4.** Role of various information sources for study decision

People/factor	Mean
Websites of companies on career in industry	3.41
Consulting friends, family or acquaintances	3.26
Career guidance at school	3.25
Traditional media (e.g., TV, magazines, radio)	3.14
Social media (e.g., Facebook)	3.11
University open days	3.10
Companies visiting schools / TVET colleges to explain their industry	2.94
Life orientation and Vocational Guidance Counsellor	2.94
Job shadowing (e.g., internship, own work experience)	2.92
Information material of the companies (e.g., brochures)	2.84
Career guidance of the SETA	2.84

Note: The higher the mean, the greater the role, N = 1363.

In order to examine possible differences between retail and non-retail students, a MANOVA was employed. The analysis revealed a significant difference between both student groups regarding the study decision influences (Wilk's  $\lambda = .947$ ,  $p < .001$ ). Retail students significantly differed from non-retail students in the role family/friends/acquaintances ( $F = 4.001$ ,  $p < .05$ ), social media ( $F = 8.105$ ,  $p < .01$ ), traditional media ( $F = 13.826$ ,  $p < .001$ ), life orientation/Vocational Guidance Counsellor ( $F = 3.983$ ,  $p < .05$ ), career guidance at school ( $F = 15.148$ ,  $p < .001$ ), companies visiting schools ( $F = 8.665$ ,  $p < .01$ ), university open days

( $F = 23.429$ ,  $p < .001$ ), and job shadowing ( $F = 3.943$ ,  $p < .05$ ), played for their decision. The remaining three sources did not significantly differ between both student groups ( $p > .149$ ). The means of the ratings are reported and ranked in Table 5 for retail and non-retail respondents. Over and above the observation that retail students reported lower influences across all factors, the table also shows that university open days and companies visiting schools were less important for their decision on what to study than career guidance of the SETA and information material provided by companies.

### 3.4. Preferred career area

We asked participants to indicate the industry/career area they would prefer most to work in upon graduation from a given list of eleven areas especially relevant to business graduates in South Africa. These industries were retrieved from an extensive market analysis and the qualitative interviews. The analysis shows that over all participants, careers in marketing/advertising are most prominent, followed by retailing and government/public services. At first glance, this finding seems encouraging compared to prior research that found retailing careers to be less appealing. Although this result compares favorably with the fifth and seventh position in prior research studies from the UK (Broadbridge, 2003; Swinyard, 1981; Swinyard et al., 1991), splitting the sample into retail and non-retail students provides a more conservative picture. As can be seen in Table 6, retailing is the number one industry for only 58.1% of all

**Table 5.** Retail and non-retail students' ratings of information sources

People/factor	Retail students			Non-retail students		
	M	SD	Rank	M	SD	Rank
Websites of companies on career in industry	3.30	1.28	1	3.43	1.19	1
Consulting friends, family or acquaintances	3.10	1.33	2	3.29	1.23	2
Career guidance at school	2.90	1.49	3	3.32	1.39	3
Traditional media (e.g., TV, magazines, radio)	2.85	1.37	5	3.22	1.28	4
Social media (e.g., Facebook)	2.87	1.43	4	3.16	1.31	5
University open days	2.68	1.47	9	3.22	1.44	4
Companies visiting schools/TVET colleges to explain industry	2.66	1.45	10	2.99	1.49	6
Life orientation and Vocational Guidance Counsellor	2.73	1.33	8	2.94	1.33	8
Job shadowing (e.g., internship, own work experience)	2.73	1.49	8	2.96	1.55	7
Information material of the companies (e.g., brochures)	2.75	1.29	7	2.86	1.27	9
Career guidance of the SETA	2.77	1.41	6	2.78	1.45	10

Note: The higher the mean, the greater the role, N = 1363.

