

Chapter 1: Introduction

1.1 Purpose of the study

The purpose of the study is to understand advertising effectiveness in NGO-Corporate partnerships. The results will assist both corporates and NGOs in designing effective advertising campaigns when addressing social issues. Understanding the factors will ensure that the advertisements used in social marketing will be effective and relevant to the target market.

1.2 Context of the study

Advertising plays an important role in changing the perception, behaviours and consumption patterns of society. Society needs advertisements for numerous reasons including consumer or audience persuasion, information sharing and decision-making, to name just a few (Indu & Jagathy Raj, 2012)

A number of factors have been identified by numerous researchers as elements that influence the audience attitude towards advertising such as source characteristics, target market characteristics, cultural aspects, content used, media characteristics, credibility, creativity and cognitive routes processing (Abdulmajid, 2009). These factors would influence the effectiveness of an advertisement. (Indu & Jagathy Raj, 2012)

Advertising has played a vital role in addressing social issues, such as reduction of drunken driving, reduction of HIV/AIDS infections, anti-smoking campaigns. A key social issue on South African roads is drunk driving or driving under the influence of alcohol. This can be defined as driving with a certain amount of alcohol in an individual's blood. Urine tests, blood tests and breathalyser tests are tools used to determine the amount of blood alcohol concentration (BAC). It is important to note that 65% of deaths and injuries on South African roads are due to alcohol abuse (SADD, 2013). Corporates, government and non-governmental organisations attempt to sell the idea of change to target audiences regarding drunk driving.

In South Africa, The Department of Transport in KwaZulu-Natal launched the Asiphephe (isiZulu word for *Let us be safe*) and Siyabakhumbula (isiZulu for *We remember them*) campaigns that were aimed at educating the public on drunk driving through emotional appeal (National Road Safety Strategy, 2011). Launched in 1998, the Siyabakhumbula campaign would put a human face to those who would be traumatised directly by drunk drivers. This would include the paramedics (and other emergency service employees) and the families of those who died. Through the use of advertising in different media (TV, print) the campaign emphasised that those in mourning were not in isolation and highlighted the impact that road accidents have on emergency workers and victims' families. The Siyabakhumela campaign was finally ended at an event held in the province with an attendance of over 40 000 people affected by drunk driving and those wanting to publicly display support of anti-drinking and driving behaviour.

In partnership with business and non-governmental organisations, the Asiphephe campaign focused on those persons and families left to deal with the severely injured or disabled persons. The advertising campaign also emphasised the lack of support given to the less privileged and the disabled. Well-known personalities (sportsmen, actors, and musicians), civil leaders and religious leaders were also used to endorse the campaign, explaining how drunk drivers had affected them in the different advertisements of the campaign. Aimed at the KwaZulu- Natal youth that are mostly responsible for the pandemics in the province, the campaign used music to further expand on the emotional appeal. A road safety CD was launched through partnerships with famous international and national musicians. Though the campaigns received criticism, KwaZulu-Natal was the only province that reduced road deaths by 35% compared to the average of 17% in the rest of South Africa (National Road Safety Strategy, 2011)

In 2009 through a partnership between an NGO, corporate and public sector, the "name and shame" campaign against convicted drunk drivers in the Western

Cape was launched. The aim of the campaign was to discourage drunk driving behaviour through public humiliation. The campaign has been pivotal in reducing road fatalities by 30% (Times Lives, 2009). Through the use of local media, the *Cape Argus* would publish the names of those people who had been convicted of drunk driving. Arrest patterns changed drastically in the weeks in which the list appeared. The use of radio (Talk Radio 702 FM and Lead SA) and print newspapers were used to advertise the campaign (Williams, 2013).

The above campaigns also made use of partnership across the three sectors. Strategic partnerships are beneficial for all the sectors (public, private and non-profit organisations). Reputation improvement (Falck & Heblich, 2007), sympathy towards stakeholders concerns and relations (Smith, 1994; Webb & Mohr, 1998 as cited by Hall, Jones & Iversen, 2011), volunteerism and product innovations are motivations for companies to partner with NGOs. For the NGO, it is an opportunity to improve awareness, allows for networking opportunities, resource support and to increase their influence. (Runte, 2009, as cited by Simpson, Lefroy & Tsarenko, 2011; Polonsky, Wood, Varadarajan & Menon, 1988, as cited in Hall et al., 2011)

The use of partnerships between NGOs and corporates has increased in South Africa in the past decade. Companies with a turnover of over R5 million are required by the Broad Based Black Economic Empowerment Act 53 of 2003 to invest 1% of net profits into socio-economic development, hence the growth in the partnership. Kourula (2006) identifies the following as partnership options that companies and NGOs could engage:

- I. Sponsorship: the NGO receives financial support from the company which could include marketing cooperation;
- II. Single-issue consultation: The company consults an NGO on a social or environmental issue. This could include advice on a particular company product;

- III. Research cooperation: The NGO and company provide resources for a research project of interest to either/both parties;
- IV. Employee training or volunteerism: NGO employees are requested to address employees on a particular issue that the NGO would work with or employees from the company are volunteering to assist at the NGO;
- V. Certification or eco-labelling: An NGO certifies a company product or service as having met environmental or social standards;
- VI. Systematic Dialogue: The company and NGO have systematic discussion or forums to discuss vital issues;
- VII. Common projects/programmes: NGO and company collaborate in a single project with defined actions and clear objects; This research paper aims to understand the impact of this partnership on social marketing advertising.
- VIII. Strategic partnerships: NGO and company sign a long-term partnering agreement with long-term goals, for example the Coca-Cola Company and USAID) (Kourula & Halme, 2008).

The process of identifying a suitable partner is important because of the need to recognise similar objectives, ensure access to target audience, credibility within the targeted audience, interest in the initiative and resources needs (Acsinia, 2010).

Consequently, this study will also attempt to understand perceptions and attitude towards the co-sponsoring advertising in comparison to a specific advertisement, either corporate or NGO-sponsored.

1.3 Research problem

A social marketing advertisement campaign may not attain expected results for many reasons; audience resistance can arise at any stage between exposure and behaviour implementation (Rice & Atkins, 2013)

In social marketing advertisement design, the common mistake is assuming that portraying behaviour as unhealthy or bad will cause people (especially children)

to reject it. In fact, the display of behaviour as prohibited may enhance the appeal to adolescents. It is also suggested that consistency in messaging from other sources generally affects the success of public communication campaigns. Public communication campaigns must provide a consistent messaging from various sources over a long period to be effective and have credibility (Austin, 1995 as cited in Siegel, 1998). The credibility of an advertisement refers to a person's perception of the truth presented in the content. It can be discussed in other forms, including corporate credibility (the perceived truthfulness of the perceived sponsor) and ad credibility (message content and endorsers' credibility (MacKenzie & Lutz, 1989 as cited by Indu & Jagathy Raj, 2012)

In some countries, alcohol producers will sponsor NGOs who aim to address alcohol-related issues. This would include campaigns against drunk driving, for example South African Breweries sponsor some South Africans against Drunk Driving initiatives.

Research question

The over-arching question guiding this study is: What are the factors affecting advertising effectiveness in NGO-corporate partnerships when addressing social issues like drunk driving?

1.4 Research objectives

The research objectives addressed in the study will include:

- To conceptualise the factors that affect advertising effectiveness
 - The integration of the factors that affect advertising effectiveness in NGO-corporate partnerships with the social issue of drunk driving
- To determine the relationship between the factors and attitude towards advertising effectiveness
- To determine if the factors affecting advertising predict the attitude towards advertising in NGO-corporate partnerships

- To determine the difference between the factors that affect advertising and attitude towards NGO-corporate with rigid variables (age, marital status, education level)

1.5 Significance of the study

Firstly, it will add to academic literature in South Africa by serving as the basis of understanding the advertising element in NGO corporate partnerships. Future research would then build on this study, taking into consideration the impact of all the factors mentioned

Secondly, it explores field of social and NGO marketing that are important in developing country context because of the social issues in the twenty-first century. Social issues derive from development, natural resources and economics dynamics within a country (Tajziehchi, 2011). Social issues in developing countries include HIV/Aids, malaria, high rates of alcohol consumption, unclean drinking water, to name a few.

Thirdly, exploring factors that affect advertising effectiveness is important because it allows social marketers an opportunity to address issues through advertising in the most impactful way that will lead to behaviour and attitude change.

Lastly, this will allow the organisations to structure suitable and effective communication for their social campaigns when pursuing collaboration efforts or working independently.

1.6 Delimitations of the study

The following are limitation to the study

- The study will be conducted in Gauteng through random stratified method which will to recognise the different gender groups, race and age.

- Sample is only 300 respondents
- The advertising tool used in the study will be print and will exclude other mediums because of costs pressures and this method has also been successfully applied in similar studies in developing countries (University of Wisconsin's binge-drinking campaign)
- The social issue addressed was drunk-driving as this pandemic is on the rise. Research done by Arrive Alive shows that the likelihood of being in an accident on a South African road is 1 in 101 but other parts of the world is 1 in 5000. The Arrive Alive campaign reports that one of the biggest threats to South African roads is drunk drivers, indicating that 50% of the deaths on the roads can be directly linked to over-indulgence of alcoholic beverages and one in fifteen South African drivers on the road at night are drunk (Arrive Alive, 2012)
- The study focused on adults over the legal alcohol-drinking age of 18.
- A reputable company and a NGO (which was created for the sake of the study) will be used to understand the dynamics. South African Breweries (SAB) was selected because of its efforts in curbing the drunk-driving pandemic; the alcoholic beverage company currently has just under 90% market share (Vallie, 2012). SAB is a well-known company in South Africa and participants will be able to recognise its visual identity. A NGO has been created for the study because the research failed to produce a reputable NGO addressing this pandemic. The NGO has been named People against Drunk Driving (PADD) and a logo was designed for this made up organisation.
- SAB was approached to use the company's current "Regret nothing" campaign.

Chapter 2: Literature Review

2.1 Introduction

The literature review introduces key concepts for the study. This will include definitions, backgrounds and theory gathered about the concepts. The literature review will define and discuss advertising, recognise factors that affect advertising effectiveness and then select key prominent element to form a proposed model for this study.

The literature review will also introduce the concept of social marketing that can be used in advertising.

2.2 Background on Advertising

Advertising is a marketing tool that provides information about a product, service and the business itself. It has been said that the purpose of advertising is mainly to build brand image, stimulate purchasing (Park, Shenoy & Salvendy, 2008) and provide information and appeal (Kumar, 2010 as cited in Dubihlela, 2011). The American Marketing Association defines advertising as the persuasion of a target audience or market about products, service or ideas using announcements or messaging in space or time bought in any mass media. This can be used by business, nonprofit organisations and government agency (American Marketing Association, 2013). Advertising plays an important role in changing consumption pattern and perception of society in general. Society needs advertisement for various reasons including consumer persuasion, information sharing and decision making (Indu & Jagathy Raj, 2012). It often incorporates the views of the majority of the consumers as a persuasive tactic or substantiating product/service/idea claims (Buchanan and Smithies, 1991 as cited in Chang, 2012).

Advertising can be increasingly powerful when it presents products or services that people do not know they need. It anticipates and exploits the prevailing consumer attitude and culture. The symbolic relationship between advertising and the audience ensures that advertising feeds information that shapes the culture and at other times abstracts elements from popular culture to create the concepts (Goldberg, 2011). Some researchers have accused advertising of selling dreams and enticing consumers into confusing dreams with reality. Advertisers cynically use a fantasy world and illusion in an attempt to control the target audience (Klempner, 2004 as cited by Dubihlela, 2011).

As technology evolves, new types of advertising mediums have been introduced. First generation advertising mediums included magazines, newspapers and billboards. Radio and television (TV) were the next generation and are the most prevalent method of advertising. Recently, mobile and Internet have emerged as new types of advertising mediums and are rapidly growing (Park, Shenoy & Salvendy, 2008). Advertising is modifying the manner in which it targets young people because of young people's relationship with technology and its devices (Segovia, 2013).

An effective advert is one that succeeds in anticipating and exploiting the prevailing consumer culture and attitudes whilst using the correct medium. When an advert is able to capture the desires or needs, expressed or not, it has a good chance of succeeding in persuading and selling. The advert must be able to tap into a meaningful socio-logical, emotional and psychological focal point (Goldberg, 2011).

The most successful advertisements reflect society and the role that the product, service or idea can play in the current environment (Goldberg, 2011).

In advertising, some advertisements are successful and others fail in achieving intended objectives. This is affected by the advertisers' decisions regarding advertising strategies and tactics (Indu & Jagathy Raj, 2012). A successful advert according to Kotler, states that information appeal as two parts:

1. Rational appeal: informs audience of the fundamental values of the product or service. This involves functionality, practicality and quality
2. Emotional appeal: aims to stimulate a purchase based on emotional response to image and context (Kotler, 1991 as cited as Yeh & Lin, 2010).

2.3 Factors affecting advertisements

The effects of an advertisement are also dependent on several factors and their contributions vary according to the situation. These factors can be grouped in three categories, namely advertisement factors, environmental factors and audience factors.

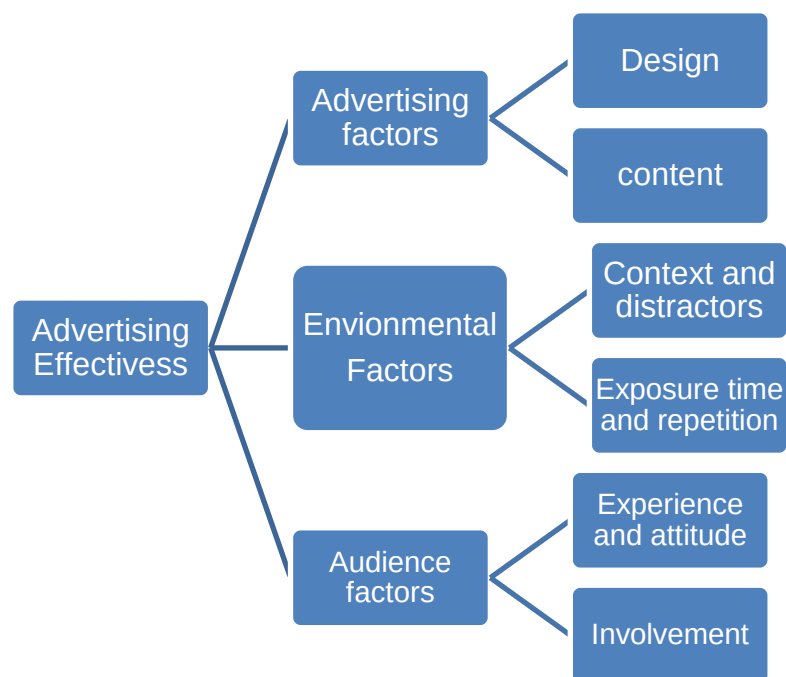


Figure 1: Effects of advertising as described by Park, Shenoy and Salvendy, 2008

Advertisement factors include design factors and content. The design of the advertisement includes size and length of the advert, music/sound effects, colour, and presence of animation. The design factors relate more to the transmitting media (multimedia functionality).

The content of an advertisement is the primary factor driving marketers and advertisers. Content is mainly focused on the presentation of the message and the story line. It is divided into two groups, namely affective and cognitive. An informative message depends on the cognitive processing of the audience which would be effective in relating the functionality of the product whereas the affective message appeals to the emotional processing (Park, Shenoy and Salvendy, 2008)

Environmental factors include context and distracter, exposure time and repetition. Context and distracters address the issue of the surrounding of the audience. Context focuses on the competitive advertisement clutter effect. The environment where the advert is presented can be a distractor.

Several studies conducted have suggested that the recall rate increases as exposure time increases. Repetition is also believed to have a positive impact of the recall rate (Park, Shenoy and Salvendy, 2008).

Audience factors include experience, attitude and involvement. The experience or exposure to the advertisement tends to build the attitude of the audience/consumer that can improve or weakened over time. Attitude can be about the brand, actual advertisement or advertising media. Involvement has been instrumental in advertising effectiveness studies. It can be defined as personal connection points between the stimulus and the audience. Involvement theory suggests that the more the audience is interested in the product, the more

they pay attention to the information provided (Park, Shenoy and Salvendy, 2008).

From the literature above, this study proposes the following model (Figure 2) in understanding factors that affect advertising effectiveness in NGO-corporate partnerships.



Figure 2: Proposed model for understanding factors affecting NGO-corporate partnerships

2.3.1 Involvement

Involvement is one of the factors used in the study. A study by Wu (2001) showed a positive relationship between degree of consumer involvement and the advertising effect hierarchy (6-step hierarchy of effect mode: awareness, knowledge, liking, preference, conviction and purchase) (Wu, 2001). There is agreement amongst advertising researchers on the relationship between involvement and advertising effectiveness (Tipps, Berger, & Weinberg, 2006)

Involvement has been an issue of debate in research. Sherif and Hovland (1961) have argued that personal involvement occurs when the message has intrinsic importance or personal meaning (Sherif & Hovland 1961). Involvement has been hypothesised to lead to greater product importance, greater perception of attribute differences and greater commitment to the brand choice (Wu, 2001). According to Zaichkowsky (1994), personal involvement refers to the level of

perceived personal relevance or importance evoked by a stimulus within a certain condition. The person's perceived relevance is based on inherent values, needs and interest (Zaichkowsky 1985 as cited in Wang 2009). Zaichkowsky (1994) suggests that in understanding personal involvements three major antecedent factors must be studied. Firstly, the character of the person; secondly, character of the stimulus and finally, the character of the product. These three factors will influence level of personal involvement in the product, purchase and advertising (Wu, 2001). Krugman (1965) further elaborates on the idea by studying this concept from the consumer psychology approach. The researcher suggests that high involvement will rely on the number of personal references that the recipients can make between the messages and their own lives (Krugman 1965 as cited by Petty & Cacioppo 1981).

Wu (2001) recommends a framework of involvement that is affected by personal and product factors. The base of the framework is formed from work done by Zaichkowsky (1985) and Andrews (1990). The product factors comprises the product characteristics. Personal factors are the audience characteristics which include personal goals, needs, activities, interstices and demographics (Wu, 2001).

Proposition 1:

The relationship between demographics (gender, race, age, educational level, marital status) and level of involvement

Numerous researchers segment product category by level of audience/consumer involvement but do not segment the audience by demographics or characteristics (Wu, 2001)

The Elaboration Likelihood Model (ELM) was developed to understand how recipients process information. ELM suggests that a high level of personal involvement is the central premise for attitude change (Petty, Cacioppo, & Schumann, 1983 as cited by Wheeler, 2009). ELM model comprises of two key elements, central and peripheral route. Central route is when the recipient has an individual diligence concentration because the information delivered is of relevance. It is believed that a more permanent or predictive attitude change would be induced via this route (Cialdini, Levy, Hermann & Kozlowski 1976 as cited by Petty & Cacioppo 1981). 'Peripheral route' refers to when the individual does not cognitively process the advert but instead associates it to positive or negative cues (Wang 2009). Attitude changes through this route would make use of non-content cues like number, quality or accuracy of the presented message because of lack of interest (Petty & Cacioppo, 1980; Cahiken 1980 as cited in Petty & Cacioppo, 1981). The change expected is more temporal and non-predictive.

In the context of social marketing, a cognitive model is regarded as crucial because of the significance of the message delivered and intractability of the behaviour belief addressed (Hassan, Walsh, Shiu, Hastings & Harris, 2007).

Advertisements in magazines and newspapers are regarded as pull type because the message is transferred by free will of the audience. This is done to create high involvement levels of the audience. TV and radio are push type advertising and the message transferred is controlled by the advertising agency or marketer. Involvement measurement of the push type advertisement is relatively low in comparison to advertising on magazines and newspaper (Krugerman 1967 as cited by Park, Shenoy & Salvendy, 2008). Two mediating factors, involvement and attitude towards advertising, are broadly studied in persuasive model framework

2.3.2 Source credibility (Trust and Expertise)

Various researchers suggests that use of source with high credibility will increase reliability (Petty & Cacioppo, 1986; Pornpitakpan 2004 as cited by Hall, Jones & Iverson 2011) (Helmig & Thaler 2010). The source credibility research can be traced back to a study done in 1951 by Hovland and Weiss. The study indicated that recipients attached subjective credibility levels to different sources (Hassan, Walsh, Shui, Hastings & Harris 2007). Source credibility is the perceived trustworthiness and expertise of a particular communicator (Wheeler 2009). Truth is the degree to which the recipient perceives the communicator to convey valid assertions or degree of confidence in the intent of the communicator. Trust is towards both communicator and message. Expertise refers to the extent to which the communicator is deemed knowledgeable and capable of making valid assertions about the message/object (Howland, Janis & Kelley 1953 as cited by Wheeler 2009). Source credibility is important to understand and research in advertising effectiveness because of credible sources and those associated with extensive levels of expertise are likely to attract high levels of elaborations and consequently better attitudinal and behavioural changes (Hassan, Walsh, Shui, Hastings & Harris, 2007). In 1993, Wilson and Shelley found that the greatest impact of persuasion could be found in using experts and those communicators who are perceived to have high levels of credibility (Hassan, Walsh, Shui, Hastings & Harris 2007). Another key element that affects perceived credibility is presentations. It has also been referred to as attractiveness or image (Ohanion, 1990; Eisend, 2006).

In campaigns addressing social issues, high creditability sources will more likely change the recipients' attitude and behaviours (Fragale & Heath, 2004). This was confirmed by a study done by Mick in 1992 on an anti-smoking campaign. It was noted that there is an association between levels of credibility and the level of comprehension in the advertisement. The latter raises questions on whether advertising is an effective tool for addressing consumer well-being. If the source

used is of 'low-credence', this is unlikely to affect the behavioural change, leading to failure in social-NGO marketing goals (Hassan, Walsh, Shui, Hastings & Harris 2007).

Attribution theory aims to explain how recipients develop causal assumptions regarding motivation of a particular sponsor's communication of promotional messages. Szykman, Bloom and Blazing (2004) wrote that depending on advertising context, it would be advantageous for the message sponsor of a social marketing advert to be endorsed by a non-commercial source (Szykman, Bloom & Blazing, 2004).

Proposition 2:

People Against Drunk Driving (PADD) as a sponsor will have high levels of credibility

Proposition 3:

South African Breweries (SAB)–People Against Drunk Driving (PADD) partnership sponsors will have a high level of credibility

Research has also revealed that recipients evaluate a company negatively if they believe its business practices are company-serving as opposed to socially motivated (Hassan, Walsh, Shui, Hastings & Harris 2007).

Proposition 4:

South Africa Breweries as a sponsor will have low levels of source credibility

When companies address social issues, consumers perceive this as either a brand image or awareness exercise which decreases the sincerity of the message (Rieh & Belkin, 1998). The concept of credibility is highly intuitive

(Eisend, 2006), so it is important for companies to understand if the recipients associate the message with them.