**Table 6.** Students' preferred industry after graduation

Industry	Overall		Retail students		Non-retail students	
	% <sup>a</sup>	Rank	% <sup>a</sup>	Rank	% <sup>a</sup>	Rank
Marketing/advertising agency	24.6	1	7.5	2	29.7	1
Retailing	17.0	2	58.1	1	3.2	8
Government/public services	13.4	3	5.9	4	15.9	2
Financial services/insurance/banking	11.1	4	6.5	3	12.7	3
Taxation/accounting	7.7	5	1.6	9	9.9	4
Consumer goods manufacturing	4.6	6	2.2	7	5.6	5
Tourism/hospitality	3.7	7	2.5	6	4.2	6
Education	3.2	8	4.3	5	2.9	9
Information/communication technology	2.9	9	2.2	7	3.3	7
Automotive	1.8	10	.9	10	2.1	10
Consulting	1.6	11	1.9	8	1.6	11
Other <sup>b</sup>	8.3		6.5		8.9	

Note: N = 1363. <sup>a</sup> Adjusted (valid) percentages excluding missing observations. <sup>b</sup> Other preferred industries not mentioned in the list included such as fashion design, personal selling and safety management.

participating students enrolled in retail management studies. As a general notion, one can assume that occupational choices are strongly associated with college major choice, because the field of study forms a substantial investment in human capital (Wiswall & Zafar, 2015). Against this background, it is surprising that 41.9% of the participating retail students would prefer a career in other areas like marketing or financial services. Moreover, it is even more astonishing that a career in retailing is only appealing for 3.2% of all non-retail students, leaving retailing ranked in the eighth position. Overall, this shows that also in South Africa, the retail industry struggles to be appealing to young university learners.

By cross tabulating the current field of study with the preferred industry of the participants, we created a classification of four different student types. These categories can be distinguished according to the reasons that drove the decision towards or against retailing as a field of study. In the questionnaire we asked the students to rate the extent to which different reasons influenced their study decision on a five-point Likert scale. Students received a list of six pre-formulated statements. A one-way ANOVA shows significant differences on three of the reasons that can be taken from Table 7. Additionally, the students were also prompted to name other reasons in an open field. We analyzed the content of these answers and clustered them according to their similarity. In what follows, the results of the

**Table 7.** Students' reasons for study choice

Reasons for study choice	Retail students		Non-retail students		F	p
	Prefer retail industry	NOT prefer retail industry	Prefer retail industry	NOT prefer retail industry		
	Mean	Mean	Mean	Mean		
A family member/friend works in this field.	2.21	2.24	2.52	2.26	.327	.806(n.s.)
I went to a consultant who tested me and told me which area fits best for me.	1.74	1.52	1.96	1.77	1.8145	.143(n.s.)
I want to open my own business in this field.	4.14	3.51	4.28	2.71	6.424	.000
I got a bursary in this field.	1.92	1.74	2.14	1.66	2.685	.045
I worked in this field before, e.g., as a part-time worker or after school.	1.96	1.95	1.86	1.73	1.924	.124(n.s.)
This was the only field of study that I could get into.	2.16	3.05	2.08	2.21	10.686	.000

Note: The higher the mean, the stronger the influence, N = 1363. n.s. = not significant.



	Retail students	Non-retail students
Prefer retail industry	Group 1: <b>“Love marriage”</b>	Group 2: <b>“Love at 2<sup>nd</sup> sight”</b>
NOT prefer retail industry	Group 3: <b>“Arranged marriage”</b>	Group 4: <b>“Not interested”</b>

**Figure 1.** Student-retail relationships

ANOVA and the content analysis help to characterize four identified student types.

As can be seen in Figure 1, retail students that prefer to work in the retail industry form the first group. As compared to students who are oriented towards other industries, these students want to open their own business. Thirteen students from this group also expressed personal reasons in the open field. Love and passion towards the retail business were the most frequently mentioned reasons, followed by an inspirational mentor from the retail area. The following statements of two participants exemplify this:

“I always loved the retail industry and would love to become a good retailer in the future”. “...my role model is a retail manager, so that gave me a high influence to go for this field”.

Because the decision towards retailing in this student group is based upon long-term commitment and affection towards the retail business, we describe the student-retail relation as a “love marriage”.

In the second group, non-retail students would prefer to work in the retail industry. Although this group is quite small (3.2% of all non-retail students) they should be of great interest to universities and the retail business. The analysis shows that similar to group one students, they are also keen to open their own businesses. It seems that a bursary for a subject different from retailing drove their study decision. This would explain why, in this group, only two open answers were given (i.e., “research”, “still on waiting list”). It shows that these students find it hard to give reasons for their chosen study. Instead, they see their future in a retail career. Thus, their relationship to retailing is a “love at second sight”.

The third group of students is the most critical one, but not least because 41.9% of all retail stu-

dents belong to it. They study retail management but strive for a career in another industry. The ANOVA shows that students from this group are significantly more likely than the other groups to state that retailing was the only field of study they could get into ( $F = 10.868, p < .000$ ). This result is also reflected in the open answers. Eight out of twelve statements expressed that the favorite major was already full and the student was placed in retailing. Because these students show low levels of affective attachment to retailing and hold preferences for other industries, we call their relationship to retailing an “arranged marriage”.

Finally, the fourth group comprises non-retail students with no preference for a retail career. The given reasons for the chosen field of study were manifold. Most often, the students cited their love for a specific major and the perceived fit to their personality. This group of students is of minor interest to the retail business. They are simply “not interested” in a relationship with the retail business.

### 3.5. Important career factors and the retail industry image

To address the first two research objectives, study participants were asked to rate the importance of various career factors in choosing an industry. Therefore, we integrated the functional industry image scale introduced by Burmann et al. (2007) and expanded the list by attributes taken from Richardson (2009), Broadbridge (2003) and the qualitative interviews. In total, each participating student provided importance ratings on twenty-six attributes ranging from not important at all (1) to very important (5). The same list was used to ask the participants to what extent these attributes applied to the retail industry. Again, a five-point Likert scale was employed (not true at all (1) – very true (5)). Table 8 shows the mean importance ratings, as well as the mean image ratings partici-

pants hold of retail careers. The first noticeable fact is that for six attributes (“working with different types of people”, “challenging task”, “close contact with customers”, “many international companies”, “quick transfer of responsibility”, and “possibility to work in family owned-business”) the perception of a career in retailing met (i.e., non-significant difference) or exceeded (i.e., positive difference) the importance ratings. However, five of them belong to the lower part of the importance list. That is, in the student’s perception, retailing primarily exceeds their expectations on attributes that are of minor importance. The opposite holds true for the remaining career attributes. For the most important career attributes like “good career opportunities”, “good prospects in the job market”, “good

opportunities for further training”, “opens opportunities to work in other industries”, “chances for personal growth”, and “good work-life balance” students were significantly more likely to rate their importance more highly than they would rate a career in retailing. As can be seen in Table 8, this also applies to the remaining attributes from the list. With regard to an importance-perception gap, four attributes can be identified that show mean differences of .60 and more. These are “good career opportunities”, “good work-life balance”, “high starting salary”, and “high wage increases”. That is, in the perception of the students, careers in the South African retail industry lag behind their ascribed importance, when it comes to payment, work-life balance and advancement issues.

**Table 8.** Importance ratings and image of retail career

Attributes	Average importance rating <sup>a</sup>	Average rating of retail career	Mean difference	t-value	p
Good career opportunities	4.74	4.03	-0.71	17.310	.000
Good prospects in job market	4.55	4.00	-0.55	12.965	.000
Good opportunities for further training	4.52	4.12	-0.40	9.547	.000
Opens opportunities to work in other industries	4.46	3.92	-0.54	11.132	.000
Chances for personal growth	4.46	4.03	-0.43	8.766	.000
Good work-life balance	4.41	3.72	-0.69	13.859	.000
Rapid growth and guaranteed future	4.40	3.88	-0.52	11.417	.000
Working with different types of people	4.40	4.35	-0.05	1.104	.270 (n.s.)
Possibility to improve service in the industry	4.36	4.08	-0.28	6.652	.000
Good cooperation with colleagues and superiors	4.32	4.02	-0.30	6.986	.000
Diversity of job content	4.17	3.79	-0.38	8.134	.000
Many big companies	4.16	4.06	-0.10	2.185	.029
High degree of job security	4.14	3.64	-0.50	11.117	.000
Social responsibility	4.14	3.83	-0.31	6.159	.000
Many innovative companies	4.12	3.79	-0.33	7.110	.000
Challenging task	4.01	3.99	-0.02	.225	.822 (n.s.)
Close contact with customers	3.99	4.13	+0.14	-3.786	.000
Attractive working hours	3.97	3.46	-0.51	9.445	.000
Dynamic industry	3.95	3.80	-0.15	3.899	.000
High wage increases	3.92	3.31	-0.61	10.685	.000
Work that is fun	3.87	3.59	-0.28	4.812	.000
Many international companies	3.85	3.89	+0.04	.086	.932 (n.s.)
High starting salary	3.80	3.17	-0.63	11.407	.000
Chances to go overseas	3.76	3.42	-0.34	5.548	.000
Quick transfer of responsibility	3.62	3.69	+0.07	-1.220	.223 (n.s.)
Possibility to work for family-owned business	3.00	3.25	+0.25	-4.077	.000

Notes: N = 1363; n.s. = not significant. <sup>a</sup> Attributes are arranged in ascending order with regard to their importance ratings, with higher mean values indicating higher importance.