The intense competition and great volume of the advertising can confuse the consumers and create doubts in their minds about the reliability and genuineness of the advertisement and its products (Indu & Jagathy Raj, 2012). Because advertising aims to attract interests and tastes of an outsized group of consumers, it is vital that it provides information about the product or service, as well as the endorsers (Engel, Blackwell & Miniard as cited in Yen & Lin, 2010).

Credibility is defined as the degree to which the audience perceives claims made about the product or brand in the advertisement as truthful and believable (Cottea, Coulterb & Moore, 2005). Advertisements that lack credibility can often be avoided and ignored by the audience (Rodgers, 2005). Advertising credibility has been identified as the most important factor in advertising effectiveness. Credibility is a key factor of persuasive messaging and can often influence the outcome of a persuasive message (Indu & Jagathy Raj, 2012).

Advert credibility can be classified in two groups: the first is the advertiser's credibility (corporate sponsor), and the second, the advertisement credibility (message content credibility) (Indu & Jagathy Raj, 2012). According to Petty and Cacioppos (1981), the developers of the Elaboration Likelihood Model (ELM) discussed above, the advert audience give importance to the advertisement sponsor and message content when they go through the central route to persuasion.

Proposition 5:

The relationship between source credibility and level of involvement

2.3.3 Message content

Puto and Wells (1984) discuss message content in an advert in two elements: informational and transformational.

'Informational advertisement' was defined as information (about the brand/product/service) that the advertisement provides to the target audience in a clear precise and logical manner such that confidence is built in ability to measure the brand, product or service after viewing the advert. The key element is that the advert is informational. An advert that is considered informational contains the following characteristics: (1) it presents factual, important information about brand; (2) it presents information which is useful and important to the customer; and (3) the consumer accepts data to be credible and appropriate. Informative advertising decreases prior inaccuracies that the consumer may have believed about the product. The customer will absorb all they need to know about the product and further information will fail at influencing their decision (Ackerberg, 2003 cited in Martin, 2012). An important element of the content is the theme used in the communication (Elder, Shults, Sleet, Nichols, Thompson, & Rajab 2004).

There are three types of informational message in advertisement campaigns: one creating awareness, the second, instruction messaging, and lastly, persuasive messaging. In awareness messaging, information presented advises the audience on what to do, cues on when and where it should be done and specifies who should do it. The more complex option is the instruction message which should produce knowledge and skills acquisition, including personal efficacy enhancement and peer assistance. Persuasive messaging provides reasons or advocates why the target audience should adopt the presented prescribed behaviour and avoid certain choices (Rice & Atkins, 2013).

A transformational advertisement is one that has the ability to associate the brand/product/service to a particular psychological characteristic which would not typically be associated with the brand. A transformational advert would include the following characteristics: (a) The experience of using the product/service/programme will be made more fulfilling, thrilling, enjoyable than that expected from the advert's objectives; (b) the experience of the advert and the experience of using the brand/product/service are so closely related that the consumer cannot recall the brand/product/service without remembering the experience generated from the advertisement.

In advertising, understanding the audience through research is critical for developing the initial message. Marketers must be creative around the actual message and its delivery.

The effectiveness of an advert is dependent on the characteristics of the target audience and requires a match of the message to the individual motivation or reason for engaging in the behaviour (Snyder & Cantors, 1998 as cited by Rhodes, Roskos-Ewoldsen, Eno, & Monahan, 2009)

Proposition 6:

The relationship between the demographics and content

In relation to social marketing, sustained engagement with persuasive and credible messages addressing belief is important. Advertising themes and content should be selected for their capability to create favourable cognitive-based attitudes (Wu, Walsh, Shiu, Hastings and Harris, 2007).

Research done by Tsai & Tsai (2006) suggests that negatively framed messaging is more effective than positively framed messages in a high-involvement arena (Tsai & Tsai, 2006 as cited by Pongsiannan, 2013). The advert

used in the study had a negatively framed message with the theme as “Don’t turn a good time into doing time”. The play on words is advising the audience not to drink and drive because they could end up in prison.

Proposition 7:

The negatively framed message content has a high degree of involvement

The “Don’t drink and drive” advertisement mentioned is an example of social marketing efforts.

2.4 Social Marketing

Public health campaigners have found that the powerful and persuasive mass media can be used to promote health and other social issues (Siegel, 1998). This study aims to understand advertising effectiveness when addressing a social issue (particularly drunk driving). This is known as social marketing which is used by both business and non-governmental organisations (McKay-Nesbitt & DeMoranville, 2011). The first definition of social marketing was coined in 1971 by Kotler and Zaltman:

“Social marketing is the design, execution, and control of marketing related programs that involve the consideration of product planning, price communication, distribution and market research with the aim to influence the acceptance of social concepts or ideas within a specific target market” (Kotler & Zaltman, 1971)

In 1995, Andreasen revised the definition of social marketing as the following;

“Adapting of commercial marketing technologies in the analysis, planning, implementing and assessment of programs designed to influence the voluntary behaviours of a specific target market so as to improve their mental and physical well-being and/or that of society they are part of” (Andreasen, 1995).

Four key features are illustrated in the above definitions. The first is the emphasis on voluntary behaviour change. Social marketing is not about enforcement or coercion. The second focus is that social marketers are trying to persuade change by applying the fundamentals of exchange, recognising that there will be value and benefits for the target audience if the change occurs. The third feature is that marketing techniques such as consumer focus, targeting, consumer research and segmentations, and the marketing mix should be applied. Finally, social marketing aims to bring about change in the individuals welfare and society, and not to the benefit of the organisations doing the social marketing (Stead, Hastings and McDermott, 2007).

In 2007, the American Marketing Association (AMA) extended the definition of marketing to include the benefits of social marketing:

“Marketing is the approach of generating, communicating, delivering and exchanging value with marketers, partner organisations, and society as a whole so as to improve the welfare of individuals and society” (Dann, 2008 as cited by Alves, 2010).

The definition accepted by the AMA thereby recognises clients as receptors of social marketing efforts and the co-creation of values amongst the different stakeholders.

2.4.1 Social marketing versus commercial marketing

Social marketing could counteract the negativities promoted on commercial marketing (Fox and Kotler, 1980 as cited by O’Shaughnessy, 1996). Where the primary motivation of marketing is to promote public good – this can be regarded as social marketing; however, where the primary motivation is to create profit or any motivation not promoting public good, this is not regarded as social marketing (Donovan, 2011). Although both social and commercial marketing aim to change behaviour, social marketing aims to change behaviour that benefits individuals and society, whilst commercial marketing will benefit the needs of the

business and its stakeholders (McKay-Nesbitt and DeMoranville, 2011). One of the key differences between commercial and social marketing is the fact that social marketing promotes ideas, products or services for voluntary behaviour to a specific target market whilst commercial marketing aims to trade a product or service for economic gains and is not concerned about any healthy behaviour change amongst the target market (Sharma, 2007). The purpose of a commercial marketer is self-explanatory: A business will close if people do not purchase its goods and services (Baker & Saren, 2010).

Table 1 below indicates these differences between social marketing and commercial marketing.

Table 1: Differences between commercial and social marketing (McKay-Nesbitt and DeMoranville, 2011)

Commercial Marketing	Social Marketing
Creates, communicates and delivers value in forms of good or services e.g. beverages, petrol, insurance	Creates, communicates and delivers value in the form of behaviour, e.g. reduction of drunk-driving pandemic or reduction of speed to conserve petrol
Though commercial marketing can be concerned about the well-being of society, its primary concern is generating financial benefits	Social marketing primary goal is the betterment of individual and society
Competition in commercial marketing occurs between providers or suppliers of similar product offering or service	Competition in social marketing occurs between existing behaviours versus new proposed behaviours

In 1952, G.D Wiebe posed a question, “Why couldn’t we sell the concept of brotherhood like we sold soap?” The question would imply that sellers of commodities such as soap are generally effective whilst those “selling” social

causes were unsuccessful (Kotler and Zaltman, 1971). However, traces of its application were evident in family-planning awareness campaigns in the 1960s in the United States. In 1969, Kotler and Levy legitimised the academic study of social marketing by emphasising that the use of marketing needs to be extended to embrace non-commercial entities (police, non-profit organisations, churches) (O'Shaughnessy, 1996). In 1971, Kotler and Zaltman defined social marketing as noted above. The work by the authors would be critical in the introductory phase because it defined the term social marketing and initiated the planning processes (Alves, 2010). The growth of social marketing was further noted when applied in broader conceptions rather than those of products marketed for social alteration (condoms, birth control, oral rehydration solution) (Andreasen, 2002). Consider the following South African pandemics: what do the following issues have in common: drunk driving, rape, smoking, teenage pregnancy, transmission of HIV/AIDS and global warming? Firstly, they are pressing issues with great concern. Secondly, they have a big impact on social welfare and can become a matter of life and death. The basic trait they share is all have a function of human behaviour: the perpetrators' actions and those of people creating social environment that make them less or more attractive (Baker & Saren, 2010). Social marketing typically focuses on behaviours that protect one's health and safety (such as smoking cessation, drunk driving), the environment (for example water conservation) or community well-being (for example obesity, literacy, HIV/AIDS prevention) (McKay-Nesbitt, DeMoranville, 2011).

Social marketing campaigns can be viewed as power strategies to fend off legislations (for example BAC limit for driving) that could endanger the system or can change the behaviour of the individual as opposed to addressing the systematic root problems (for example government subsidy on tobacco growers and barley farmers in the beer industry).

Almost 20 years ago, a study in the Journal of the American Medical Association highlighted that more than half of the population in developed countries would die

prematurely as a result of lifestyle choices. Key lifestyle choices include poor diet, smoking, drinking and sedentary living. Behaviour, then, is a vital determinant of society's longevity and morbidity (Baker & Sørensen, 2010). Social marketing is selling a behaviour regarding a social issue. This type of behaviour change is voluntary (Kotler, Roberto & Lee, 2002). Andreasen argues that social marketing is not just about "increasing acceptability of an idea" but rather changing behaviour as that is the key goal for overall initiatives (Andreasen, 2002). Social marketing is generally concerned with the adoption of new behaviour in place of current or existing behaviour (Donovan, 2011). The focus of human behaviours can be reduced to three simple questions:

1. How does the particular target audience feel about the specific behaviour?
2. What social and other contextual factors influence this positioning?
3. What offering will encourage them to change the behaviour or create social context more conducive to change? (Baker & Sørensen, 2010).

Social marketing places the change of individual at the centre of its objective; however, Dann (2008) acknowledges that it is a coordination of a vast network of partnerships and relationships across society in order to attain its objective (Dann, 2008 as cited by Alves, 2010). The use of social marketing is not only directed at individuals (downstream marketing) but also at professionals, policymakers and organisations. This is known as upstream marketing. An example of this concept is if a non-profit organisation uses social marketing to influence legislators or policy makers in changing the law regarding alcohol and tobacco marketing (Stead, Hastings and McDermott, 2007). These stakeholders are also known as an indirect or secondary target audience. The secondary market is useful in exerting interpersonal influence on target segment or help in reforming the environment that fosters behaviours (Atkins & Salmon, 2010). It is a framework or structures that draw from numerous other bodies of knowledge including sociology, anthropology, psychology and communication theory to help

marketers and those using its principles to understand how to influence people's behaviour (Kotler & Zaltman, 1971).

Several barriers have been noted by Andreasen that have prevented its sustainable development, these include lack of acceptance and appreciation by senior management in organisations, no generally accepted definition of the term, an apparently confusing image, lack of differentiation with competitors, insufficient documentation and minimal awareness of its success, as well as its lack of academic position (Andreasen, 2002).

Social marketing is customer driven, with changing behaviours as its core purpose and creating an attractive enough exchange for customers to buy in and persuade behaviour (Andreasen 2002). The change in consumer behaviour is for the benefit of the individual and society (McKay-Nesbitt, DeMoranville, 2011).

As suggested by Prochaska & DiClemente (2005), changing behaviours can be divided into five stages, namely Pre-contemplation, Contemplation, Preparation, Action and Confirmation. The Pre-contemplation stage is when an individual becomes aware of a particular behaviour but shows no interest at this point. One may become aware of the effects of drunk driving and the blood alcohol concentration limit needed for driving; The second stage is Contemplation where an individual consciously assesses and weighs the relevance of the different alternate behaviour. The individual would weigh the costs of being arrested or injuring other drivers or pedestrians due to drunk driving; The third stage is Preparation – the individual starts changing to the new behaviours, and puts in measures to act accordingly. An example could be registering with Good Fellas (a South African service company that accompanies individuals home after consumption of alcohol). Action is taken in stage four: an individual could either stop consuming alcohol or make use of the Good Fellas services. The last phase is Confirmation. An individual commits to the behaviour with no desire to relapse (Prochaska & DiClemente, 2005; Baker & Saren, 2010).

Andreasen lists the benefits of Social marketing. One, a major role of the target audience would be involvement in the development and implementation of programmes. Two, the purpose would be to change behaviours as opposed to short-term objectives including awareness and liking. Three, the message is tailored to a specific target market; and lastly, through the use of the 4Ps (product, place, price and promotion), reduce the cost of behaviour, making the idea or service simple and popular. Social marketing discipline incorporates all activities central to traditional forms of marketing that facilitate the process of exchange: customer focus, situational analysis and dependence on market research, market segmentation, identifying the target market, consideration of environmental forces, strategy-orientated 4Ps as described above); and finally the impact marketing efforts have on the financial return (McKay-Nesbitt & DeMoranville, 2011).

Social marketing is said to be one of many approaches to social changes, forcing it to face competition in five levels that Andreasen labels generic, intervention-level, subject markets, products and brand. At generic competition level, social marketing experiences similar challenges to other systematic methods to creating change. It is competing with habit and lethargy. Many organisations, associations, people and programmes do not subscribe to organised, systematic tactics to bring about change. Intervention-level competition subscribes to the notion of three intervention societal levels believed by strategists to be necessary for social change. Firstly, there is a school of thought that believes that individuals are ultimately responsible for behaviours when facing social issues. This type of intervention focuses on individual transformation, making use of social workers, educators, psychologists and social marketing. Secondly, other people subscribe to social changes by focusing intervention by communities. The argument specifies the importance of local leadership; interpersonal influences and social norms are powerful factors in how social issues are resolved. Ultimately, communities play a role in designing implementing and assessing the

programmes. The intervention would include sociologists, anthropologists, social workers and community mobilisers.

The last approach of social issues relies on social structures. This is constructed by the law, technology, public policies and institutions. (Wallack, 1990) suggests that media advocacy, change of policy, usage of the court systems and creation of laws to achieve social intervention. Subject-market competition comprises subject matter experts, government administrators, journal, conferences and practitioners all competing to get funding, government budget, media attention volunteers and ultimately increased priority in public agenda. The growth of subject market can grow the field significantly. Product competition is recognised in Kotler and Roberto (1989, p.20) as five categories of change strategies/products that would comprise social marketing, education, technology, economics, politics and laws (Kotler & Roberto, 1989).

As social marketing increases in prominence and acceptability, policy makers and funders are increasingly seeking evidence of its effectiveness. Providing the evidence has proved to be challenging, not because it is difficult to demonstrate its effectiveness but because many types of complex social interventions work (Gordon, McDermott & Hastings, 2008)

In a study by Helmig and Thaler (2010) about the effectiveness of social marketing, the authors reviewed 203 articles, journals and books on the topic. The next step was to conduct an unstructured search of material cited in the articles and books which led to an additional 123 articles. Through the research, the authors uncovered the following regarding the implementation of effective social marketing campaigns: community-based campaigns when compared to countrywide campaigns, yielded better results in behaviour changed; focused messages and culturally sensitive messaging focused on smaller targeted audience were important for intentional change and increased awareness; the concept of targeting the general population was more effective in increasing the impact on behaviour change than those focusing on just the youth; gender-

targeted campaigns did not increase recall or behaviour change when compared to gender neutral campaigns. In campaigns addressing smoking, the research showed that non-smokers and smokers had equal recall levels to the message; mass media campaigns have a positive impact on awareness, recall and knowledge. Mass media was also found to positively impact attitudes and behaviour change. Audio channels (for example. radio) create a higher level of behaviour change; interactive elements in the campaign proved to be more effective in attitude than non-interactive elements; self-focused messaging (for example,. 'If you drink and drive, you could get arrested') were more effective in both anti-smoking and drinking-and-driving campaigns. Testimonials (particularly by well-known personalities and leaders) were found to be more effective when addressing issues pertaining to smoking and drug use issues; normative and rational messages have a lesser impact than emotional messages. Threatening messaging (communication of the likelihood of death due to driving drunk) impacted on the effectiveness; with regards to the content, multiple messages within a campaign, clear description of recommended behaviour, known and unknown information and qualitative and quantitative information contribute to the effectiveness of social marketing (Haldemann & Turner, 2009). Behavioural beliefs influence attitude and normative beliefs influence social or subjective norms. Personal characteristics (demographics, experience, level of motivation to change, involvement and sensation seeking) influence the effectiveness of social marketing campaigns. High fear-arousing messaging was more impactful with females whilst males' favourable intention was increased by low fear-arousing and high involvement has a positive impact on attitude and attention. (Helmig & Thaler, 2010)

2.5 Addressing “drunk driving” through social marketing advertising campaigns

Drunk driving is often defined as driving after drinking a specific amount of alcohol, also known as individual blood alcohol concentration (BAC) – which can

be obtained or measured through urine, blood and breath tests. The tests estimate the number of grams of ethanol per 100ml of blood (The Century Council, 2006 as cited in Cismaru, Lavack & Markewich, 2009). The legal allowable amount varies in countries from 0 to 0.08g/100 ml. It is important to note that “drunk driving” does not necessarily mean “drunkenness” but rather denotes that the individual is over the acceptable BAC levels for operating a motor vehicle (Ross 1992 as cited in Cismaru, Lavack & Markewich, 2009). The greater the consumption of alcohol, the more the BAC increases. High BAC slows down brain function and is likely to affect an individual’s reaction time, information processing, vision and therefore judgment whilst driving can be adversely affected (Hanningan, Spear, Spear, Goodlett, 1999). Studies have also indicated that involvement in vehicle crashes increases significantly at a BAC level of 0.04g/100ml (Commission for global road safety, 2006)

In South Africa, the National Road Traffic Act (NRTA), Act 93 of 1996 as amended, states that the BAC level permitted on South African roads is 0.05g/100ml for all drivers and 0.02 /100ml for professional drivers (public transport drivers). It is noted further that more than 65% of deaths and injuries on South African roads are due to alcohol abuse (RTMC, 2012 as cited in SADD, 2013). In 2010, human factors which included alcohol abuse, jaywalking on the road by pedestrians, non- use of seat belts by drivers and passengers, excessive speed, dangerous overtaking, and driver fatigue account for 84.9% of fatal crashes. Road fatalities amount to over R306 billion per annum of socio-economic costs (SADD, 2013).

Drunk driving and its social and economic impact are preventable. Preventative options include policies by government to reduce alcohol consumption in the form of either increased tax on alcohol to reduce heavy drinking (Levitt and Porter, 2001) and linking alcohol advertising with pro-health and safety messages (Marshall and Oleson, 1994). Social marketing campaigns are also

used in publicising, implementing and reinforcing recommended policies in several countries (Cismaru, Lavack & Markewich, 2009).

There is a growing body of evidence that suggests that the marketing of alcohol plays a role in encouraging and sustaining consumption (Grube & Wallack, 1994 as cited in Stead, Hastings and McDermott, 2006). The consumption environment presents a market-friendly ideology which requires self-responsibility (Sulkunen and Warpenuis, 2000 as cited in Szmigin, Bengry-Howell, Griffin, Hackley and Mistral, 2011). A concern with social marketing is that it focuses on individual responsibility and behaviour change rather than societal or cultural factors that shape such behaviour (Brenkert, 2002) (Raftopoulou and Hogg, 2010 as cited by Szmigin, Bengry-Howell, Griffin, Hackley and Mistral, 2011).

A drawback in addressing drinking and driving using social marketing is that it is usually effective with behaviours that needs to be changed once or only a few times, but can be ineffective with behaviours that need to be repeated or maintained over a period of time (Evans, 2006 as cited in Sharma, 2007)

In social marketing campaign design, the common mistake is assuming that portraying behaviour as unhealthy or bad will cause people (especially children) to reject it. In fact, the display of behaviour as prohibited may enhance the appeal to adolescents. It is also suggested that consistency in messaging from other sources generally affect the success of public communication campaigns. Public communication campaigns must provide consistent messaging from various sources over a long period to be effective (Siegel, 1998).

In designing advertising campaigns addressing drunk driving or anti-smoking, it is important to do a conceptual assessment of the current environment to determine opportunities and barriers and identify the types of behaviours needed from which specific people (audience segmentation) (Atkins & Salmon, 2010). Campaigns should avoid targeting the population in its entity but should identify

specific risk segments. Segmenting markets allows for improved message efficiency and effectiveness because of better message content, form and style design with targeted channelling and tailoring for a particular subsets' abilities (Rice & Atkins, 2013).

In the tobacco industry, it is known that public communication campaigns aimed at changing behaviours by mainly focusing on health-related themes are ineffective in challenging social norms and will therefore be ineffective in reducing tobacco use (Siegel, 1998).

Studies have also revealed that media campaigns led to a change in proximal variables (awareness, understanding) rather than definite behavioural change (Cavill & Bauman, 2004). The communication persuasion matrix, also known as the input-output model, recognises the inputs variable essential for advertising social campaigns as audience, message, source and channel. Output variable will be the audience response to the advertisement stimuli as proceeding through the basic stages of exposure and processing which should lead to effects such as learning, yielding and behaviour levels. Exposure is defined as the reception of the message by the audience and degree of attention to the advertisement content. Processing of the message by the audience includes mental comprehension, interpretative perception, emotional reaction, cognitive connection and pro-and counter arguing produced through the exposure of the message. Learning is the information derived, the generation of any related cognition picture formation, and skills acquisition. Yielding involves the change in the belief, values and attitude of the audience. Behaviour in the advertisement campaign forms the basis of the enactment of recommended actions from the message (McQuire, date unknown, as cited by Rice & Atkin, 2013).

2.6 Conclusion

The main purpose of social marketing is about selling an idea for the betterment of individual and society. The particular social idea used in the study is drunk driving. Using the factors affecting advertising effectiveness mentioned

(involvement, source credibility, message content, demographic), the study attempts to understand the relationships when the advertisement is discouraging drunk driving.

Resistance to drunk driving advertising campaigns can occur at any stage of response to exposure and behavioural implementation. A major problem identified in research done by Hornik (2002) is simply reaching the target audience and attaining attention to the advertisement and message. The attention of the audience is lost at any stage due to defensive responses. Defensive responses include denial of the message applicability to self, counter argument by the audience about the appeal, sheer inertial lethargy, susceptibility of threatened consequence and lack of believability of information and source (Rice & Atkins, 2013).

Despite the various reasons that campaigns can fail, there have been successful campaigns in the past decades. These can be characterised by rigorous evaluation, theoretical guidance, and substantial amounts of messaging over a substantial period, widespread receptivity to advocating action, accompanying persuasive incentive and supplementation of arbitrated messages by campaign-stimulated factors.

Greater success in advertising can be attained by making use of the strengths of mass media for influencing cognitively orientated elements. This includes knowledge sharing and stimulating information seeking, highlighting salience of product or problem, and educating people about new techniques (Rice & Atkins, 2013). Special attention must be paid to factors that can affect the effectiveness of the advertisement.

This study has recognised size propositions that it will investigate using an advertisement that addresses social marketing.

Proposition 1: The relationship between demographics (gender, race, age, educational level, marital status) and level of involvement

Proposition 2: People Against Drunk Driving (PADD) as a sponsor will have high levels of credibility.

Proposition 3: South African Breweries (SAB) – People Against Drunk Driving (PADD) partner-sponsorship will have a high level of credibility.

Proposition 4: South Africa Breweries as a sponsor will have low levels of source credibility.

Proposition 5: There is a positive relationship between source credibility and level of involvement.

Proposition 6: There is a relationship between the demographics and content.

Proposition 7: The negatively framed message content has a high degree of involvement.

The literature review has indicated contradictory results from different researchers which highlight a gap for a South African study which will serve as blueprint for other social marketers to use.

Chapter 3: Research Methodology

3.1 Introduction:

The chapter describes the methodology used in conducting this study. Research methodology focuses on the process used in the study and the kinds of tools and procedures applied (Babbie & Mouton, 2009). Research methodology is an important part of the study because it describes, explains and predicts the phenomena in the research (Rajasekar, Philominathan & Chinnathambi 2006).

3.2 Research Philosophy

The study undertook a positivism paradigm. Positivism is applicable for this research because it takes a quantitative approach to investigating phenomena. The positivist paradigm of exploring social science is based on the philosophical ideas of August Comte, who highlighted reasons and observation as a means of understanding human behaviour (Dash, 2005). The positivist paradigm as a philosophy is identified as logical and based on strict rules of logic and measurement, absolute principles, truth and prediction (Halcomb & Andrew, 2005). Because this paradigm believes in one objective reality, valid research is confirmed only by the degree of proof that it can link to the phenomena for which the study results stand (Hope & Waterman, 2003). The implication of positivism includes agreement of the scientific method, value-freedom options, exploring causal relationship, support of empiricism and its establishment of science based on logic and mathematics.

Causal research aims to understand a cause-effect relationship between variables. It can be defined as an approach to social science that assumes that things can be researched as facts and the association of these facts can be recognised as scientific law (Smith, 1998). Deductive logic to resolve unilateral, causal generalised relationships and an opportunity to forecast behaviour across situations are advantages of positivist philosophy (Orlikowski & Bauoundi as

cited by Hirschheim, n.d.). The approach has been criticised for not providing a way to examine humans and behaviours in a way that provides depth. Parahoo (1997) argues that humans are not to be studied like objects and could be exposed to many behaviour influences, perception, feelings and attitude that the approach could reject as metaphysics or unrelated (Parahoo 1997 as cited by Crossan, 2003).

However, this type of approach was chosen because it promotes study of relationships and using this insight to predict behaviour.

This study aims to understand the extent (through mathematics) to which the factors proposed will affect advertising effectiveness in NGO-corporate partnerships so that ultimately the attitude and behaviours can be predicted. The main aim of quantitative research is to understand and predict relationships between market variables, gain insight into the relationship and confirm current relationships. Quantitative research was also used in the study because of its emphasis on testing and verification. Quantitative research differs from qualitative (unstructured and exploratory by design) because it uses a more structured approach and statistical data collection and analysis, and a higher representative of the sample is collected (Malhotra, Baalbaki and Bechwati, 2010). Quantitative research explores a more critical and logical approach allowing the objective 'outsider' view remote from data (Cook & Reichardt, 1979).

The study focuses on testing seven propositions presented and how they affect advertising effectiveness in NGO-corporate partnerships. The study also attempts to understand if there will be differences between the different demographic elements.

3.3.1. Ontological approach

Objectivism ontology is the approach related to quantitative studies. This approach supports the premise that social phenomena are independent from social actors (Bryman 2004 as cited by Bahari 2010). This aim is to predict reality

as it is known in an objective way (Davies, McCarty & Shaw 1993 as cited by Bahari, 2010). Social research (such as the one in this study) can use methods of natural science. This means numbers can be used to understand and measure the relationships between variables (David & Sutton, 2004 as cited in Bahari, 2010). The study has attempted to measure the degree to which the factors proposed will be relevant to advertising effectiveness.

3.3.2. Epistemological approach

Positivist epistemology is the approach that was used for this study. The research tests the propositions (source credibility, informational content, demographics and personal involvement as factors affecting advertising effectiveness in NGO–corporate partnerships).

Explanatory research (also known as causal research) was used in the study. Causal research is used in uncovering evidence in cause-and-effect understanding. The key task is to isolate the cause and understand to what degree cause results in effect (Olie, Olffen, Berendas & Hendriks, 2005). Causality in behavioural science must meet three conditions. Firstly, there must be correlation between the variables; secondly, cause must precede the effect; and lastly, the third variable must be controlled (Welman & Kruger, 2001)

A disadvantage of this method is that business and administration science are complicated and there are seldom only four factors that have been identified in this study as causal factors. Advertising effectiveness in NGO-partnerships could be dependent on a number of other factors. Oversimplification of the problem and negation of reality are other possible limitations.

3.3 Research Design

Research design is defined in literature as “a master plan or blueprint” on how the research will be conducted, including collecting and analysing the needed information (Mouton, 2009). In research design, the best plan to answer the research problem is explored (Burns & Bush, 2010).

The research used a survey approach with a close-ended questionnaire structure. Surveys are effective tools to obtain opinions, attitudes, descriptions and cause-effect relationships. Surveys aim to give a broad overview of a representative sample from the population. There are two types of survey; analytic and descriptive. This study will make use of analytic survey which is used to understand the relationships between two or more variables. This type of survey is used in causal/explanatory research. The conceptualising and structure of the research questionnaire are dependent on the knowledge of existing literature (Olie, Olfen, Berendas & Hendriks 2005). Advantages of a questionnaire include the ability for the questionnaire to cover a broad respondent base and remain anonymous. This method is also economical. Disadvantages include that there is no motivation for the respondents to participate in the study, and response rates can be generally low. Because of the close-ended questions, relevant and important information is omitted in the study; and respondents could answer superficially if they think the questionnaire is too long. Response rates are also relatively low for questionnaires (Phellas, Bloch and Seale, 2011)

The research study made use of self-administrated surveys. Each survey addressed the variable outlined in the proposition (source credibility, informational and transformational content, demographics and personal involvement).

3.4 Population and Sample

3.4.1 Population

The population comprises of people affected by the pandemic and those recipients of various social marketing campaigns attempting to address the drunk driving pandemic. The sample was chosen from South Africans in Gauteng over the legal drinking age of 18.

3.4.2 Sampling

Convenience random sampling method was used to select the sample. However, seventy percent (70%) of the respondents were obtained from universities. Though the study cannot be generalised, it can be used to understand university students who formed the majority of the sample.

A favourable sample of females and males was obtained. Fifty-three percent (58.33%) of the respondents were female and almost forty-two percent (41,67%) were males. .A study conducted suggested that gender targeted social advertisement show no evidence of increase in recall or change of behaviour (McCulloch, Albarracin & Durantini 2008 as cited in Helmig & Thaler 2010). High fear-arousing messages that have a perceived likelihood to harm have a favourable impact on women more than the male counterparts (Helmig & Thaler 2010). The participants were expected to answer the age variable in a range option because of the sensitivity associated with this question.

A sample of 300 was used because by using a large sample size the study can start to recognise key differences in the respondents. One hundred participants answered the survey with the South African Breweries (SAB) logo; another 100 answered the survey with a People Against Drunken Driving (PADD) logo and a separate 100 answered a questionnaire with both logos (see APPENDIX A).

The sample group comprised students from universities (University of Pretoria, University of Witwatersrand, University of South Africa and the Wits Business School), corporates and NGO's.

3.5 Research instrument

The data was collected through self-administrated, paper-based questionnaires to avoid bias. The instrument has 36 questions derived from the scales. The scales are the Personal Involvement scale (Zaichosky 1985), Expertise,

Trustworthiness and Attractive Endorsers (Obanian 1990) and Informational and Transformational Ad content (Puto & Wells, 1984). (See scales in the APPENDIX B).

The survey was chosen because of its ability to provide a broad overview of a well-representative sample for the entire population. Although linked with behaviourist or what is referred to as meta-theory, the survey is traditionally associated with variable analysis as in the study we conducting

Advantages of a survey include the potential to generalise the population if the appropriate sample is chosen, high levels of reliability if the survey is well structured and appropriate standards of validity if the correct controls are implemented (Mounton, 2001).

Disadvantages in the survey usage research include the depth in the analyses and insiders' perspective lead to criticism. Surveys are also subject to sampling error, questionnaire error, high non-response rate, high refusal rate, data capturing error, fieldwork error and incorrect selection of statistical method used (Mounton, 2001).

Close-ended questions were used in the questionnaire. The questionnaire was structured with four sections (See questionnaire in APPENDIX C):

Section A: This is where the demographical information was collected including age, race, gender, marital status and educational levels;

Section B: This comprised 13 semantic items scored on a 7-point scale measuring personal involvement. The scale was derived from the personal involvement inventory: PII. The advertisement was judged against descriptive scales. Scores on the item are added to form an overall involvement score ranging from a low score of 13 to highest of 91;

Section C: This section aimed to measure source credibility which was divided into two sub-sections. Section C (1) comprised 5 semantic differential items scored on a 7-point scale measuring trustworthiness of the organisation or

organisations sponsoring the advertisement. Section C (2) comprised 5 semantic differential items scored on 7-point scale measuring expertise of the organisation or organisations sponsoring the advertisement;

The scale is known as the Expertise, Trustworthiness, and Attractiveness of Celebrity Endorsers by Ohanian (1990).

Section D: To obtain data about the advertisement message content through the Informational and transformational ad content scale by Puto and Well (1984). The scale includes 23 items scored on a 6-point scale using strongly agree to strongly disagree; however, for this study 13 items were chosen. The transformational construct is addressed in 7 of the 13 items and the remaining 6 address information construct. The scores are averages across each subscale to form indices of each dimension.

Proposed model on which the instrument questionnaire was based on is shown in the figure below



Figure 2: Proposed model for understanding factor affecting advertising effectiveness in NGO-corporate partnerships.

3.6 Procedure of data collection

The participants were obtained at universities, various companies and non-profit organisations in Gauteng.

Random individuals from these organisations were approached to participate. This was often during lunch breaks and on weekends. The questionnaire had clear instructions of the expectation and explained the researchers purpose (see APPENDIX C and F). Each questionnaire took between 15-20 minutes to complete.

3.7 Data of analysis and interpretation

Statistical techniques that the data was exposed to include the following

- Descriptive statistics (ANOVA, multivariate)
- Chi-squared
- Fisher's Exact Test
- Frequency procedure
- Cronbach Alpha

The data collected was captured on Microsoft Excel and then imported into SAS and SPSS.

3.7.1 Descriptive Statistics

The study made use of the descriptive statistics. Descriptive statistics are the summarising and description of data obtained from a group of analysis. This includes information about age, gender, race, educational level, marital status and whether participants consume alcohol or not. This will be a multivariate analysis because it comprises more than two variables

Descriptive statistics assisted the study in graphically and numerically summarising to get a picture and understanding of the data. Descriptive statistics will help the study understand central tendency and dispersion. This will include the mean, standard deviation and variance.

3.7.2 Chi-Squared and Fisher's Exact Test

The relationship between the propositions was identified and tested using Chi-squared method. The Pearson Chi-square test was used to determine whether

there is an association between two variables. Using SAS, the study determined the Chi-squared p-value.

A p-value smaller than 0.05 indicates a significant association between two variables.

The Fisher's exact test was used to work out the p-value where the variables studied by the frequencies are less than 5. The Fisher's exact test works the same way as the Pearson Chi-square.

The relationship between source credibility, personal involvement, demographics and informational or transformational content was tested against advertising effectiveness of NGO-sponsored, corporate-sponsored and co-sponsored advertisements and also the different demographic groups.

3.8 Validity and Reliability

3.8.1 Validity

Content validity refers to the extent to which measurement of instrument is applicable and representative of the target construct for an assessment purpose (Haynes, Richard & Kubany 1995 as cited by Bearden, Netemeyer & Haws 2011). All scales chosen for the study address the variable measured. Validity was ensured by using scales developed by original researchers. A pre-test of the instrument was done to ensure that all variables and any other issues are addressed, which is known as construct validity (APPENDIX E).

3.8.1.1. External validity

External validity determines the extent to which the study results can be generalised. The sampling was done using the convenience sampling method as discussed in 3.4.2. so it cannot be generalised to the entire population over the age of 18. The attempt to get respondents from a wide market segment would further strengthen the validity. Because all the questionnaires were paper- based, which made it easier to administrate.

3.8.1.2 Internal validity

All attempts were made to ensure that the questionnaire is clear and concise. Clear instructions were written on the questionnaire with examples of answering.

Two exploratory pilot studies were done. The first sample comprised 30: 10 participants were given the questionnaire with the SAB logo; 10 participants were given the questionnaire with the PADD logo; lastly, 10 participants were given the questionnaire with both the SAB and PADD logo.

To further examine the validity and after changing the structure of the question, a further pilot with 75 participants was administrated and the three questionnaires were given to 25 different participants.

3.8.2 Reliability

Psychometric literature refers to two types of reliability, namely test-retest and internal consistency. Testing and retesting was done to correlate the same participants' score on the same set of items at different points of time. Internal consistency is the correlation between a set of items on the scale and all who participate in answering the items (Bearden, Netemyer & Haws, 2011). The Cronbach coefficient alpha is used in measuring the reliability of a scale. A score of over 0.7 serves as reliability confirmation. All the scales chosen are regarded as reliable.

The reliability tests conducted were as follow (see APPENDIX D):

Section B: The involvement scale had an overall Cronbach score of 0.9070.

Cronbach's α

Table 2: Reliability score for the entire set of the Personal Involvement scale

α Plot Alpha

Entire set of Personal Involvement	0.9070	
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Section C (1): The trustworthiness scale had an overall Cronbach score of 0.9097.

Table 3: Reliability score of the entire set of the Trustworthiness scale

α Plot Alpha

Entire set on Trustworthiness	0.9097	
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Table 4: Reliability score of the entire set of the Expertise scale

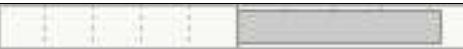
α Plot Alpha

Entire set of Expertise	0.9119	
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Section D: The informational and transformational had an overall Cronbach score of 0.8470. The Informational transformational is scored on a 6-point strong agree to strongly disagree scale.

Table 5: Reliability scores for the entire set of Informational and Transformational ad content

α Plot Alpha

Entire set of Informational and Transformational ad	0.8470	
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The retesting of the Cronbach coefficient was vital for the study because not all the questions in the 3 scales were used. Questions relevant for the study were selected from each scale.

3.9 Pilot Study

Two pilot studies were done before the administering of all 300 questionnaires. The first one, comprised 25 questionnaires, was used to gauge the effectiveness of the tool. This included the layout, language, clarity of the questions, flow of the question and the actual physical appeal.

Minimal changes were made to design the final questionnaire (see APPENDIX E).

The second pilot was with 75 participants to help understand if noticeable relationships could be determined from this number and to retest the reliability scores.

Both of the pilots used random participants from different organisations in Gauteng province.

3.10 Research ethics

Ethical considerations are addressed on three levels: at recruitment of participants, during the intervention or the measurement, and on the release of results obtained (Welman & Kruger, 2003). Recruitment of participants did not include people under the age of 18 because the legal drinking age in South Africa is 18. Secondly, it was completely voluntary and no compensation was provided for participants – this was clearly stipulated in the introductory letter (APPENDIX F). Thirdly, participants could withdraw from the process at any point in the questionnaire. Lastly, SAB was approached to use the company's 'Regret Nothing' campaign.

Intervention or the measurement used in the study was not modified but conducted as per the scale instructions. Measurements were rechecked to ensure reliability. Intervention was consistent across all respondents

Releasing results from the study will not be administrated without the permission of the Wits Business School. A summary of the results will be sent to participants, but all rights to the study are reserved to the institution.

Chapter 4: Presentation of Results

4.1 Introduction

This chapter presents data collected from the sample. The interpretation will then be discussed in the next chapter.

Figure 3 depicts the questionnaire response rate. A total of 440 hard-copy questionnaires were sent out. Of these, 24 (6% of total questionnaire) were disregarded because they were Invalid. Invalid questionnaires are those questionnaires that were either incomplete or ambiguously completed. A total of 111 (25%) of the questionnaires were not returned. Questionnaires returned numbered 305 (69 %), but only 300 would be essential for this study.

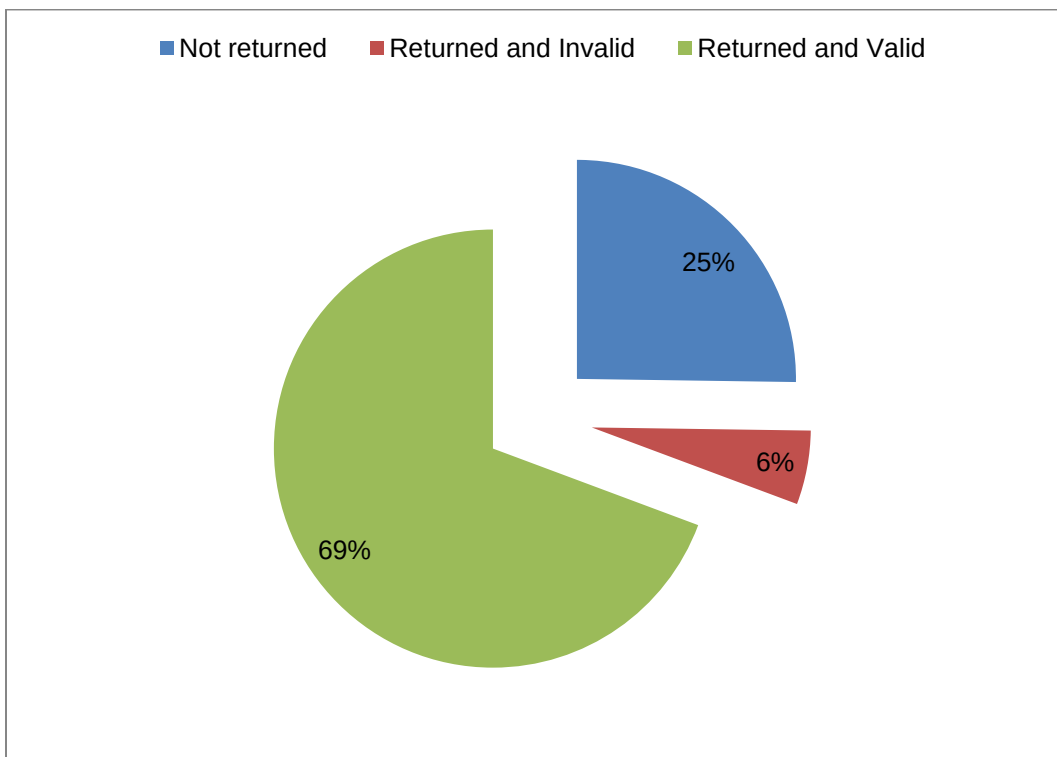


Figure 3: Questionnaire response

4.2 Demographics

Demographics used to differentiate the sample included race, gender, age, marital status and educational level. Because the study is using an alcohol related social problem, respondents were also asked to note whether they consume alcohol or not.

4.2.1 Race Profile

As displayed on Figure 2, Black respondents made up the majority of the study with 186 respondents (62%), followed by White respondents with 73 respondents (24.33%), then Asian persons with 22 respondents (7.33%) and finally Coloured with 19 respondents (6.33%).