The attributes associated with a career in the retail industry were tested to see if there were any significant differences between retail and non-retail students. A MANOVA revealed significant differ-

ences between these two groups of respondents (Wilk’s  $\lambda = .897, p < .001$ ). Over all attributes, retail students held more positive associations than non-retail students. Table 9 illustrates that seventeen

out of twenty-six attributes showed significant differences. For example, retail students were more likely to agree that the retail industry provides chances for personal growth, good career opportunities, the opportunity to work in another industry and high degrees of job security. This finding extends results from prior research that showed students with prior retail course attendance to hold more positive associations than their non-retail trained counterparts do (Swinyard, 1981;

Swinyard et al., 1991). Because our sample only included first week students, prior retail courses do not provide an explanation for this difference. Instead, one might expect that heightened retail involvement in the study decision process might account for this observation. However, both student groups doubt that retailing offers high starting salaries, high wage increases and attractive working hours, as indicated by low evaluations and insignificant differences.

**Table 9.** Retail and non-retail students' ratings of retail career image

Attributes	Retail students			Non-retail students			F	p
	M	SD	Rank	M	SD	Rank		
Working with different types of people	4.53	.88	1	4.30	1.06	1	6.605	.010
Good opportunities for further training	4.36	.946	2	3.97	1.16	6	16.619	.000
Chances for personal growth	4.36	.87	3	3.85	1.27	11	25.943	.000
Good career opportunities	4.32	1.01	4	3.92	1.24	8	15.442	.000
Many big companies	4.31	.99	5	4.04	1.21	3	7.038	.008
Possibility to improve service in the industry	4.28	.95	6	4.01	1.17	4	7.826	.005
Challenging task	4.25	.99	7	3.95	1.20	7	8.709	.003
Opens opportunities to work in other industries	4.24	1.02	8	3.80	1.33	14	16.512	.000
Close contact with customers	4.19	1.12	9	4.12	1.20	2	.412	.521 (n.s.)
Good prospects in job market	4.18	.98	10	3.90	1.19	9	8.137	.004
Rapid growth and guaranteed future	4.11	1.06	11	3.85	1.26	12	6.328	.012
Many international companies	4.10	1.08	12	3.90	1.26	10	3.562	.060 (n.s.)
Good cooperation with colleagues / superiors	4.08	.994	13	4.01	1.14	5	.578	.447 (n.s.)
Social responsibility	4.06	1.10	14	3.76	1.30	15	8.043	.005
Dynamic industry	4.06	.97	15	3.82	1.23	13	5.744	.017
Many innovative companies	4.05	1.01	16	3.75	1.27	17	7.944	.005
Good work-life balance	3.97	1.15	17	3.65	1.38	19	8.278	.004
Diversity of job content	3.96	1.08	18	3.75	1.33	18	3.884	.049
High degree of job security	3.91	1.12	19	3.54	1.37	21	10.659	.001
Work that is fun	3.77	1.26	20	3.55	1.37	20	3.642	.057 (n.s.)
Quick transfer of responsibility	3.75	1.13	21	3.76	1.26	16	.010	.921 (n.s.)
Chances to go overseas	3.71	1.28	22	3.37	1.51	23	7.210	.007
Attractive working hours	3.62	1.31	23	3.46	1.46	22	1.769	.184 (n.s.)
High wage increases	3.42	1.32	24	3.29	1.46	24	1.179	.278 (n.s.)
Possibility to work for family-owned business	3.28	1.46	25	3.28	1.59	25	.000	.988 (n.s.)
High starting salary	3.25	1.38	26	3.23	1.46	26	.041	.841 (n.s.)

Note: The higher the mean, the more participants believe to find the attribute in the retail industry, N = 1363, n.s. = not significant.

Another MANOVA to explore gender differences in retail specific associations showed no significant difference between men and women (Wilk's  $\lambda = .962, p = .719$ ).