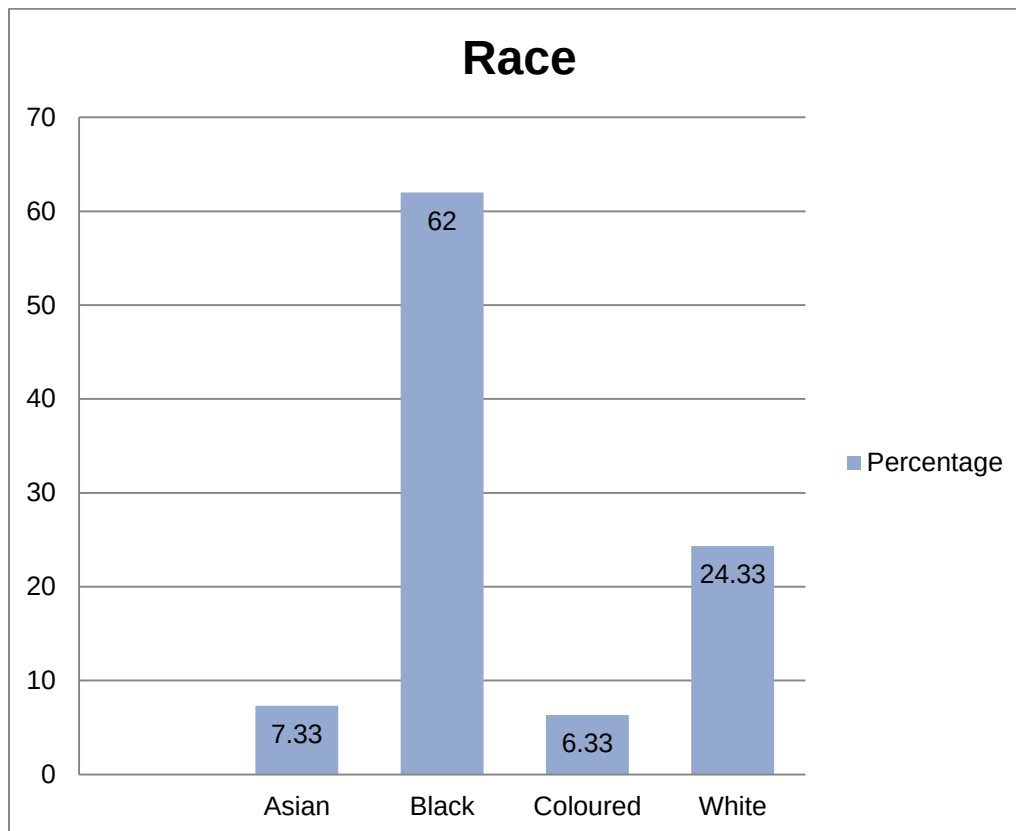


Figure 4: Breakdown of respondents according to race groups

4.2.2 Gender Profile

Of the 300 respondents, 175(58.33%) were female and 125 (41.67%) were male

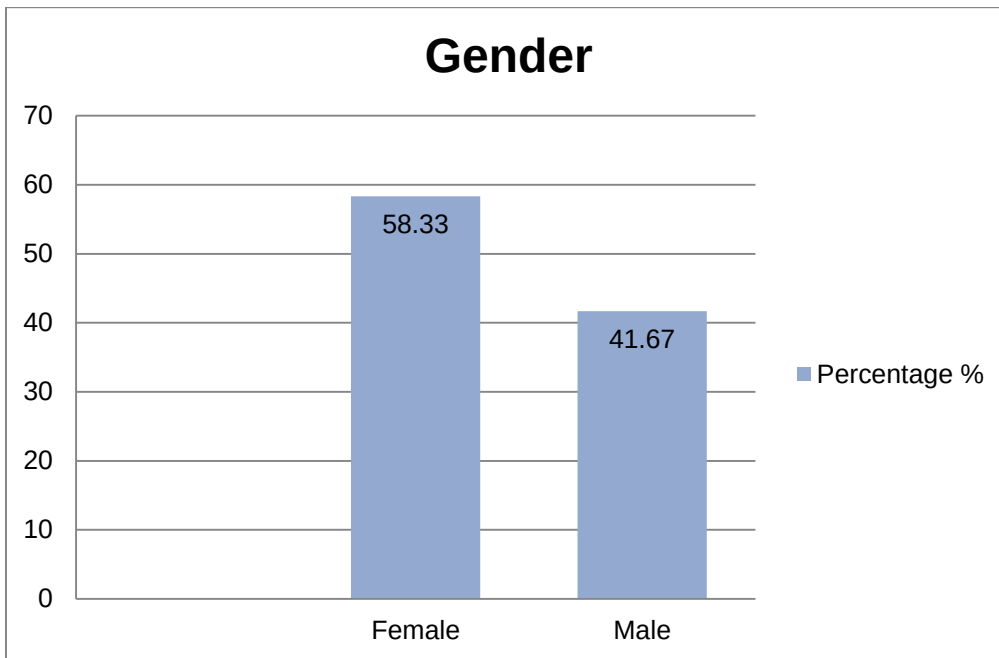


Figure 5: Breakdown of respondents according to gender

4.2.3 Age Profile

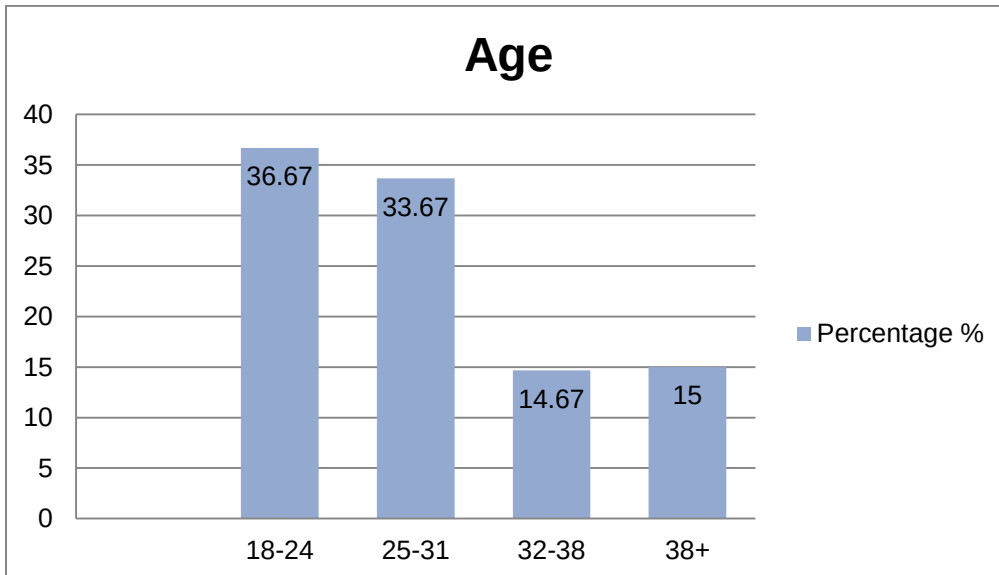


Figure 6: Breakdown of respondents according to age

The majority of the respondents were between the ages of 18-24. This age group accounted for 110 respondents (36.67%), followed by 101 (33.67) respondents of ages 25-31. In fact, respondents between the age 18-24 and 25-31 accounted for 70.33% of the respondents. The group 38+ had 45 respondents (15%) and finally 32-38 years had 44 respondents (14.67%).

Because the legal drinking age in South Africa is 18, all respondents were 18 and above.

4.2.4 Marital status Profile

As displayed in Figure 5, 76% of respondents (228) were single; 60 respondents (20%) were married; 2 respondents (0.67) were widows and 10 (3.33%) respondents were either separated or divorced.

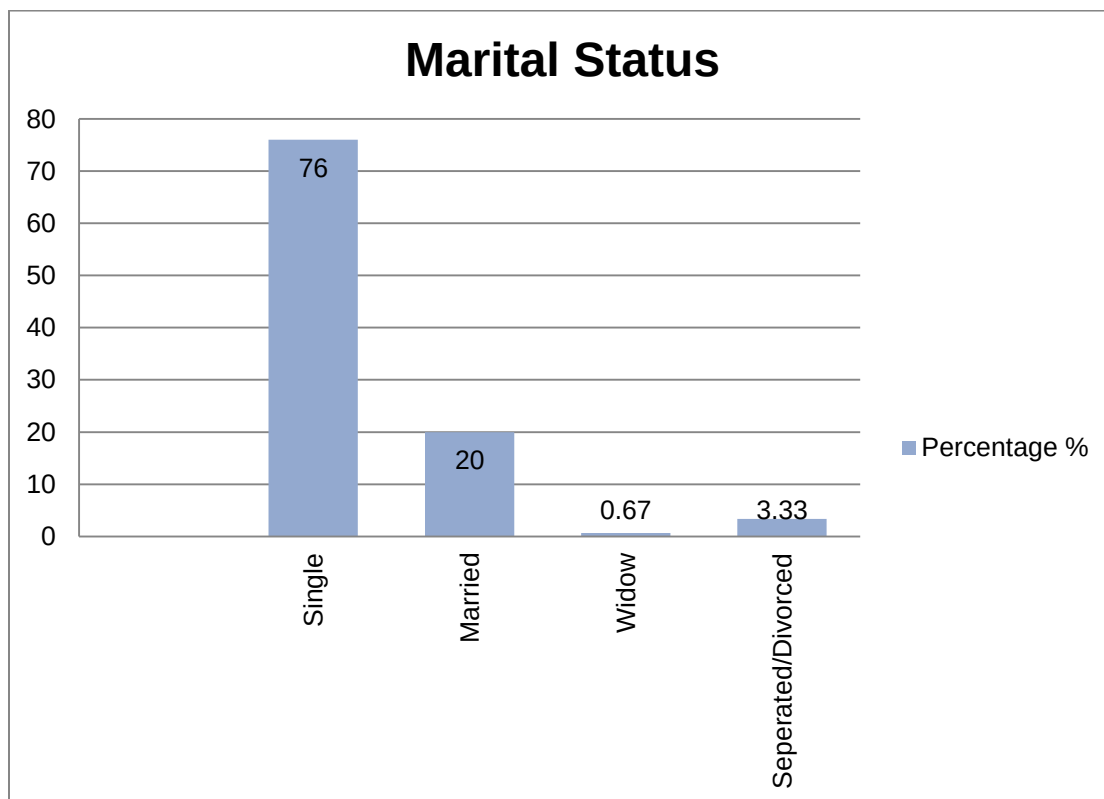


Figure 7: Breakdown of respondents according to marital status

4.2.5 Educational Level Profile

As displayed in Figure 8, the majority of the respondents (176 which translates to 58.67%) had either a Bachelor's or an Honours degree, 85 respondents (28.33%) had obtained a matric certificate, 29 respondents (9.67%) had either a Master's degree or a Doctorate. Finally, 10 (3.33%) had only reached high school but had not completed matric.

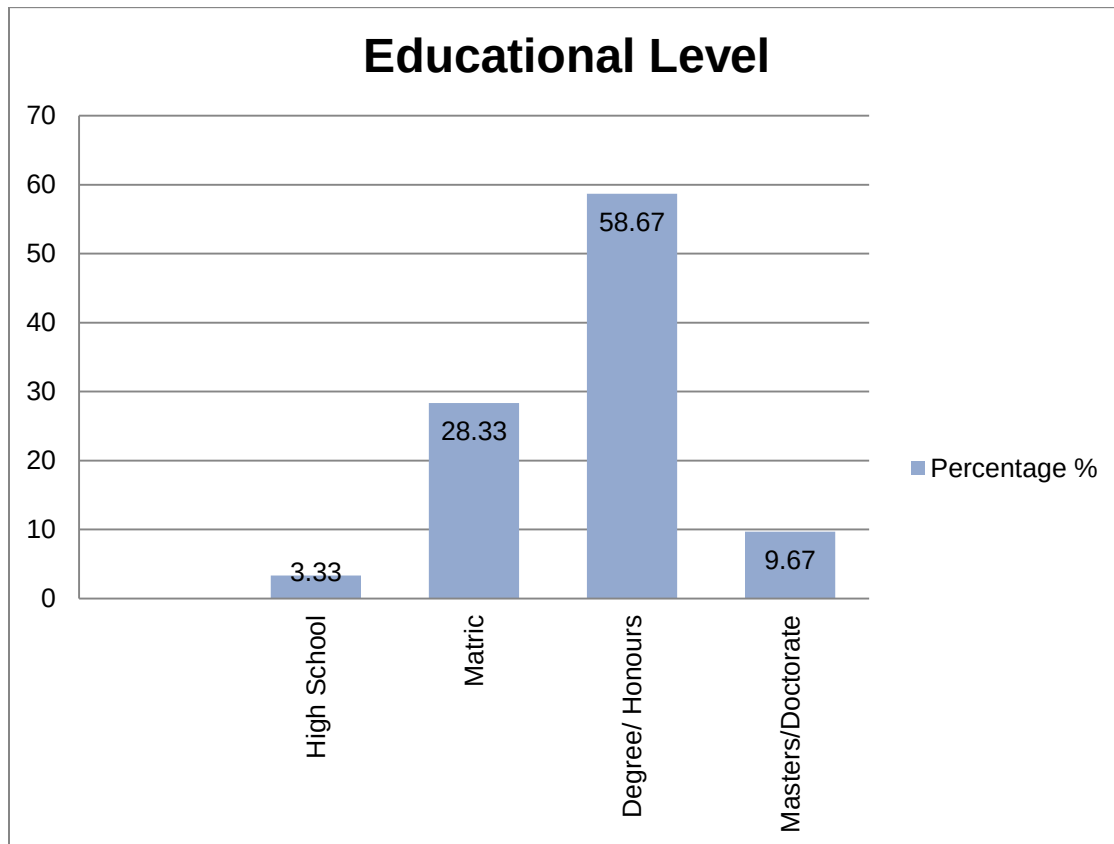


Figure 8: Breakdown of respondent according to the level of education.

4.2.6 Alcohol consumption Profile

Figure 9 displays the number of respondents who either consume alcohol and those who do not consume alcohol. From the sample, 204 respondents (68%) consume alcohol and 96 respondents (32%) do not consume alcohol.

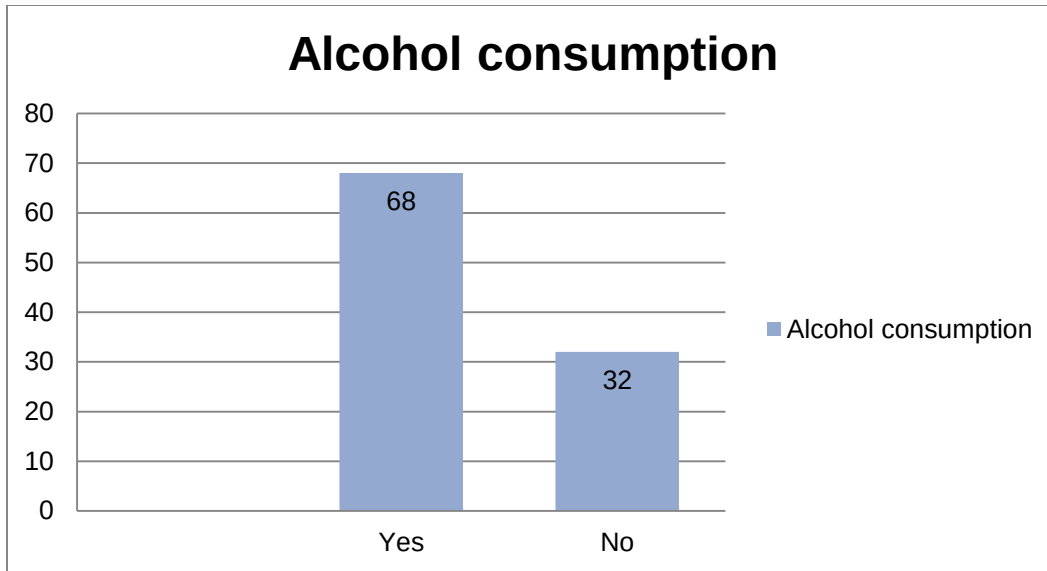


Figure 9: Respondents who consume alcohol versus respondents who don't

4.3 Descriptive Statistics

Descriptive statistics are numerical values used to summarise and describe a sample. Pattern can emerge from the data (Hebl, n.d.). The table below presents descriptive statistics used for the study including the Mean, Standard Deviation and Cronbach Alpha (APPENDIX G)

- n = number of sample
- μ = mean
- σ = standard deviation
- α = Cronbach alpha

Table 6: Descriptive statistics table

Construct	N	μ	α	Cronbach Alpha
Personal Involvement	300	5.23	1.2	0.91
Trustworthiness	300	5.31	1.21	0.91
Expertise	300	5.4	1.16	0.91
Informational Transformational	300	3.45	0.85	0.85

The mean is also known as the average. The highest mean with the four constructs is the Expertise (5.4) and the lowest is informational transformational with an average of 3.45.

The standard deviation is at its highest with trustworthiness (1.21) and lowest with Informational Transformational. Informational Transformational data are more concentrated around the mean. The standard deviation is defined as the dispersion of the set of data from the mean (Rumsey, 2011).

As discussed in 3.8.2, the Cronbach alpha scores all met the research requirement to be considered reliable and internally consistent. The acceptable reliability score is 0.7 (Nunnally, 1978). In this study the Cronbach alpha ranged between 0.8470 – 0.9119.

4.4 ANOVA analysis

4.4.1 Multivariate Correlation

Table 7: Multivariate Correlation across all constructs

Constructs	Personal involvement	Trustworthiness	Expertise	Informational transformational
Personal involvement	1.0000	0.3535	0.3327	-0.3597
Trustworthiness	0.3535	1.0000	0.5270	-0.3919
Expertise	0.3327	0.5270	1.0000	-0.3352
Informational transformational	-0.3597	-0.3919	-0.3352	1.0000

Interpretation of correlation

0.15-0.29 means the correlation has a small effect size

0.30-0.49 means the correlation has a medium effect size

0.50 and above mean the correlation has a large effect

From the table, there is a positive relationship between Personal Involvement and Trustworthiness; Personal Involvement and Expertise; and Expertise and Trustworthiness.

The medium-effect size results (0.3535) in Personal involvement and Expertise suggest that respondents' trust in the sponsors led to involvement in the advert. It is also true that personal involvement was interrelated to perceived expertise of the sponsor with a medium-effect size of 0.3327. Respondents also trusted the advertisement because of the perception that the sponsor/s was/were experts. The correlation with Expertise and Trustworthiness was high at 0.5270.

To determine if the mean of the constructs differed significantly (between categories of the demographic variables) and if further relationships between the constructs and the demographics exist, ANOVA will be used. ANOVA (analysis of variance) is a collection of statistical models with associated procedures. The below will also use MANOVA which is an ANOVA with several dependent variables. The ANOVA tests for variation between 2 or more means (of a category) whilst MANOVA tests variation between two or more vectors of means (French, Macedo, Poulsen, Waterson & Yu, n.d.)

Overall mean scores of all constructs

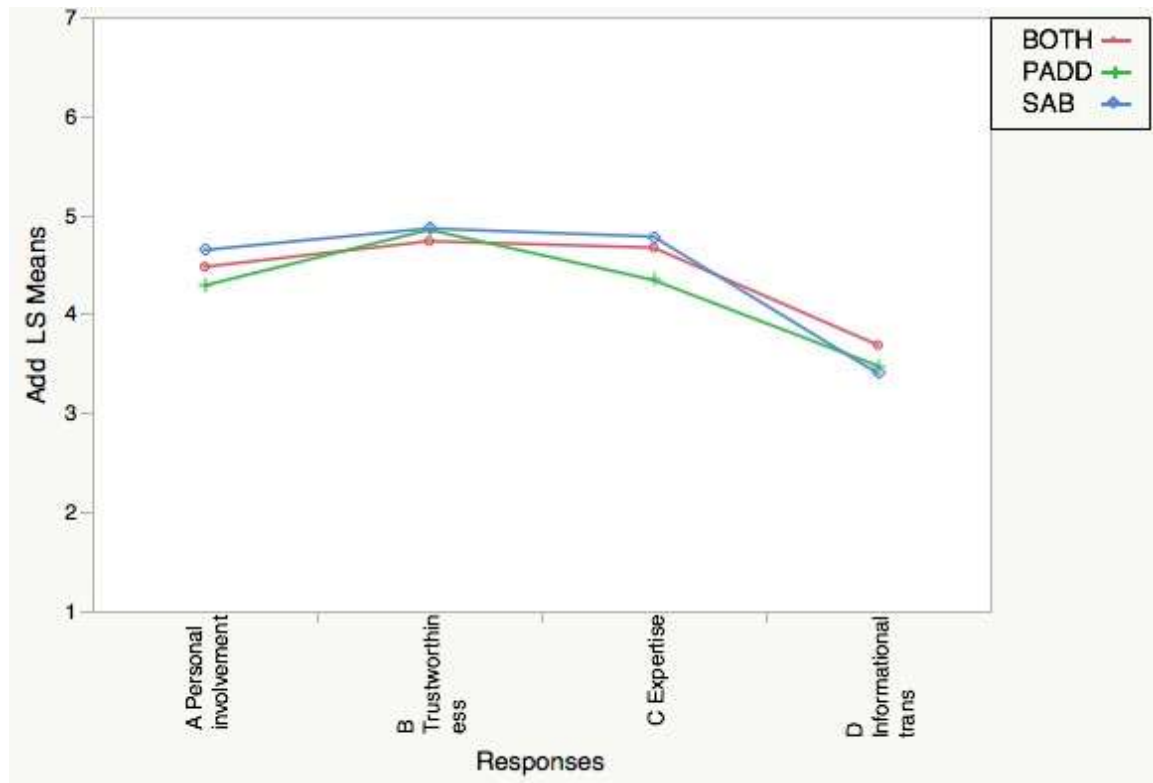


Figure 10: Consolidated means with all the constructs and the 3 advert sponsor

The Figure 10 above and Table 8 below show the least square means produced by the MANOVA analyses and are used for graphical presentation.

Table 8: Mean score of the 3 advert sponsors across the constructs

Advert Sponsor	Personal Involvement	Trustworthiness	Expertise	Informational Transformational
BOTH	4.48	4.77	4.67	3.69
PADD	4.29	4.85	4.34	3.48
SAB	4.65	4.86	4.78	3.4

The study will investigate each construct to see where there is a significant difference between the means of the construct and type of advert by using ANOVA analyses.

Table 9: ANOVA table with respect to SAB, PADD and Both (Partnership) and constructs

Advert Sponsor: SAB,PADD and Partnership with Both			
Constructs	Df	F-Ratio	p-value
Personal Involvement	299	2.06	0.1288
Trustworthiness	299	0.855	0.4263
Expertise	299	4.79	0.0089
Informational Transformational	299	4.4	0.0131

The significant differences are noted in Expertise (0.0089) and Informational (0.0131), and Transformational where the p-value <0.05. This suggests that the adverts were perceived to be sponsored by experts and respondents gained useful information from them.

Post hoc Multiple comparison tests (Tukeys HSD) were done to assess where significant differences exist. The ANOVA letter group shows the mean scores and groups them for levels of significance. The levels not connected by the same letter have a significant difference.

ANOVA connecting letters report for overall difference of means for Personal Level.

Table 10: ANOVA connecting letters for overall difference of means for Personal Involvement across the 3 sponsored adverts

Level		Mean
SAB	A	5.39
BOTH (Partnership)	A	5.25
PADD	A	5.05

From Table 10, it is clear that there is no significant difference in the mean scores of personal involvement across SAB, PADD and with the partnership between both. This confirms what was shown in Table 8.

Table 11: ANOVA connecting letters for overall difference of means for Trustworthiness across the 3 sponsored advert

Level		Mean
SAB	A	5.40
PADD	A	5.34
BOTH(Partnership)	A	5.18

Table 11 shows no significant difference between trustworthiness across SAB, PADD and with the partnership between both. This confirms what is reported on table 8.

ANOVA connecting letters report for actual total difference with means for Expertise.

Table 12: ANOVA connecting letters report for actual total difference with mean for Expertise.

Level			Mean
SAB	A		5.62
BOTH (Partnership)	A	B	5.46
PADD		B	5.13

With regards to Expertise, a significant difference is seen between SAB and PADD. Respondents regarded SAB to be more of experts and PADD to be least of experts. The partnership shows higher mean levels than PADD but less than SAB.

Table 13: ANOVA connecting letters report for actual total difference with means for Informational Transformational

Level			Means
BOTH (Partnership)	A		3.64
PADD	A	B	3.41
SAB		B	3.29

Table 13 indicates a significant difference between the partnership with both and SAB with regards Informational Transformational.

Respondents got more informational or found the advert to be informative when the partnership between both was used. Respondents gained the least information when SAB sponsored the advert.

4.4.2 Demographics and ANOVA

4.4.2.1 Race and ANOVA

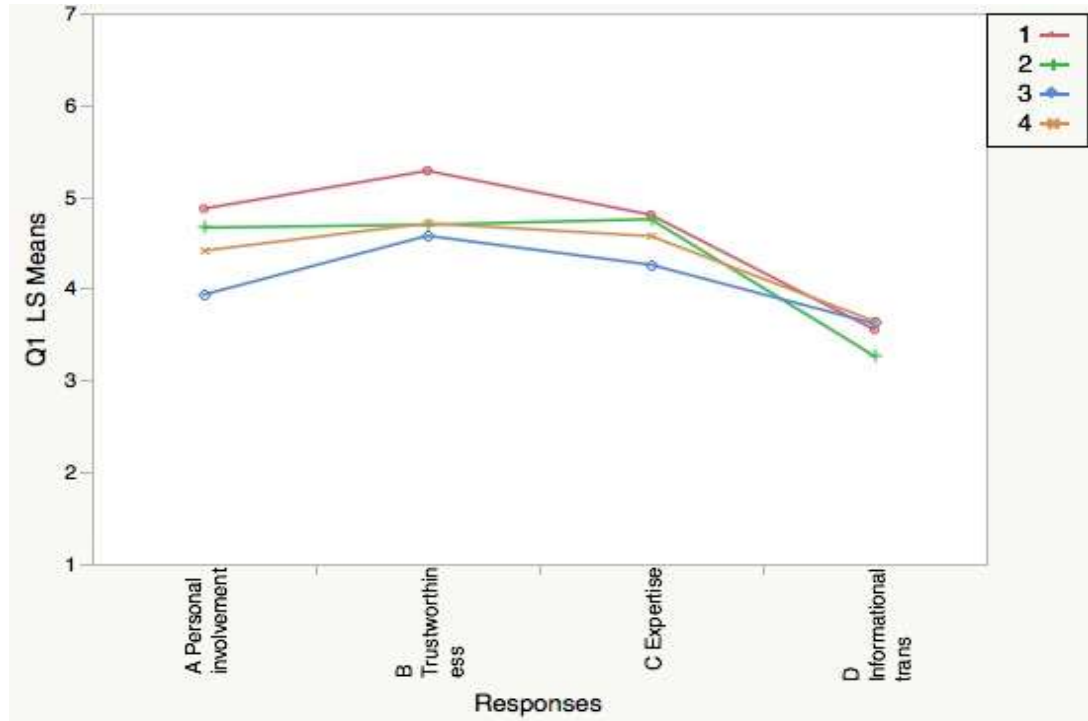


Figure 11: Consolidated mean scores for constructs and the races

Table 14: Mean scores for each construct against the race groups

	Personal Involvement	Trustworthiness	Expertise	Informational Transformational content
1. Asian	4.87	5.28	4.80	3.55
2. Black	4.66	4.70	4.76	3.27
3. Coloured	3.93	4.58	4.26	3.62
4. White	4.41	4.71	4.57	3.65

Figure 11 and Table 14 show the means of the race groups. Trustworthiness, Personal Involvement and Expertise are higher with Asian respondents.

ANOVA will further explain the extent of the differences.

Table 15: ANOVA analysis for constructs and race groups

	Race Groups		
Constructs	Df	F-Ratio	P-value
Personal Involvement	299	2.39	0.07
Trustworthiness	299	1.99	0.11
Expertise	299	1.03	0.38
Informational Transformational content	299	1.9416	0.12

The ANOVA shows no significant difference between the means for Involvement, trustworthiness, expertise and informational transformational content within the race.

4.4.2.2 Gender and ANOVA

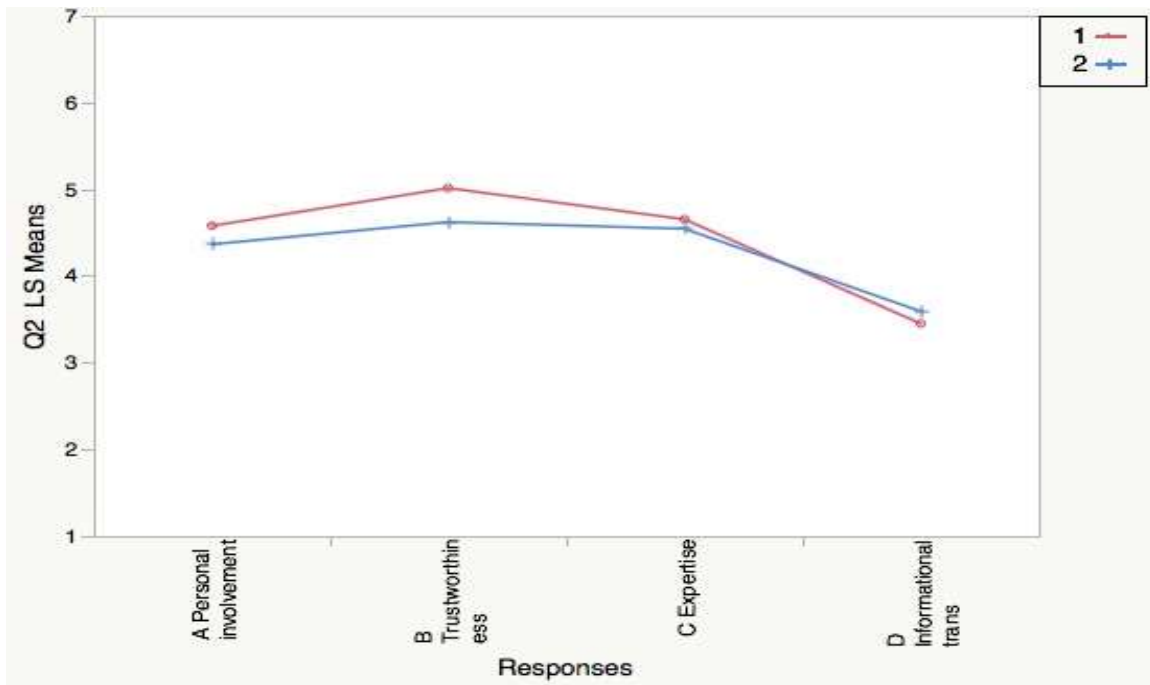


Figure 12: Consolidated mean scores of construct and gender

Table 16: Mean scores for each construct against the gender

	Personal involvement	Trustworthiness	Expertise	Informational Transformational content
1. Female	4.58	5.01	4.65	3.45
2. Male	4.36	4.62	4.54	3.59

The above mean scores show marginal difference between female and male respondents. The table below will check for significant differences.

Table 17: ANOVA analysis of construct and gender

Constructs	Gender		
	Df	F-Ratio	P-value
Personal Involvement	299	2.39	0.07
Trustworthiness	299	4.33	0.04
Expertise	299	0.003	0.96
Informational Transformational	299	0.3497	0.5547

The only significant difference noted here is within trustworthiness. Females are more trusting of the advertisement than males.

4.4.2.3 Age and ANOVA

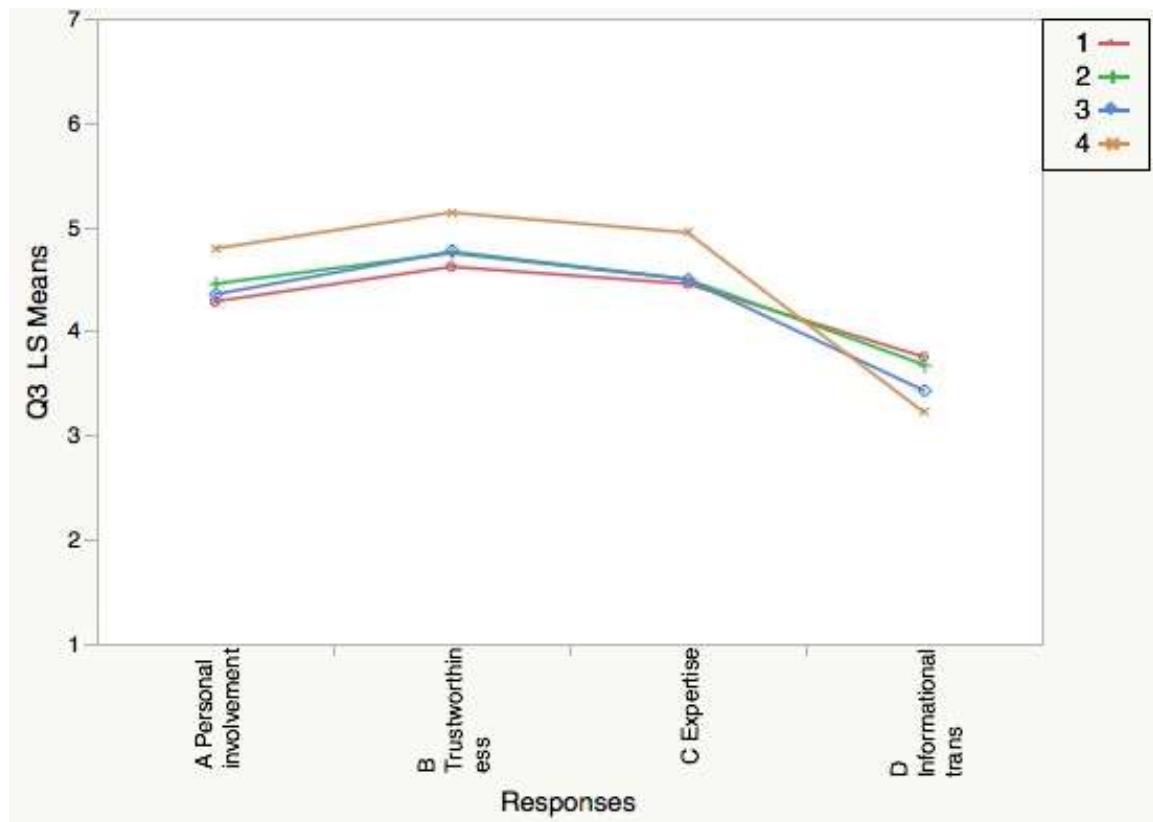


Figure 13: Consolidated mean scores of construct and age

Table 18: Mean score between construct and age groups

	Personal involvement	Trustworthiness	Expertise	Informational Transformational content
1:18-24	4.28	4.62	4.45	3.75
2: 25-31	4.45	4.75	4.50	3.68
3:32-38	4.35	4.76	4.50	3.43
4: 38+	4.79	5.14	4.95	3.22

The table suggests that older persons (38+) are more trusting; more involved and perceive sponsors to be experts. The younger the respondents, the higher the means scores for informational transformational content. This suggests that younger people found the advert to be more informative and useful than older respondents.

The AVONA analysis table will interpret whether the difference are significant.

Table 19: AVONA analysis between constructs and age

	Age		
Constructs	Df	F-Ratio	p-value
Personal Involvement	299	2.57	0.054
Trustworthiness	299	0.47	0.7
Expertise	299	1.34	0.26
Informational Transformational content	299	4.47	0.004

The p-value of Personal involvement is 0.054, which is marginally higher than the required acceptable score of 0.05 and less. The only significant difference is between the age and informational transformational content. Younger respondents found the advert to be more informative than older respondents.

4.4.2.4 Marital status and ANOVA

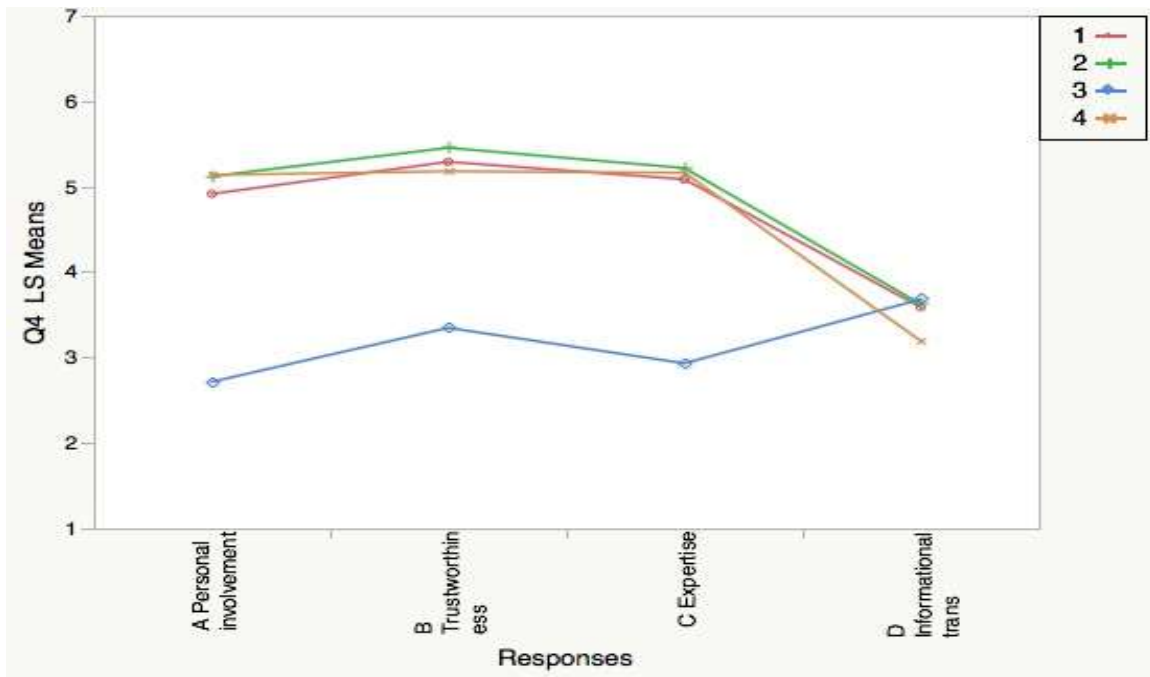


Figure 14: Consolidated mean scores of construct and marital status

Table 20: Means score of constructs and marital status

	Personal involvement	Trustworthiness	Expertise	Informational Transformational content
1: Single	4.91	5.29	5.08	3.59
2: Married	5.12	5.45	5.22	3.62
3: Widow	2.72	3.35	2.93	3.68
4: Seperated/Divorce	5.14	5.18	5.16	3.19

Mean scores of informational transformational content are low across of the range of respondents. It is also clear that married respondents scored higher on trustworthiness and expertise. The ANOVA analysis below investigates where the difference is significant.

Table 21: ANOVA analysis between constructs and marital status

Constructs	Marital Status		
	Df	F-Ratio	p-value
Personal Involvement	299	2.63	0.0498
Trustworthiness	299	1.86	0.14
Expertise	299	2.22	0.09
Informational Transformational	299	2.39	0.07

The analysis suggests that the only significant difference is in Personal Involvement. Separated/Divorced respondents were more involved (5.14) followed by Married respondents (5.12).

4.4.2.5 Level of Education and ANOVA

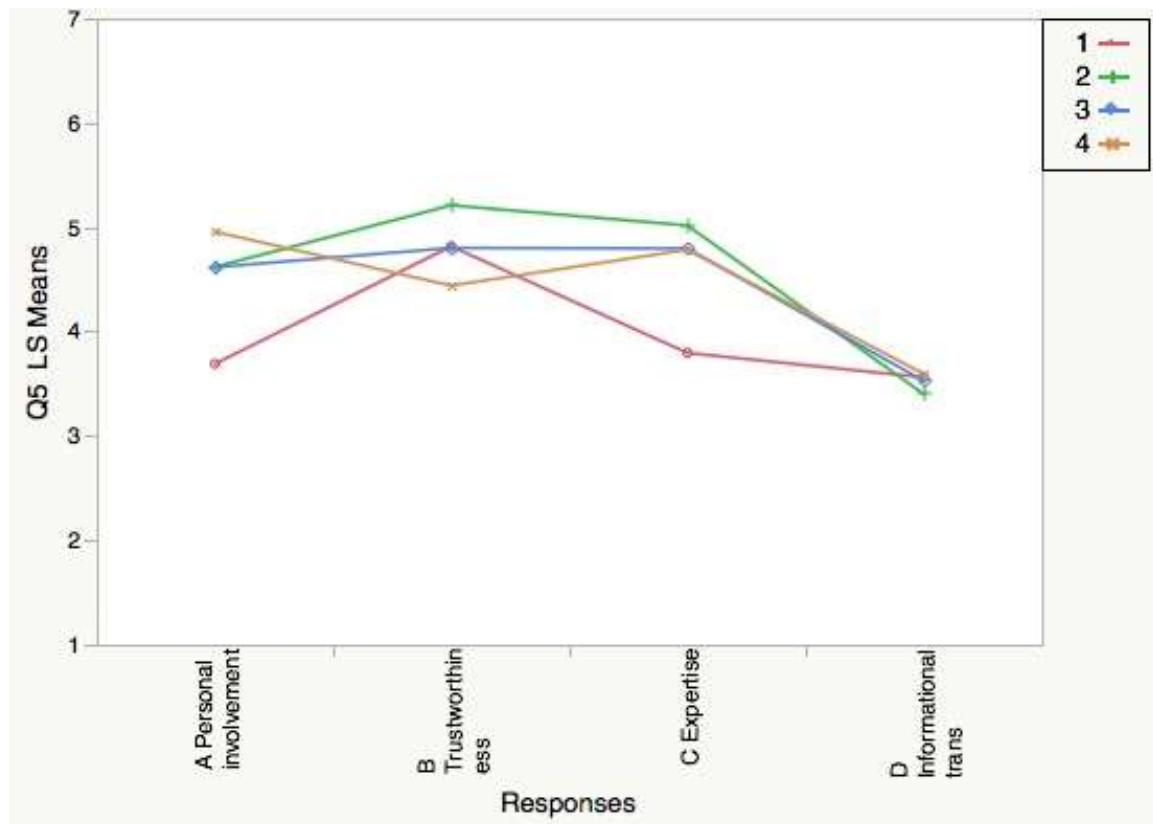


Figure 15: Consolidated mean scores of construct and level of education

Mean and Level of education

Table 22: Mean scores with construct and levels of education

	Personal involvement	Trustworthiness	Expertise	Informational Transformational content
1. High School	3.69	4.82	3.80	3.56
2. Matric	4.62	5.21	5.02	3.40
3. Degree /Honours	4.62	4.80	4.80	3.53
4. Master /Doctorate	4.96	4.44	4.79	3.59

The more educated the respondents, the more involved they are. Respondents with high school and matric were more trusting of the advert sponsor. The ANOVA analysis was used to determine if the differences were significant.

Table 23: ANOVA analysis and educational level

	Education level		
Constructs	Df	F-Ratio	P-value
Personal Involvement	299	2.67	0.048
Trustworthiness	299	3.6	0.01
Expertise	299	2.41	0.06
Informational Transformational	299	0.04	0.99

The significant values are noted with Personal Involvement (0.048) and Trustworthiness (0.01). The more trusting respondents were those with matric and the least trusting were respondents with Masters degrees or Doctorates.

4.4.2.6 Consume alcohol and do not consume alcohol and ANOVA

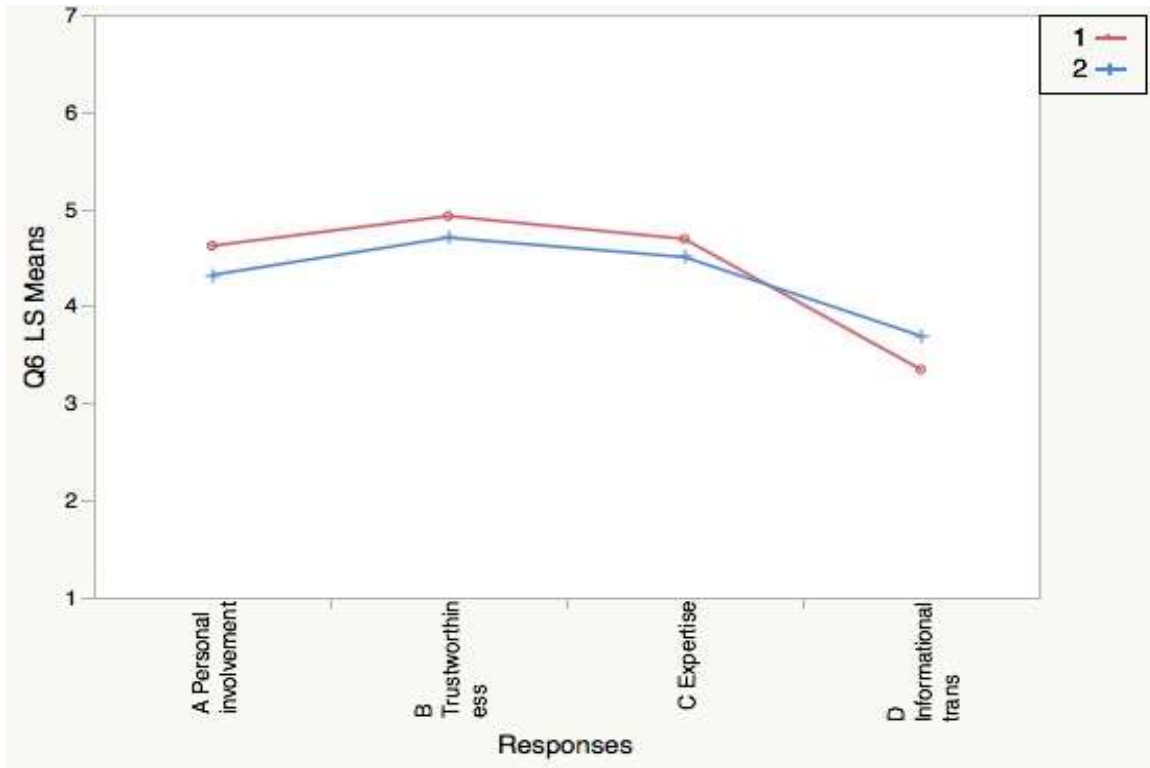


Figure 16: Consolidated mean scores of construct and consume alcohol and those who do not

Table 24: Mean scores for those who consume and those who do not consume alcohol

	Personal involvement	Trustworthiness	Expertise	Informational Transformational content
1. Yes, I consume alcohol	4.62	4.93	4.69	3.35
2. No, I don't consume alcohol	4.32	4.71	4.50	3.69

Respondents that consume alcohol had higher mean scores on all mean scores except Informational Transformational content.

Table 25: AVONA analysis for those who consume alcohol and those whose who do not consume alcohol

	Consume alcohol and don't consume alcohol		
Constructs	Df	F-Ratio	P-value
Personal Involvement	299	0.17	0.68
Trustworthiness	299	0.33	0.56
Expertise	299	0.008	0.93
Informational Transformational	299	3.76	0.054

Though the mean scores of those that consume alcohol are higher, there is no significant difference in any of the constructs.

Using the SAS (APPENDIX H), the next session of the statistics will look at the level of the construct with regards to respondents (low, medium and high) and Chi-square. The Chi-square test is used to test independence and goodness of fit in statistics. Independence testing determines if two or more constructs or variables in two populations are dependent on each other. Good to fit testing determines if the variable or constructs frequency distribution equals a theoretical frequency distribution.

4.5 Personal Involvement results

Table 26: Degree of Personal involvement

Table of Personal Involvement scale				
Advert Sponsor	Degree of Involvement			
	High involvement	Low involvement	Medium involvement	Total
Both	31	8	61	100
	31%	8%	61%	
PADD	27	10	63	100
	27%	10%	63%	
SAB	45	8	47	100
	45%	8%	47%	
Total	103	26	171	300
	34.33%	8.67%	57%	100

Section B of the questionnaire comprised 13 descriptive words or scales to measure persons' interest or involvement in the issue being addressed by the advertisement. It was then possible to determine where people had high, medium or low involvement. The total sample was 300; 100 completed the SAB sponsored advert, 100 completed the PADD-sponsored advert, while another 100 completed the advert sponsored by a partnership with both.

Scores between 13 –45 would be respondents with low involvement; 46–72 scores would have medium respondents and finally anything between 72–90 have high involvement. . Involvement is a motivational concept which is partly reliant on a person's needs and values (Zaichkowsky, 1987).