To test if the often cited "retailing myth" also exists in South Africa, we included three statements in the questionnaire that represent common biases and associations, which participants occasionally expressed in the narrative inter-

views. To unveil if these prejudices are common amongst respondents, we asked participants to express their level of agreement. The five-point Likert scale was anchored with strongly disagree (1) and strongly agree (5). Over all participants, the mean values for these items range between 2.52 and 2.83. An independent samples t-test revealed (marginal) significant differences between retail and non-retail students for all three statements "The retail sector is less impor-

tant than the commodity and industrial sector” ( $M_{\text{retail}} = 2.29$  vs.  $M_{\text{non-retail}} = 2.66$ ;  $t(783) = -4.014$ ,  $p < .001$ ); “Most people think: If you can’t make it anywhere else, you work in retailing” ( $M_{\text{retail}} = 2.69$  vs.  $M_{\text{non-retail}} = 2.91$ ;  $t(793) = -1.839$ ,  $p = .066$ ); and “Retailing means working in a shop” ( $M_{\text{retail}} = 2.61$  vs.  $M_{\text{non-retail}} = 2.94$ ;  $t(785) = -2.943$ ,  $p < .01$ ). Accordingly, retail students were less likely to fall prey to the “retailing myth” as compared to students from other disciplines.

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## DISCUSSION AND CONCLUSION

The current study investigated first year university learners’ attitudes, in their first week at university, towards retailing as a field of study and as a prospective career option. The study among 1363 South African beginners shows that a career in retailing is only appealing to a few Gen Y members. They believe a career in retailing does not offer them those attributes they consider important. It shows that for twenty out of twenty-six attributes retailing significantly lags behind important expectations of an industry. Although our investigation shows that current retail students hold more beneficial associations of a career in their chosen field of study, the often cited “retailing myth” also exists in South Africa. That is, retailing is often associated with unattractive working hours, low wage increases and low starting salaries. As a consequence, a career in retailing ranks eighth among the given list of industries for non-retail students. Most surprisingly, only 58.1% of all participating retail students specified retailing as their preferred career choice. This highlights the need for the industry, all retail companies and educators to implement strategies that attract and inform highly motivated university students prior to and during their studies. For each of the four identified student groups, different implications will be addressed.

*Implications for the “love marriage” group:* Students from this group hold a passionate relationship with their field of study and look forward to working in the retail industry. All communication efforts should focus on this emotionally charged commitment towards a career in retailing. That is, communication strategies should combine information on functional attributes with storytelling and experience-based recruitment. In order to retain their commitment, universities and employers should be keen to address these students’ expectations, when it comes to the most important career attributes like advancement opportunities, further training and future prospects. Underpinning the integration of these factors, the selection process for retail students should also focus on applicants’ personal commitment to the industry.

*Implications for the “love at second sight” group:* Although this group of students in our study was numerically small, they are of great importance for the retail industry. These students strive for a retail career although they are currently enrolled in other majors. Remarkably, these students could not give any reasons for their study decision. One might argue that their current field of study is rather a fallback option than their first choice. These students might have missed the entry requirements of a retail management program or they were faced with capacity restrictions. Accordingly, universities should review their selection processes with regard to the selection criteria and capacity restraints.

*Implications for the “arranged marriage” group:* Because of its size and contradictory behavior, this group of students is most critical for the retail ‘industry’s’ future recruitment success. Although these students are enrolled in retail management, they prefer a different industry for their future careers. The major reason for this disjunction can be seen in the fact that retail management was the only field of study the students could get into. Although this might cause misallocations of resources (which calls for changes in the selection process), it also offers the possibility to universities and the industry to prove that the retailing myth is incorrect. Universities should encourage students to take advantage of internships, right from the beginning of their studies. Moreover, retail companies should offer classroom presentations, case-study sessions and mentoring programs to accompany retail students through their studies. As the major source of information, the career websites should connect to the experience realm of prospective students to encourage them right from the early decision stages.

*Implications for the “not interested” group:* As with any field of study, there are also students who are not interested in studying retailing or working in this industry. They hold a “love marriage” with other majors. Although they are not the target audience for future recruitment activities, they are important as customers and advice givers to their peer group. Because the industry image strongly influences the corporate image of each retailer within the retail industry, all market players should entrust a retail association with image building actions. Other countries, for example Germany, have already launched joint communication campaigns in order to counter the “retailing myth” (Hebben, 2011).