Both: These respondents participated in the study and answered the questionnaire with an advert displaying partnership between SAB and PADD; 31% of respondents of the questionnaire with both logos had high levels of involvement; 61% of respondents had medium involvement; 8% had low involvement. Respondents with high personal involvement score high in finding the advert to be important, interesting, beneficial, needed and fundamental. These respondents find the advertisement extremely important in addressing the issue of drunk driving.

PADD: These respondents answered the questionnaire with the advert displaying the PADD logo; 27% of respondents of the questionnaire with the PADD had high levels of involvements; 63% of respondents had medium involvements and 10% had low involvement. PADD had the lowest high-involved number of the three (both with 31% and SAB with 45%). PADD also had 10% respondents with low involvement (which was the highest amongst the three adverts). This means the respondents found the advert boring, unimportant, uninteresting and meant nothing to them.

SAB: Respondents answered a questionnaire with the advert displaying the SAB logo. Of the 100 respondents completing this particular SAB-sponsored advert, 45% had high involvement, 47% had medium involvement and 8% had low involvement. SAB had the most respondents within the highly involved group. These respondents had a personal connect or were able to bridge experience to the advert (Krugman, 1965).

Table 27: Chi square and Personal Involvement

Statistic	Value	P-value
Chi-square	8.1782	0.0853
Likelihood Ratio Chi-square	8.0946	0.0882

The above Chi-square is used to determine whether involvement and the different advertisement are independent from each other or not. By statistical convention, we use the 0.05 probability level as our critical value and anything above it proves that the variables are not correlated and anything below shows correlation. The Chi-square is 0.0853.

4.6 Trustworthiness and Expertise results

Trustworthiness

Table 28: Degree of trustworthiness

Table of Trustworthiness				
Advert Sponsor	Degree of Trustworthiness			
	High trustworthiness	Low trustworthiness	Medium trustworthiness	Total
Both	47	6	47	100
	47%	6%	47%	
PADD	50	4	46	100
	50%	4%	46%	
SAB	51	11	38	100
	51%	11%	38%	
Total	148	21	131	300
	49.33%	7%	43.67%	100

Section C of the questionnaire comprised two 5-semantic differential items scored by a 7-point scale. The items are summed up to determine the level of Trustworthiness and Expertise. The results were obtained by using SASS. The study aimed to understand if trust of any of the organisations would be higher. The audience would need to believe that the sources are genuine and that they can trust the message.

Both: Of respondents of the questionnaire with both logos 47% showed high trust in the source sponsoring the advertisement; 47% of the respondents had medium trust and 6% had low trust. Trust for the partnership is 47% which is the lowest when compared to SAB and PADD. This can be because the public might perceive the NGO as losing focus by partnering with the same corporates that they need to be boycotting. Pursuing partnerships and building close working relationships with corporates by NGOs might distract them from fulfilling the mission and using disruptive actions like protests (which could be effective) against the organisation (Baur & Schmitz, 2011). Six percent of the respondents did not trust the sources completely

PADD: Of respondents of the questionnaire with PADD logo 50% showed high trust in the source sponsoring the advertisement; 46% had medium trust and 4% had low trust. NGOs are viewed to not have a hidden agenda because they do not commercially benefit from this. PADD only had 4% of the respondents who perceived PADD as insincere and undependable.

SAB: Fifty-one percent of respondents of the questionnaire with the SAB logo showed high levels of trust in the source sponsoring the advertisement; 38% of respondents had medium trust and 11% had low trust. Over half of the respondents who completed the advert with the SAB logo found them to be trustworthy in addressing drunk driving. The number is contradictory to Szykman, Bloom & Blazing (2004) who wrote that depending on advertising context, it would be advantageous for the message sponsor of a social marketing advert to be endorsed by a non-commercial source (Szykman, Bloom & Blazing, 2004).

Table 29 : Chi-square and Trustworthiness

Statistic	Value	P-value
Chi-square	5.0045	0.2868
Likelihood Ratio Chi-square	4.9339	0.2941

The Chi-square for the independent variables (trustworthiness and the three logos) is 0.29 which is higher than the critical 0.05 needed to establish a relationship.

Expertise

Table 30: Level of Expertise

Table of Expertise				
Advert Sponsor	Level of Expertise			
	High expertise	Low expertise	Medium expertise	Total
Both	51	7	42	100
	51%	7%	42%	
PADD	42	7	51	100
	42%	7%	51%	
SAB	62	6	32	100
	62%	6%	32%	
Total	155	20	125	300
	51.67%	6.67%	41.67%	100

Both: Of the respondents in the questionnaire with both logos 51% regarded the source of the advertisement to have a high level of expertise in addressing the social issue; 42% of respondents regarded that source as having medium expertise, and 7% regarded the sponsors as having low expertise. Over half of the respondents perceived the partnership as being competent and knowledgeable in addressing the pandemic of drunk driving.

PADD: Forty-two percent of the respondents in the questionnaire with the PADD logo regarded the source of the advertisement as having a high level of expertise in addressing the social issue; 51% of respondents regarded that source as having medium expertise, and 7% felt that the sponsors had low expertise. Over 93% of the respondents perceived PADD to have above medium competence and capability in addressing the social issue of drunk driving.

SAB: Sixty-two percent of respondents felt SAB was an expert in addressing the drunk driving issue; 32% felt SAB had medium expertise and 6% felt the sponsor had low expertise. Then 62% of the respondents perceived SAB to be qualified and competent to address the drunk driving pandemic and 6% disagreed that SAB are experts. The high personal involvement score is the highest amongst the other two, which means more respondents perceived SAB as experts and experienced.

Table 31: Chi-square and Expertise

Statistic	Value	P-value
Chi-square	8.3199	0.0805
Likelihood Ratio Chi-square	8.3771	0.0787

The Chi-square did not show a significant correlation between the variables and can be viewed as independent of each other. The Chi-squared p-value is 0.0805, which is higher than the statistical accepted standard of 0.05.

4.7 Informational and Transformational results

Table 32: Agree/Disagree and Informational and Transformational

Table of Informational & Transformational			
Advert Sponsor	Scale		
	Agree	Degree	Total
Both	33	67	100
	33%	67%	
PADD	47	53	100
	47%	53%	
SAB	37	63	100
	37%	63%	
Total	117	183	300
	39%	61%	100

The table comprised 13 items or statements measured on a 6-point scale: 'strongly agree' to 'strongly disagree'. 'Strongly agree', 'agree' and 'somewhat agree' were grouped under 'Agree'. 'Strongly disagree', 'disagree' and 'somewhat disagree' were grouped under 'Disagree'.

Both logos representing partnership: Thirty-three percent of the respondents in the questionnaire with both logos agree that the advertisement was informational and transformational; 67% of respondents disagreed; 33% respondents perceived the advertisement content as relevant, factual and important. The respondents also connected the advertisement to an actual experience which means they are likely to recall the advert when they consume alcohol.

PADD: Forty-seven percent of the respondents in the questionnaire with a PADD logo agree that the advertisement was informational and transformational; .53% of the respondents disagreed. Over half of the respondents did not believe in the content and were likely to forget it. Those respondents do not believe the facts

are presented in a clear and logical manner such that respondents can be confident in assessing the merit of the organisation.

SAB: Of the respondents in the questionnaire with a SAB logo 37% agree to the advertisement being informational and transformational; 63% of the respondents disagreed. The advertisement with the SABA logo had 63% disagreeing to its message content relevance. If respondents do not recall the advert, they are unlikely to take the social marketing message.

Informational and Transformational advertisement content

Questions 24, 26, 28, 30 and 34 address the informational element. Informational advertisement is defined as an ad that provides respondents with factual, relevant brand data in a clear and logical.

The table below compared the respondents' level of involvement and questions relating to informational advertisement content. Informational ad content is defined as factual, logical and clear about the brand, service or idea being presented (Puto & Well, 1984).

Question 24: I learnt something from this advertisement that I didn't know

Table 33: Degree of involvement in informational question number 24

Table of scale by Informational			
Construct	Question 24		
	Agree	Disagree	Total
High involvement	50	53	103
	48.54%	51.46%	
Low involvement	8	18	26
	30.77%	69.23%	
Medium involvement	59	112	171
	34.5%	65.5%	
Total	117	183	300
	39%	61%	100%

Respondents were asked if they learnt something the advertisement that they did not know.

- Fifty (48.54%) respondents agreed to learning something they did not know from the advert also displayed high levels of involvement; 53 respondents (51.46%) disagreed that they learnt anything from the advertisement but showed high involvement.
- One hundred and seventy-one respondents had medium involvement and from those respondents 59 (34.5%) agreed to learning something from the advert and 112 (65.5%) disagreed to learning anything.
- Twenty six respondents had low levels of involvement and from those respondents 8 (30.77%) learnt something from the advertisement and 18 (69.23%) disagreed to learning from it. This means that the majority of the respondents knew that if they drank and drove, they could end up in jail which was the message on the advert.

Table 34: Chi-Square in the degree of involvement and informational question 24

Statistic	DF	Value	P-value
Chi-Square	2	6.1375	0.0465

The above Chi-square is lower than the recommended 0.05. The study can therefore conclude that there is a relationship between involvement and whether the respondents learnt something from the advertisement. If the respondents feel like they are learning from the advert, they are likely to be involved.

Question 26: There is nothing special about this advert that makes it different from the others.

Table 35: Degree of involvement in informational question number 26

Table of scale by Informational			
Construct	Question 26		
	Agree	Disagree	Total
High involvement	45	58	103
	43.69%	56.31%	
Low involvement	16	10	26
	61.54%	38.46%	
Medium involvement	111	60	171
	64.91%	35.09%	
Total	172	128	300
	57.33%	42.67%	100

- Of the 103 respondents with high levels of involvement, 45 respondents (43.69%) agreed there was nothing special about the advertisement that makes it different from the others and 58 (56.31%) disagreed.
- From the 171 respondents with medium levels of involvements, 111 respondents (64.91%) agreed there was special about the advertisement that makes it different from the others and 60 respondents (35.09%) disagreed.
- From the 26 respondents with low levels of involvements, 16 respondents (61.54%) agreed there was special about the advertisement that makes it different from the others and 10 respondents (38.46%) disagreed.

Table 36: Chi-Square in the degree of involvement and informational question 26

Statistic	DF	Value	p-value
Chi-Square	2	12.0416	0.0024

The above Chi-square probability of 0.0024 is below the 0.05 which shows there is a relationship.

Question 28: The advertisement was informative

Table 37: Degree of involvement in informational question number 28

Table of scale by Informational			
Construct	Question 28		
	Agree	Disagree	Total
High involvement	81	22	103
	78.64%	21.36%	
Low involvement	9	17	26
	34.62%	65.38%	
Medium involvement	115	56	171
	67.25%	32.75%	
Total	205	95	300
	68.33%	31.67%	100

- High involvement: 81 respondents (78.64%) agreed that the advert was informative and 22 respondents (21.36%) disagreed.
- Medium involvement: 171 respondents were within the medium involvement degree and of this group 115 (67.25%) agreed the advert was informative whilst 56 (32.75%) disagreed.
- Low involvement: A total of 26 respondents had low degrees of involvement and from the 26, 9 agreed the advert was informative and 17 disagreed.

The Chi-square probability tabled below shows a strong relationship between involvement and the extent to which the respondents found the advertisement informative.

Table 38: Chi-Square in the degree of involvement and informational question 28

Statistic	DF	Value	P-value
Chi-Square	2	18.8099	<.0001
Likelihood Ratio Chi-Square	2	17.9344	0.0001

Question 30: If they could, the company(s) could provide evidence to support the claim made on the advert.

Table 39: Degree of involvement in informational question number 30

Table of scale by Informational			
Construct	Question 30		
	Agree	Disagree	Total
High involvement	87	16	103
	84.47%	15.53%	
Low involvement	22	4	26
	84.62%	15.38%	
Medium involvement	137	34	171
	80.12%	19.88%	
Total	246	54	300
	82%	18%	100

- High involvement: Of the 103 with a high degree of involvement, 87(84.47%) agreed that the company/s could provide evidence to support claims made on the advert and 16 (15.53%) disagreed.
- Medium involvement: Of the 171 respondents with medium levels of involvement, 137 (80.12%) agreed to the question and 34 (19.88%) disagreed

- Low involvement: Of the 26 respondents with low involvements, 22 (84.62%) agreed that the company/s could provide evidence to support claims made on the advert and 4 (15.58%) disagreed.

The Fisher's Exact Test was used in this question instead of the Chi-square because the Fisher's Exact Test is applied when one or more of your cells have an expected frequency of five or less. From the above 4 in the low involvement disagreed with the statement.

Table 40: Fisher's Exact test and the degree of involvement and informational question 30

Fisher's Exact Test	
Table Probability (P)	0.018
p-value	0.6295

The Fisher's Exact Test had a p-value score of 0.6295. The score is higher than 0.05, which shows no relationship between the answers and the involvement.

Question 34: I can now accurately compare with other competing brands on matters that are important to me.

Table 41: Degree of involvement in informational question number 34

Table of scale by Informational			
Construct	Question 34		
	Agree	Disagree	Total
High involvement	62	41	103
	60.19%	39.81%	
Low involvement	7	19	26
	26.92%	73.08%	
Medium involvement	82	89	171
	47.95%	52.05%	
Total	151	149	300
	50.33%	49.67%	100

- High involvement: Of the 103 respondents in the high involvement group, 62 respondents (60.19%) that they could accurately compare the brand/s on matters that are important to them and 41 respondents (39.81%) disagreed.
- Medium involvement: Of the 171 respondents with medium involvement, 82 respondents (47.95%) agreed to the statement and 89 (52.05%) disagreed.
- Low involvement: from the 26 respondents in the low involvement group, 7 agreed that they could accurately compare the brand(s) on matters that are important to them and 19 respondents (73.08%) disagreed.

Table 42: Chi-Square in the degree of involvement and informational question 34

Statistic	DF	Value	P-value
Chi-Square	2	10.0937	0.0064

The Chi-square p-value is 0.0064 which shows a relationship between the two variables.

Questions 25, 27, 29, 31,32,33,35 and 36 address the transformational element. A transformational advertisement is one that associates the experience of using the advertised brand/s with unique psychological characteristics which would typically not be associated with the brand experience to the same degree without exposure of the advertisement.

Question 25: It is hard to give a reason, but somehow this advert is not really for me.

Table 43: Degree of involvement in transformational question number 25

Table of scale by Transformational			
Construct	Question 25		
	Agree	Disagree	Total
High involvement	31	72	103
	30.1	69.9	
Low involvement	17	9	26
	65.38	34.62	
Medium involvement	93	78	171
	54.39	45.61	
Total	141	159	300
	47	53	100

- High involvement: Of the 103 with high involvement, 31 (30.1%) agreed that they could not give a specific reason, but the advert was not really for them, and 72 (69.9%) disagreed.
- Medium involvement: 171 respondents were in the medium involvement group. From those respondents, 93 (54.39%) agreed that they could not give a specific reason but the advert was not really for and 78 (45.61%) disagreed.

- Low involvement: Of the 26 with high involvement, 17 (65.38%) agreed within that they could not give a specific reason, but the advert was not really for them and 9 (34.62%) disagreed.

Table 44: Chi-Square in the degree of involvement and transformational question 25

Statistic	DF	Value	P-value
Chi-Square	2	20.9312	<.0001

The p-value=0.001 indicates that the association is statistically significant at the 0.05 alpha level. There is a relationship between the degree to which respondents were involved and the extent to which the respondents felt they did not learn anything from the advert.

Question 26: This advert was meaningful to me

Table 45: Degree of Involvement for transformational question 26

Table of scale by Transformational			
Construct	Question 27		
	Agree	Disagree	Total
High involvement	88	15	103
	85.44%	14.56%	
Low involvement	11	15	26
	42.31%	57.69%	
Medium involvement	125	46	171
	73.1%	26.9%	
Total	224	76	300
	74.67%	25.33%	100

- High involvement: Of the 103, 88 (85.44%) respondents say the advert was meaningful to them and 15 (14.56%) respondents disagree.

- Medium involvement: 125 (73.1%) respondents agreed that the advert was meaningful to them and 46 (26.9%) disagreed.
- Low involvement: Of the 26, 11 (42.31%) respondents say the advert was meaningful to them and 15 (57.69%) respondents disagree

The below Chi-square p-value also reflects an association or relationship between the two independent variables.

Table 46: Chi-Square in the degree of involvement and transformational question 27

Statistic	DF	Value	P-value
Chi-Square	2	20.9312	<.0001

Question 29: I could really relate to this advert.

Table 47: Degree of involvement in transformational question number 29

Table of scale by SSec D_6 Transformational			
Construct	Question 29		
	Agree	Disagree	Total
High involvement	78	25	103
	75.73%	24.27%	
Low involvement	10	16	26
	38.46%	61.54%	
Medium involvement	90	81	171
	52.63%	47.37%	
Total	178	122	300
	59.33%	40.67%	100

- High involvement: Of the 103 highly involved respondents, 78 respondents (75.73%) agreed that they could relate to the advert and 25 (24.27%) disagreed.

- Medium involvement: Of the 171 medium involved respondents, 90 respondents (52.63%) agreed that they could relate to the advert whilst 81 (47.37%) disagreed.
- Low involvement: Of the 26 low-involved respondents, 10 (38.46%) agreed they could relate to the advert and 16 (61.54%) disagreed.

Table 48: Chi-Square in the degree of involvement and transformational question 29

Statistic	DF	Value	P-value
Chi-Square	2	19.3511	<.0001

Question 31: it is the kind of advert that keeps running through your head after you've seen it.

Table 49: Degree of involvement in transformational question number 31

Table of scale by Transformational			
Construct	Question 31		
	Agree	Disagree	Total
High involvement	65	38	103
	63.11%	36.89%	
Low involvement	8	18	26
	30.77%	69.23%	
Medium involvement	86	85	171
	50.29%	49.71%	
Total	159	141	300
	53%	47%	100

- High involvement: From the 103 respondents in this group, 65 respondents (63.11%) agree that this is the type of advert that keeps running through ones head after seeing it and 39 (36.89%) disagree.
- 171 respondents are within the medium involved group. From the 171 respondents, 86 respondents (50.29%) agree to the question and 85 (49.17%) disagree.

- From the 26 respondents in with low involvement, 8 agree that this was the type of advert that keeps running through ones head after seeing it and 18 (69.23%) disagree.

Table 50: Chi-Square in the degree of involvement and transformational question 31

Statistic	DF	Value	P-value
Chi-Square	2	9.8853	0.0071

Question 32: If I could change my lifestyle, I would make it less like people that consume alcohol.

Table 51: Degree of involvement in transformational question number 32

Table of scale by Transformational			
Scale	Question 32		
	Agree	Disagree	Total
High involvement	69	34	103
	66.99%	33.01%	
Low involvement	17	9	26
	65.38%	34.62%	
Medium involvement	82	89	171
	47.95%	52.05%	
Total	168	132	300
	56%	44%	100

- High involvement: 69 (66.99%) of highly involved respondents agreed to the statement and 34 (33.01%) disagreed.
- Medium involvement: 47 (47.95%) agreed that if they could they would change their lifestyles to be less like people that consume alcohol and 89 (52.05%) disagreed.
- Low involvement: 17 respondents (65.38%) within the low involvement group agreed to the statement and 9 (34.62%) disagreed

Table 52: Chi-Square in the degree of involvement and transformational question 32

Statistic	DF	Value	P-value
Chi-Square	2	10.4721	0.0053

The Chi-square p-value of 0.0053 shows a relationship between the level of involvement and willingness for respondents to change their lifestyles.

Question 35: When looking at the advert, I thought of how this might be useful to me.

Table 53: Degree of involvement in transformational question number 34

Table of scale by Transformational			
scale	Question 35		
	Agree	Disagree	Total
High involvement	73	30	103
	70.87%	29.13%	
Low involvement	9	17	26
	34.62%	65.38%	
Medium involvement	103	68	171
	60.23%	39.77%	
Total	185	115	300
	61.67%	38.33%	100

- High involvement: Within the 103 highly involved respondents, 73 respondents (70.87%) thought of how the advert might be useful to them and 30 (29.13%) disagreed
- Medium involvement: Of the 171 respondents in the medium involvement group, 103 (60.23%) agreed with the statement and 68 (39.77%) disagreed that when they were exposed to the advert, they thought of how it could be useful to them.

- Low involvement: From the 26 respondents within the low involvement group, 9 respondents (34.62%) agreed to the statement and 17 (65.38%) disagreed.

Table 54 below shows the Chi-square value as 0.0026 which is reveals a relationship or correlation between the two variables.

Table 54: Chi-Square in the degree of involvement and transformational question 34

Statistic	DF	Value	P-value
Chi-Square	2	11.8908	0.0026

Question 36: It is hard to put it in words, but this advert leaves me with a good feeling about the brand/s.

Table 55: Degree of involvement in transformational question number 36

Table of scale by Transformational			
scale	Question 36		
	Agree	Disagree	Total
High involvement	84	19	103
	81.55%	18.45%	
Low involvement	10	16	26
	38.46%	61.54%	
Medium involvement	109	62	171
	63.74%	36.26%	
Total	203	97	300
	67.67%	32.33%	100

- High involvement: From the 103 high involved respondents, 84 (81.55%) agreed that the advert left them with a good feeling about the brand (s) and 19 (18.45%) disagreed.
- Medium involvement: From the 171 medium involved respondents, 109 (63.74%) agreed the advert left them with a good feeling about the brand (s) and 62 respondents (36.26%) disagreed.
- Low involvement: 10 respondents (38.46%) agreed the advert left them with a good feeling about the brand (s) and 16 (61.54%) disagreed.

Table 56: Chi-Square of the degree of involvement and transformational question 36

Statistic	DF	Value	P-value
Chi-Square	2	20.4179	<.0001

The Chi-square p-value shows a relationship or correlation between the degree of involvement and feelings toward the brand after seeing the advert.

4.8 Demographic and Involvement

4.8.1 Race and involvement

The study analysed the degree of involvement within the different race groups

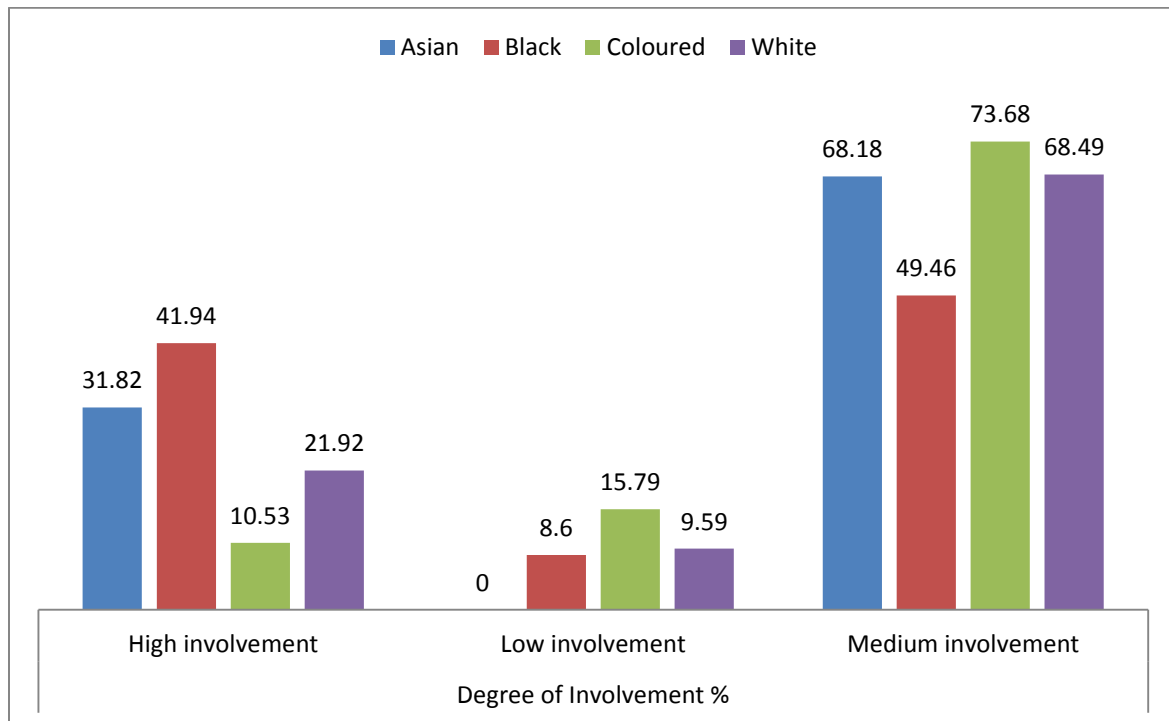


Figure 17: Race and Degree of Involvement

- Asian: A total of 22 Asian respondents undertook the study, 7 (31.82%) were high involved and 15 (68.18%) within the medium involvement. There was no recorded low involvement within the Asian group.
- Black: From the total of 186 black respondents participated in the study, 92(49.46%) had medium involvement, 78 respondents (41.94%)had high involvement and 16 (8.6%) had low involvement.
- Coloured: From the 19 Coloured respondents, 14 (73.68%) had medium involvement, 3 had low involvements and 2 were with the low involvement group.
- White: From the 73 white respondents, 50 (68.49%) had medium involvement, 16 had high involvement and 7(9.59%) had low involvement.

The Chi-square indicates a relationship between the race and degree of involvement with a Fisher's exact test p-value of 0.0041. Fisher's exact test was used because some values were less than 5.

4.8.2 Gender and Involvement

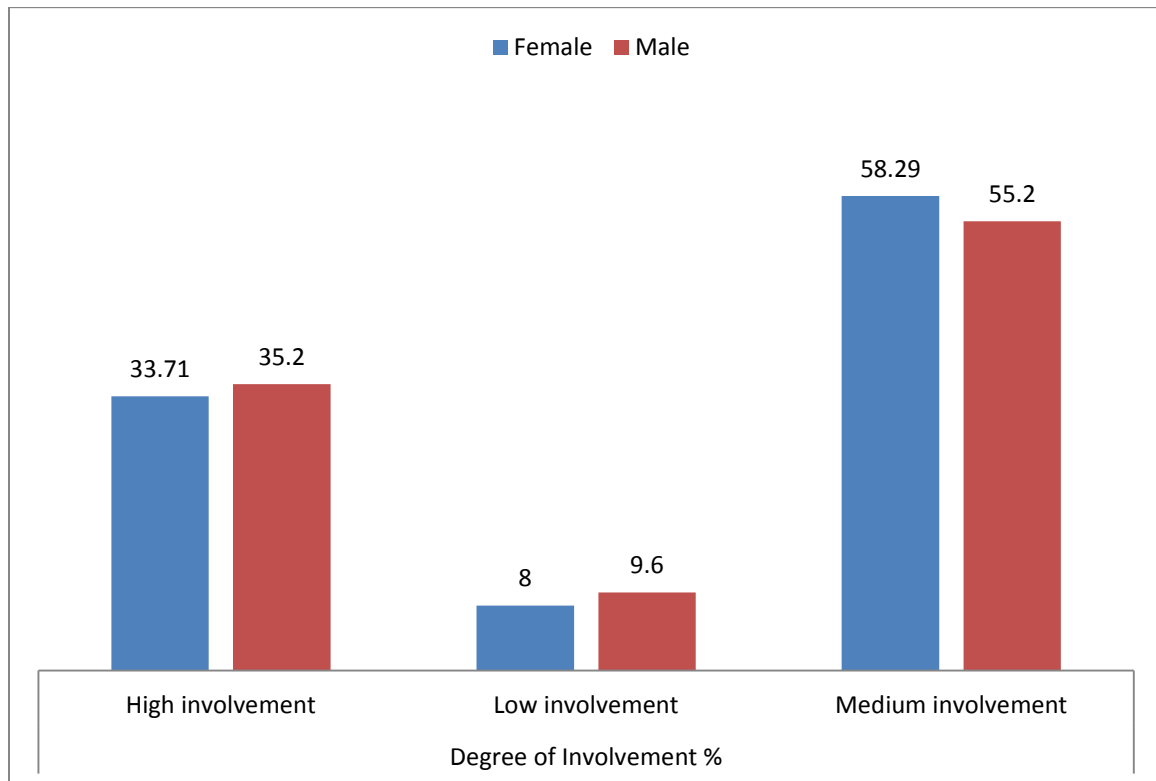


Figure 18: Gender and Degree of Involvement

- Females: 175 females participated in the study. From these females, 102 respondents had medium involvement, 59(33.71%) had high involvement and 14 (8%) had low involvement.
- Males: 125 females participated in the study. 69(55.2%) female respondents had medium involvement, 44 (35.2%) had high involvement and 12 (9.6%).

The Chi-square p-value was 0.8253 so there was no relationship between level of involvement and gender.

4.8.3 Age and Involvement

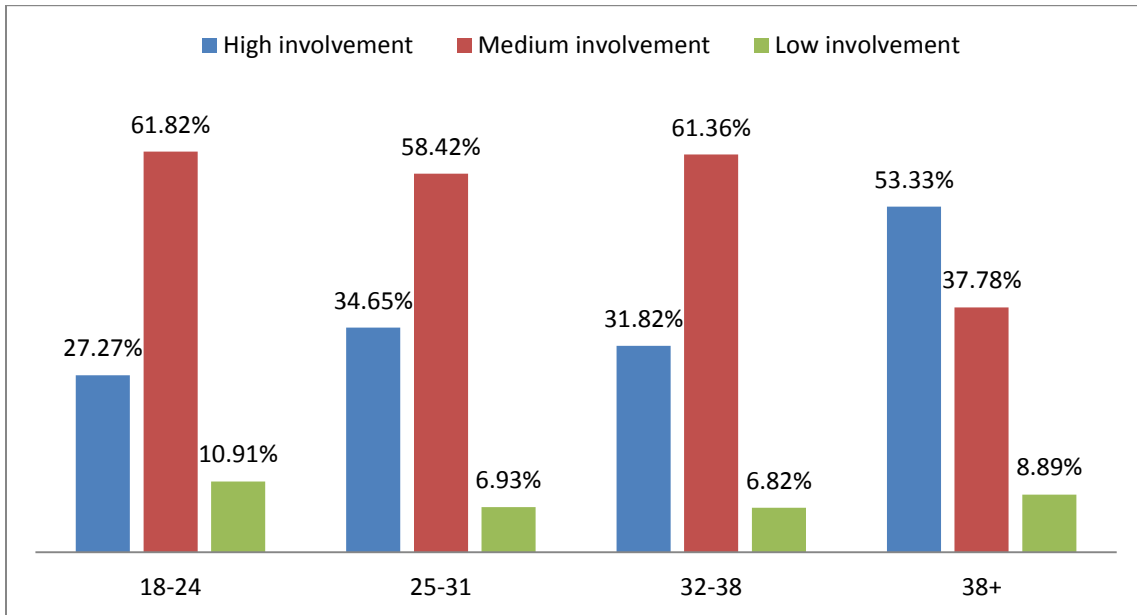


Figure 19: Age and Level of Involvement

The age groups were divided as follows:

- 18-24
 - 25-31
 - 32-38
 - 38+
-
- 18-24: 110 respondents between the ages of 18-24 participated in the study. 68 (61.82%) had medium levels of involvement, 30 (27.27%) had high involvement and 12 (10.91%) had low involvement.
 - 25-31: 101 respondents between the ages of 25-31 participated in the study. 59 (58.42%) had medium involvement, 35 (34.65%) had high involvement and 7 (6.93%) had low involvement.
 - 32-38: 44 respondents between the ages of 32-38 participated in the study. 27 (61.36%) had medium involvement, 14 (31.82%) had high involvement and 3 (6.82%) had low involvement.

- 38+: 45 respondents were over the age of 38. 24 of the respondents over 38 (53.33%) had high involvement, 17 (37.70%) had medium involvement and 4 (8.89%) had low involvement.

The Fisher's Exact Test was used to determine if there was a relationship between the age and level of involvement. The p-value was 0.0883 showed no relation. (Please see APPENDIX H)

4.8.4 Marital Status and Involvement

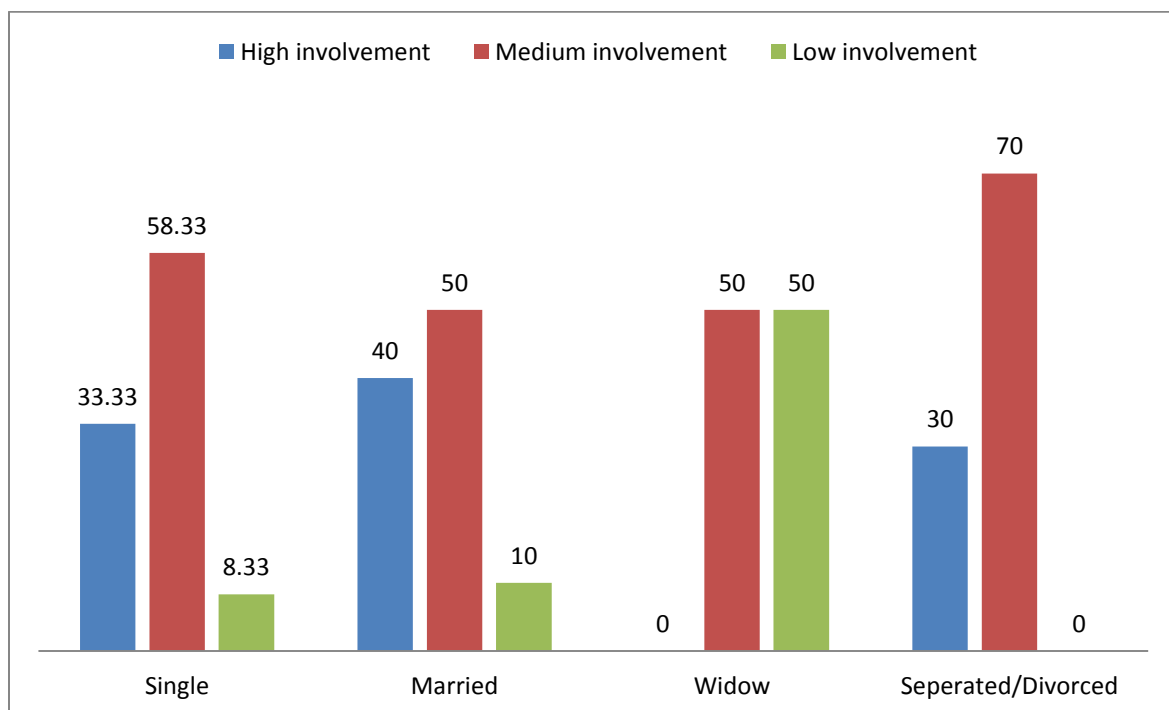


Figure 20: Marital status and Level of involvement

Single: 228 single respondents participated in the study. From the single group, 133 respondents (58.33%) had medium involvement, 76 respondents (33.33%) were within the high involvement and 19 (8.33%) had low involvement.

Married: 60 married respondents participated in the study. From the married respondents, 30 (50%) had medium involvement, 24 respondents (40%) had high involvement and only 6 respondents (10%) had low involvement

Window: Only 2 respondents were widows,. 1(50%) had low involvement and the other had medium involvement.

Separated or divorced: 10 respondents were either separated or divorced, 7 (70%) had medium involvement and 3 (30%) had high levels of involvement.

There was no significant relationship noted by the Fisher's Exact Test between the marital status and level of involvement. See Appendix

4.8.5 Educational level and Involvement

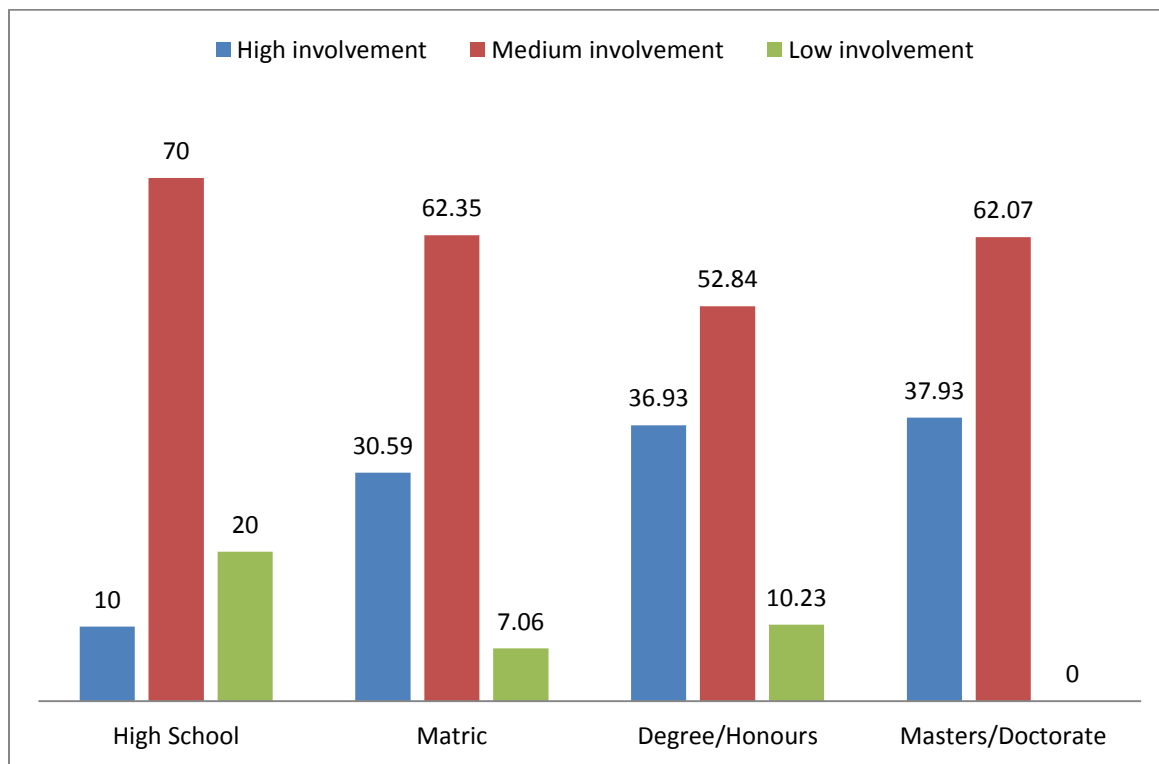


Figure 21: Educational Level and Level of Involvement

- High School: 10 respondents were within the high school group. This group did not complete their matric. From this group 7 respondents (70%) had medium involvement, 2 (20%) had low involvement and 1 (10%) had high involvement.

- Matric: 85 respondents highest qualification was a matric. From this group, 53 (62.35%) had medium involvement, 26 respondents (30.59%) had high levels of involvement and 6 respondents (7.06%) had low involvement.
- Degree or Honours: 176 respondents had a diploma, degree or honours. From this group, 93 (52, 84%) respondents had medium involvement, 65 (36.93%) had high involvement and 18 (10.23%) had low involvement.
- Masters or Doctorate: 29 respondents had either a Masters or Doctorate. From this group 18 respondents (62.07%) had medium involvement and 11 respondents (37.93%) had high involvement.

There was no significant relationship between the educational level and level of involvement. The Fisher's Exact Test had a p-value of 0.1540.

4.8.6 Alcohol Consumption and Involvement

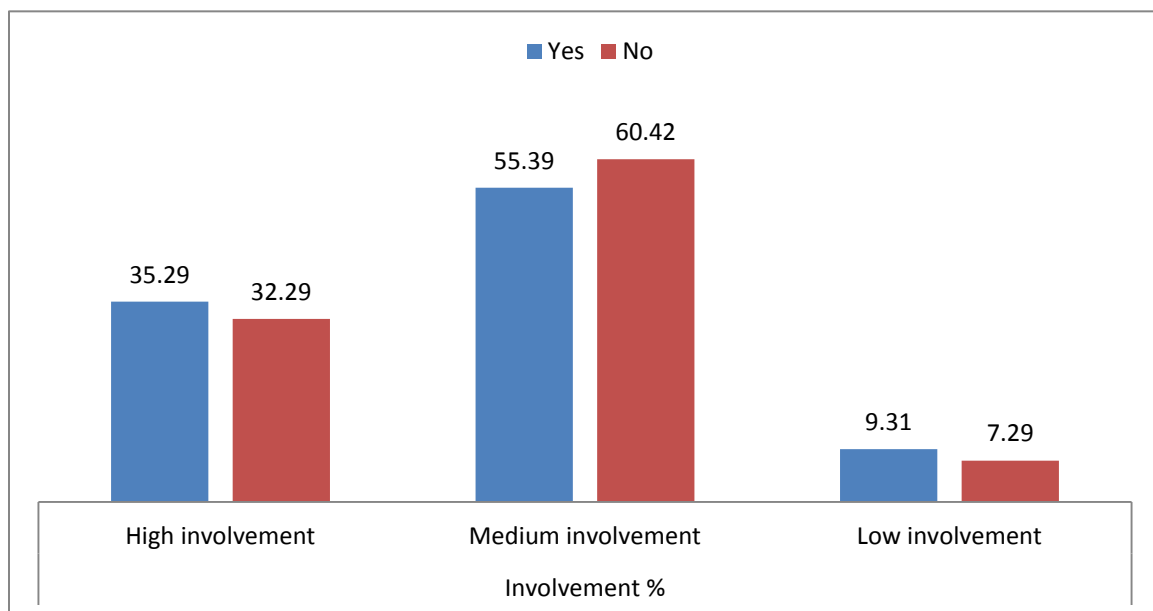


Figure 22: Alcohol consumption and involvement

- From 204 respondents who consume alcohol, 113 respondents (55.39%) had medium involvement, 72 (35.29%) had high involvement and 19 (9.31%) had low involvement

- From the 96 respondents who do not consume alcohol, 58 (60.42%) had medium levels of involvement, 31 (32.29%) had high levels of involvement and 7 (7.29%) had low levels of involvement.

The Chi-square p-value was 0.6810 does not indicate a relationship between respondents who consume alcohol and those that don't with the level of involvement.

Chapter 5: Discussion of results

5.1 Introduction

This chapter discusses the results presented in Chapter 4 with alignment to research questions posed in the literature review. The results will specifically focus on the parts where statistically significant differences were noted amongst the constructs and the demographics. This discussion will answer and make clear of the factors affecting the effectiveness of social marketing advertising. The chapter will also look at the different levels of each of the variables to better understand where the most of the respondents rank.

5.2 Demographics

The demographic profile in the sample allowed for certain vigorous statistics but was not equally distributed amongst the groups. Due to the random selection of the respondents, some of the demographic groups are not richly represented. This could be because the respondents were from Gauteng and primarily found in universities. This does not compromise the quality of the data attained but would be important to note if one would like to use the study to understand the behaviour in another province.

5.2.1 Race profile

The breakdown of the respondents' demographics is presented in Figures 4 to 7. The breakdown shows that the majority of the respondents were Black respondents who are also a majority race in South Africa followed by White respondents. In 2013, black persons in South Africa represented 79.8% of the population; white persons were 8.7% of total population; Coloured persons represented 9% of total South Africa population and Asian people were 2.5% (Statistics South Africa, 2013). Due to convenience sampling technique used to acquire the sample, some of the races (Asians and Coloured) were poorly

presented. The difference in the sample could also be because most of the respondents were from Gauteng.

5.2.2 Gender profile

The majority of the respondents were female, which is also true about the South Africa population. The spread is fairly split between the genders allowing for robust statistical study between the females and males.

5.2.3 Age profile

The respondents between the ages of 18-31 accounted for 70.33% of the study as displayed in Chapter 4. The balance of the respondents was over the age of 32. The majority of the respondents were young persons. This is a particularly good for the study because drunk driving is more prevalent among younger persons so the statistical analysis will be relevant for younger persons.

It was also difficult to establish the age of persons 38+ because this is a wide group, but the questionnaire did not categorise them, but instead all respondents over the age of 38 fall in one category.

5.2.4 Marital status profile

A flaw in the study shows that the majority of the respondents were singles at over 76%. This could mean the results are more meaningful to this group. If further study is to be explored, it would be recommended that the focus also adequately cover the married or divorced.

5.2.5 Educational level profile

The majority of the respondents were educated, with at least a degree. This would make the study specifically relevant to the more educated. However, it can also be useful to less educated respondents because they represent a third of the study.

5.2.6 Consume alcohol versus do not consume alcohol

Respondents consuming alcohol were the majority of the respondent. This is particularly important because the advertisements are targeted at those who consume and might consider driving. It is not assumed that everyone consuming alcohol engages in drunk driving; however, this group is more susceptible.

The study compares perception of both groups (consumers and those who do not consume alcohol) to investigate if there is significant difference.

5.3 Results to research proposition 1:

The relationship between demographics and level of involvement

Figure 17 to Figure 21 depicts the relationship between demographics and level of involvement in the advertisement. Levels of involvement are categorized as (high, medium and low levels of involvement). These categories are formed by adding the scores from the scale.

5.3.1 The relationship between Race and involvement

5.3.1.1 Introduction

Involvement amongst the races varied with Asian respondents ranking as the most involved according to the overall mean score. This was followed by Black respondents, White respondents were third and, finally Coloured respondents.