As with other studies, we acknowledge some limitations relative to our data collection. Although our sample comprised business students from five South African universities, generalizability of the results is limited. Considering that South Africa has twenty-six public universities, many private universities and colleges, and more than one million students in higher education with a myriad of majors (BusinessTech, 2015), our results are only applicable to those students majoring in business. For future studies it would be interesting also to include non-business students in the sample – the retail sector also holds potential for students studying disciplines such as law, engineering, food science, fashion design, etc. Such inclusions might result in even sharper differences between groups of students (Mokhlis, 2014a). Moreover, our study only assessed retail specific opinions from first year students within their first week of studies. Future research should follow up on these results or employ longitudinal research designs in order to show how the retail image evolves over time, and to assess efficiency of image-building actions.

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## REFERENCES

1. Barber, A. E. (1998). *Recruiting Employees: Individual and Organisational Perspectives*. Thousand Oaks: Sage Publications.
2. Broadbridge, A. M. (2003). The appeal of retailing as a career 20 years on. *Journal of Retailing and Consumer Services*, 10(5), 287-296.
3. Broadbridge, A. M., Maxwell, G. A., and Ogden, S. M. (2007). 13\_2\_30: Experiences, perceptions and expectations of retail employment for Generation Y. *Career Development International*, 12(6), 523-544.
4. Broadbridge, A. M., Maxwell, G. A., and Ogden, S. M. (2009). Selling retailing to Generation Y graduates: recruitment challenges and opportunities. *The International Review of Retail, Distribution and Consumer Research*, 19(4), 405-420.
5. Burmann, C., Schaefer, K., and Maloney, P. (2007). Industry image: Its impact on the brand image of potential employees. *Journal of Brand Management*, 15(3), 157-176.
6. BusinessTech. (2015). Here are South Africa's 26 universities. Retrieved from <http://businesstech.co.za/news/general/101412/here-are-south-africas-26-universities/> (accessed on 22.09.2016).
7. Cable, D. M., and Graham, M. E. (2000). The determinants of job seekers' reputation perceptions. *Journal of Organizational Behavior*, 21(8), 929-947.
8. Cable, D. M., and Judge, T. A. (1996). Person-Organization Fit, Job Choice Decisions, and Organizational Entry. *Organizational Behavior and Human Decision Processes*, 67(3), 294-311.
9. Deloitte. (2016). *The 2016 Deloitte Millennial Survey: Winning over the next generation of leaders*. Retrieved from <http://www2.deloitte.com/content/dam/Deloitte/global/Documents/About-Deloitte/gx-millennial-survey-2016-exec-summary.pdf> (accessed on 05.08.2016).
10. Dicey, L. (2016). *South African millennials different from US millennials*. Retrieved from <http://www.financialmail.co.za/red-zone/2016/01/13/south-african-millennials-different-from-us-millennials> (accessed on 01.08.2016).
11. Eisner, S.P. (2005). Managing Generation Y. *S.A.M. Advanced Management Journal*, 70(4), 4-15.
12. Gush, J. (1996). Graduates into the retail industry: an assessment of the nature and causes of mismatches between the needs and expectations of the



- retail industry and its graduate employees. *International Journal of Retail & Distribution Management*, 24(9), 5-12.
13. Hebben, M. (2011). *Handelsverband HDE gibt Startschuss für Imagekampagne*. Retrieved from <http://www.horizont.net/marketing/nachrichten/-Handelsverband-HDE-gibt-Startschuss-fuer-Imagekampagne-102295> (accessed on 13.06.2016).
  14. Hurst, J. L., and Good, L. K. (2009). Generation Y and career choice: The impact of retail career perceptions, expectations and entitlement perceptions. *Career Development International*, 14(6), 570-593.
  15. Knight, D. K., Crutsinger, C., and Kim, H. (2006). The Impact of Retail Work Experience, Career Expectation, and Job Satisfaction on Retail Career Intention. *Clothing and Textiles Research Journal*, 24(1), 1-14.
  16. Koyana, S., and Mason, R. B. (2015). *Transformation: Evaluation of the role of the W&RSETA in the last 10 years and the way forward*. Retrieved from [http://wrlc.org.za/wp-content/uploads/2016/05/2015\\_12-WRSETA-TRANSFORMATION-Report-.pdf](http://wrlc.org.za/wp-content/uploads/2016/05/2015_12-WRSETA-TRANSFORMATION-Report-.pdf) (accessed on 02.05.2016).
  17. Manpower. (2011). *2011 Talent Shortage Survey*. Retrieved from <http://www.manpowergroup.com/wps/wcm/connect/07459525-3de8-4888-a576-84ddcd843454/2011+Talent+Shortage+Survey.pdf?MOD=AJPERES> (accessed on 18.09.2016).
  18. Martin, C.A. (2005). From high maintenance to high productivity: What managers need to know about Generation Y. *Industrial and Commercial Training*, 37(1), 39-44.
  19. Michaels, E., Handfield-Jones, H., and Axelrod, B. (2001). *The War for Talent*. Boston: Harvard Business Review Press.
  20. Mokhlis, S. (2014a). Marketing Students' Perception of Retailing as a Career Option. *The Social Sciences*, 9(6), 486-491.
  21. Mokhlis, S. (2014b). What Are Students' Perceptions of Retailing as a Career Choice?. *Academic Journal of Interdisciplinary Studies*, 3(1), 363-368.
  22. Nedungadi, P. (1990). Recall and Consumer Consideration Sets: Influencing Choice without Altering Brand Evaluations. *Journal of Consumer Research*, 17(3), 263-276.
  23. Ng, E. S. W., Schweitzer, L., and Lyons, S. T. (2010). New Generation, Great Expectations: A Field Study of the Millennial Generation. *Journal of Business and Psychology*, 25(2), 281-292.
  24. Oh, H., Weitz, B., and Lim, J. (2016). Retail career attractiveness to college students: Connecting individual characteristics to the trade-off of job attributes. *Journal of Retailing and Consumer Services*, 31, 345-354.
  25. Podnar, K. (2004). Is It All A Question of Reputation? The Role of Branch Identity (The Case of an Oil Company). *Corporate Reputation Review*, 6(4), 376-387.
  26. PricewaterhouseCoopers. (2012). *South African retail and consumer products outlook 2012-2016*. Retrieved from <https://www.pwc.co.za/en/assets/pdf/retail-and-consumer-products-outlook-2012-2016.pdf> (accessed on 25.06.2016).
  27. Retail Merchandiser. (2003). Retail Employers Must Understand Gen Y Values. *Retail Merchandiser*, 43(2), 12.
  28. Rhoads, G. K., Swinyard, W. R., Geurts, M. D., and Price, W. D. (2002). Retailing as a career: a comparative study of marketers. *Journal of Retailing*, 78(1), 71-76.
  29. Richardson, S. (2009). Undergraduates' perceptions of tourism and hospitality as a career choice. *International Journal of Hospitality Management*, 28(3), 382-388.
  30. Rynes, S. L. (1991). Recruitment, job choice, and post-hire consequences: a call for new research directions. In M. Dunnette and L. Hough, (Eds.). *Handbook of Industrial/Organizational Psychology* (Vol. 2). Palo Alto, CA: Consulting Psychologists Press.
  31. Sutherland, M. M., Torricelli, D. G., and Karg, R. F. (2002). Employer-of-choice branding for knowledge workers. *South African Journal of Business Management*, 33(4), 13.
  32. Swinyard, W. R. (1981). The Appeal of Retailing as a Career. *Journal of Retailing*, 57(4), 86-97.
  33. Swinyard, W. R., Langrehr, F. W., and Smith, S. M. (1991). The Appeal of Retailing as a Career: A Decade Later. *Journal of Retailing*, 67(4), 451-465.
  34. Templer, A. J., and Cawsey, T. F. (1999). Rethinking career development in an era of portfolio careers. *Career Development International*, 4(2), 70-76.
  35. UNDP. (2015). *Human Development Report 2015: Work for Human Development*. Retrieved from [http://hdr.undp.org/sites/default/files/2015\\_human\\_development\\_report\\_1.pdf](http://hdr.undp.org/sites/default/files/2015_human_development_report_1.pdf) (accessed on 20.05.2016).
  36. Verquer, M. L., Beehr, T. A., and Wagner, S. H. (2003). A meta-analysis of relations between person-organization fit and work attitudes. *Journal of Vocational Behavior*, 63(3), 473-489.
  37. W&RSETA. (2014). *Wholesale & Retail Sector Education and Training Authority (W&RSETA) Sector Skills Plan 2011-2016, 2014 Update*. W&RSETA: Centurion.
  38. Wiswall, M., and Zafar, B. (2015). Determinants of College Major Choice: Identification using an Information Experiment. *The Review of Economic Studies*, 82(2), 791-824.