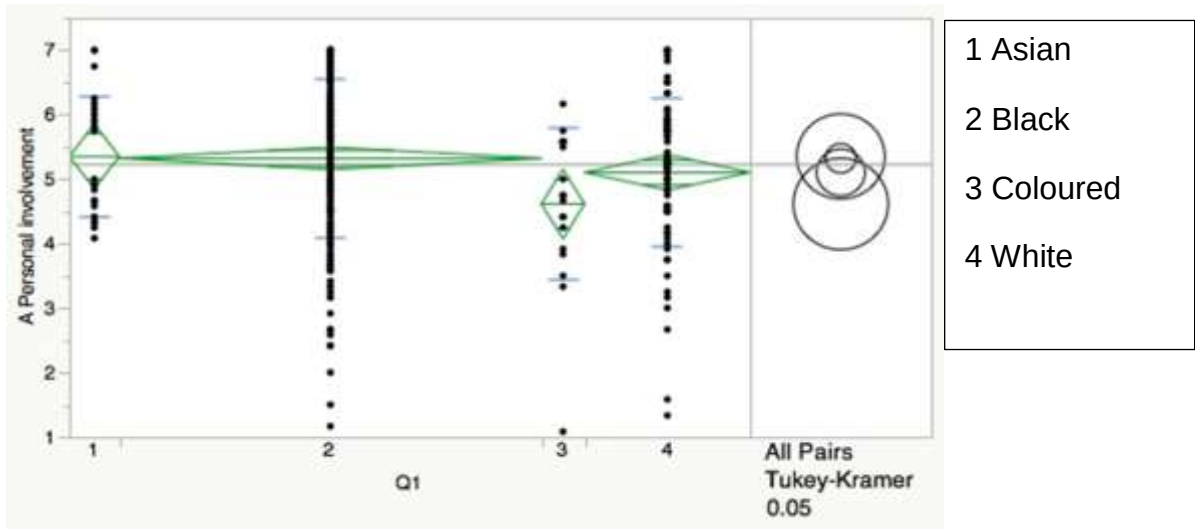


Figure 23: One way analysis of personal involvement relative to Race

The horizontal line running across or above the diamonds represents the mean score of the race groups. The vertical endpoint represents the 95% confidence interval of the mean. It is clear that Asian respondents (1) have a higher mean score and the Coloured (3) has significantly lower as discussed above.

In terms of involvement level segments, figure 17 indicated that within the high involvement group, Black persons had a higher percentage; within the medium involvement group Coloured persons had a higher percentage and Coloured respondents also had a higher percentage of people within the low involvement group.

5.3.1.2 Discussion

Though the graph shows some differences between the race groups, the p-value was used to determine the extent of the significance. The p-value of 0.07 (Table 15) shows no significant correlation between personal involvement and the race. This means the personal involvement and race are independent from each other and do not have a relationship. When Social marketers are designing advert and want to increase involvement, race is not something they should focus on.

5.3.2 The relationship between gender and level of involvement

5.3.2.1 Introduction

Table 16 shows that females had a higher mean score than males. The graph below shows that females (1) are marginally higher.

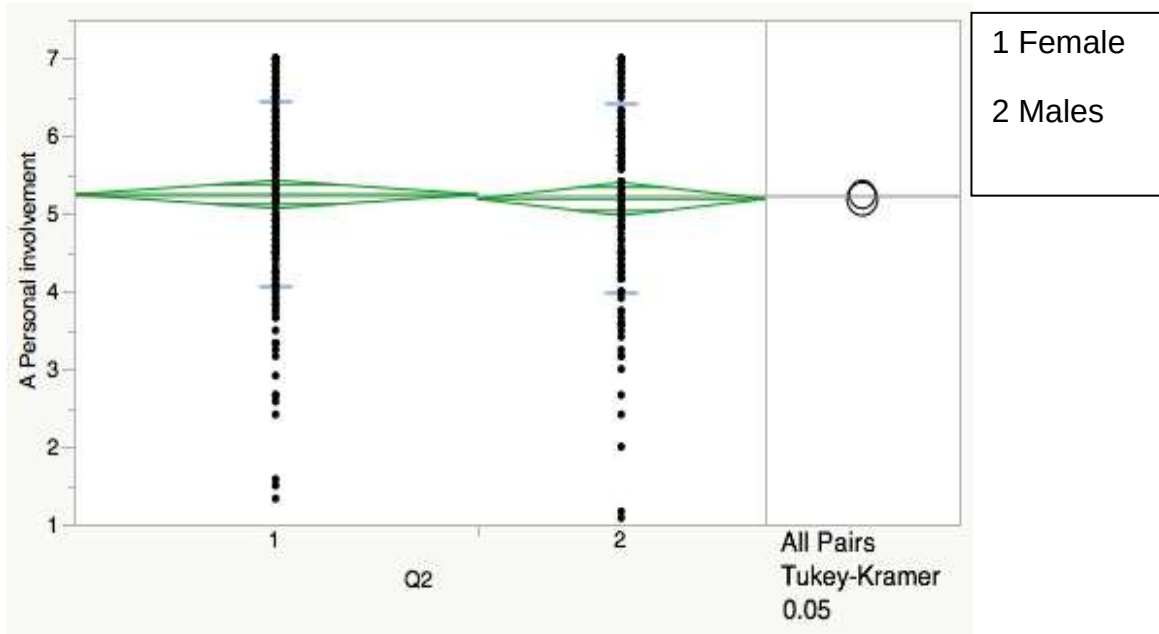


Figure 24: One way analysis of personal involvement relative to gender

Figure 17 depicts levels of involvement between females and males. Males have a higher percentage in the high involvement segment (35.2%). Females have a higher level of medium level of involvement with 58.29% respondents.

5.3.2.2 Discussion

Using the ANOVA analysis (table 21), the study does not reveal correlation between the gender and level of involvement. The two variables are independent from each other and do not have a relationship. Social Marketers must not attempt to increase involvement by using gender. The chi-square test also did not show any significance.

However, in table 21, the ANOVA analysis uncovers significant relationship between the genders and trustworthiness. Though this was never part of the proposition, it is important to note that females and males have different trust levels and the two variables (trustworthiness and involvement) have a

correlation. Investigating what the trust triggers are in adverts addressing social will ensure effectiveness and can affect design of social marketing advertisement addressing drunken driving.

5.3.3 Age and involvement

5.3.3 The relationship between age and level of involvement

5.3.3.1 Introduction

The highest mean score was with the older respondents 38+. This was followed by the age group 25-31.

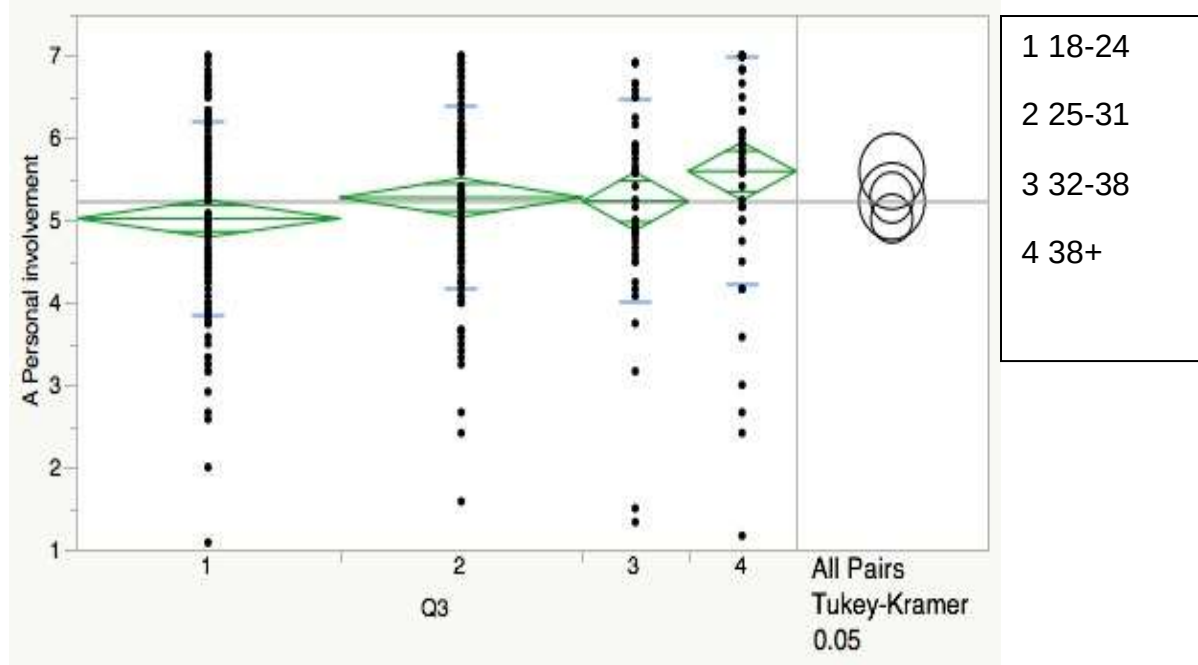


Figure 25: One way analysis of personal involvement relative to age

The graph shows that respondents over the age 38(4) have a higher mean score of 4.79 and 18-24 is lower (4.28).

Table 19 shows that 61.82% of the respondents within the ages 18-24 had medium involvement; 58.42% of the 25-31 age group were also within the medium involvement; 61.36% of the 32-38 age group had medium involvement and 53.33% in the 38 and above had high involvement. This indicates that the older age group were likely to find the advertisement most relevant.

5.3.3.2 Discussion

The ANOVA analysis does not confirm a significant relationship between the involvement and age. It can be concluded that for persons to be involved in the advert, it has nothing to do with age. The chi-square p-value of 0.0883 does not indicate correlation between the age and the level of involvement. The variables age and involvement are independent from each other.

However, table 19 showed a relationship between informational and transformational content. This means that different age groups perceived the content differently. From table 18, the study uncovers that age group 18-24 found the advert to be valuable, factual, logical and clear. These respondents accept it as being verifiable. Those respondents are likely to connect the advert to an experience therefore increasing recall. The older the respondents, the less connection detected with the message content.

5.3.4 *The relationship between marital status and level of involvement*

5.3.4.1 Introduction

The mean score of married and separated/divorced respondents are higher at 5.12 and 5.14 respectively. The mean score for widows is relatively lower. Figure 20 depicts married persons (40%) with the highest scores of involvement towards the advertisement, single persons followed with 33.33%.

5.3.4.2 Discussion

The ANOVA analysis reveals a significant relationship between involvement and the different marital status option. The study reveals that divorced respondents and married respondents were more involved in the advert and widows were the least involved. Though the study does not uncover the reasons for this, future study must attempt to investigate the differences.

5.3.5 The relationship between educational level and level of involvement

5.3.5.1 Introduction

Respondents with high levels education (Masters and Doctorate) had higher means scores in involvement and the less educated respondents (high school) have the least score (3.69)

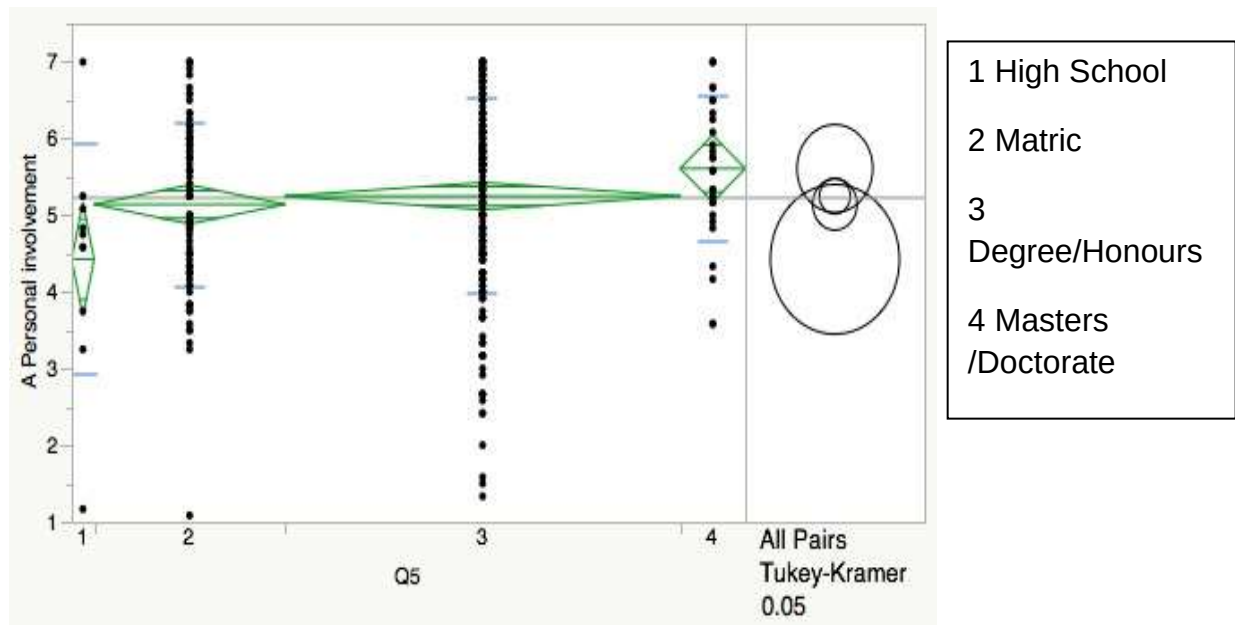


Figure 26: One way analysis of personal involvement relative to educational level

From the graph, one can clearly see that master/doctorate (4) is higher and high school (1) is relatively lower. Respondents with a degree or honours degree have a higher mean compared to those with matric qualification. The mean scores increases as the level of education increases.

Figure 21 depicts high involvement levels amongst respondents with masters and doctorate (37.63%) followed by 36.93% from respondents with degrees and honours.

5.3.5.2 Discussion

The ANOVA analysis shows significant difference between levels of education and personal involvement (table 23). The more educated the respondents, the more involvement showed towards advert. Those with masters/doctorate scored

the highest and those who finished in high school (without a matric) showed the least involvement. Those with higher education levels perceive the advert to have relevance. This is based on values, inherent needs and interests (Zaichkowsky, 1985). This can be because those who are more educated possibly have access to more information but it is important for social marketers to be aware of this depending on who the adverts are targeting.

It is also important to note that trustworthiness and level of education had a correlation. This is shown on table 23. Those who are less educated were more trusting and skeptical behaviour is seen in the more educated respondents.

5.3.6 The relationship between those who consume alcohol/ those who don't and levels of involvement

5.3.6.1 Introduction

Respondents who consume alcohol had marginally higher mean scores compared to respondents who do not consume alcohol.

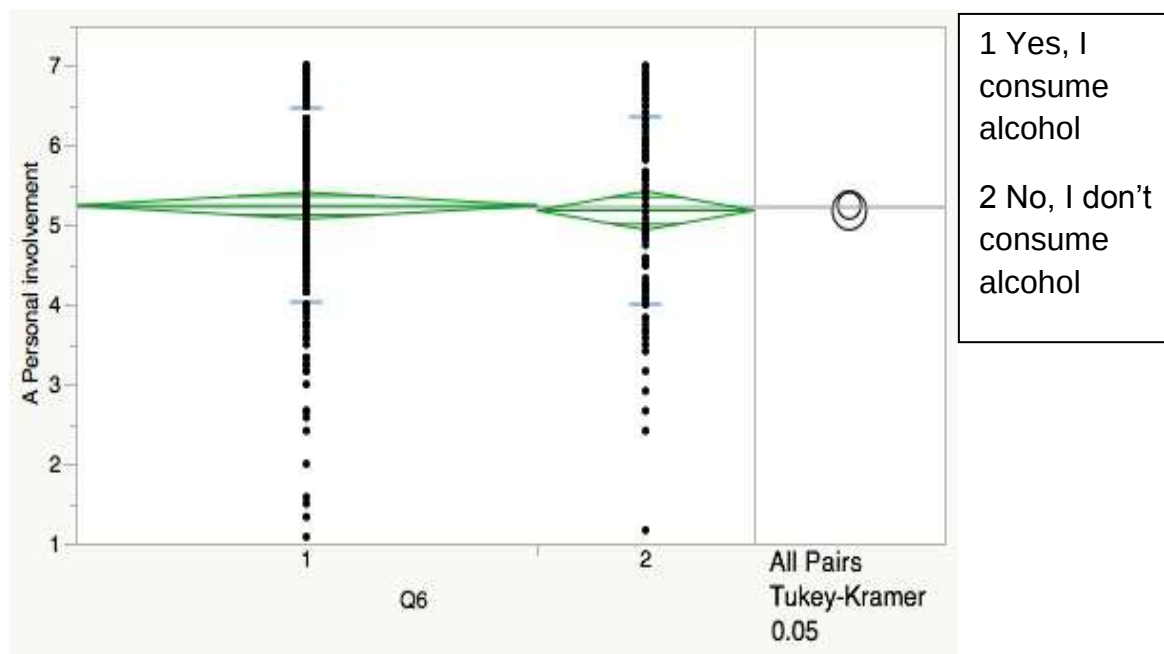


Figure 27: One way analysis of personal involvement relative to those who consume alcohol and those who don't

The above graph shows slight differences between those who consume alcohol and those who don't. From the 204 respondents who consume alcohol, 72(35.29%) had high involvement and of the 96 who did not consume alcohol 31 (32.29%) had high involvement as depicted in figure 22.

5.3.6.2 Discussions

The chi-squared showed there was no relationship between the variable so when designing an advert addressing drunk driving, those who consume alcohol and those who don't are both involved.

The ANOVA analysis shows no significant difference between those who consume alcohol and those that don't consume alcohol and personal involvement.

5.3.7 Conclusion

Wu (2001) recommends a framework that affects involvement which is presented in the literature review. The framework recognizes personal and product factors as attributes affecting involvement. Personal factors affecting involvement include personal goals, needs and demographics (Wu, 2001)

From the study, it is revealed that demographics with close correlation to involvement are level of education and marital status. The recognized relationships will mean that if the social marketers want to increase involvement for an advertisement addressing drunk driving, the level to which the target audience is educated must be considered. The needs for the respondents differ depending on education level. Personal involvement is affected by values, interest and inherent need. It could be that the more educated perceive drunk driving as more of an issue than the less educated.

The married and divorced were more involved and one could assume that this is because of the level of responsibility amongst the married and divorced. This assumption would need to be confirmed by future studies.

Race, age and gender did not show any relationship so the variables are independent from each other.

5.4 Proposition 2

Source credibility comprises of both trustworthiness and expertise. The two are however measured separately. Trustworthiness and expertise will be presented for SAB, PADD and partnership. Firstly, the study will look at the overall picture and then specifically to the advert sponsor.

Trust

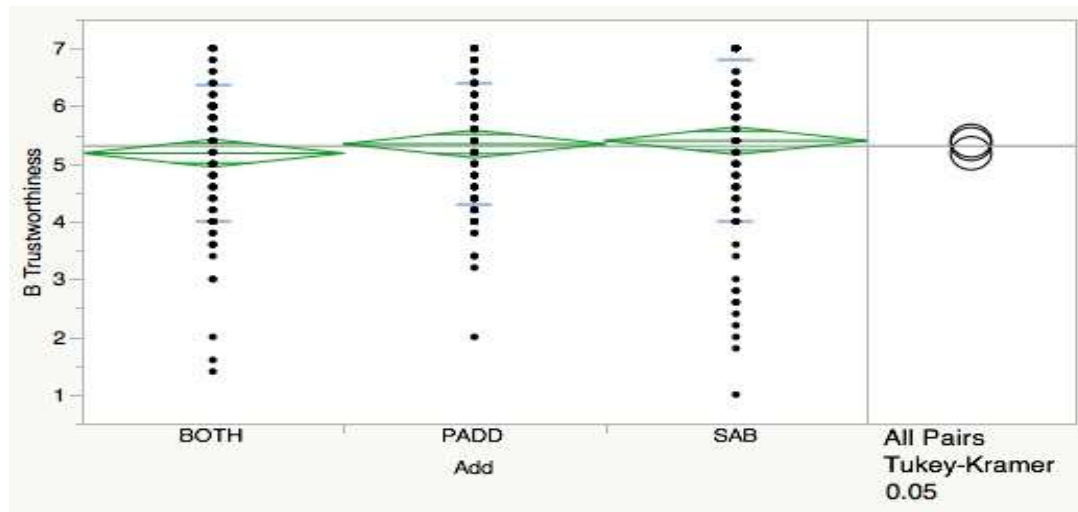


Figure 28: One way analysis trustworthiness and the sponsors

The overall mean scores are shown above for trustworthiness. SAB appears to be marginally higher than PADD and partnership slightly below.

Expertise

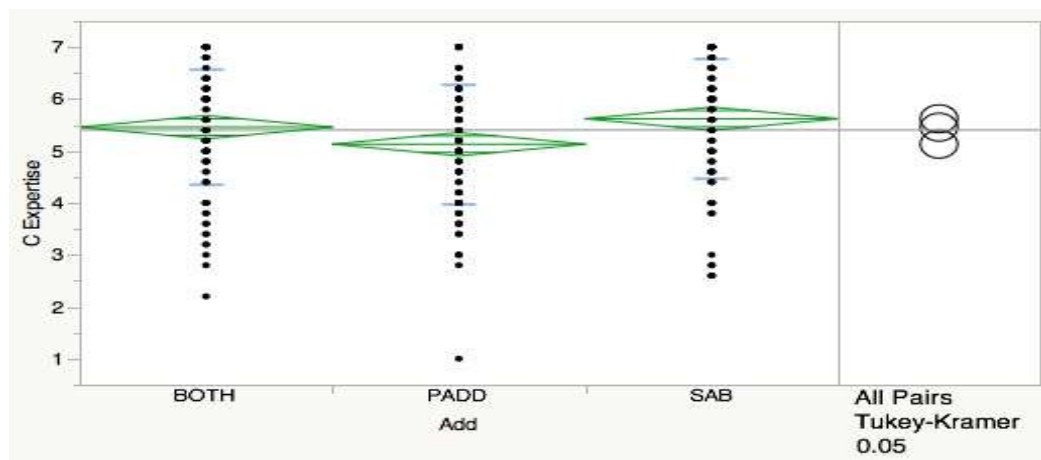


Figure 29: One way analysis expertise and the sponsors

SAB has higher mean scores as shown on the figure above followed by the partnerships with regards to expertise.

5.4.1 People Against Drunken Driving (PADD) as a sponsor will have high levels of credibility

PADD had the second highest mean scores in trustworthiness and the least score in expertise. Szykman, Bloom and Blazing (2004) wrote that depending on advertising context, it would be advantageous for the message sponsor of a social marketing advert to be endorsed by a non-commercial source to increase credibility (Szykman, Bloom & Blazing, 2004) This correlates with PADD scoring high in the trustworthiness.

With regards to trustworthiness of PADD, 50% of the respondents have high level trustworthiness and only 4% had low trustworthiness. 42% of respondents perceived PADD to have high expertise which was the lowest amongst the 3.

5.4.2 Proposition 3

South African Breweries (SAB)-People Against Drunken Driving (PADD) partnership sponsorship will have high levels of credibility

The partnership had the second highest expertise score and the lowest trustworthiness score. Research done by Baur and Schmitz suggests that when the partnerships are pursued, the public might perceive the NGO as losing focus by partnering with the same corporates that they need to be boycotting against. Pursuing partnerships and building close working relationship with corporates by NGO's might distract them from fulfilling the mission and using disruptive actions like protests (which could be effective) against the organization (Baur & Schmitz, 2011).

From table 32, trustworthiness with co-sponsoring between SAB and PADD has 47% of the respondents were high levels of trustworthiness and 6% had low trustworthiness. This indicates a less trustworthiness in the partnership

compared to PADD and SAB sponsored advertisement. However this is still a positive relationship.

5.4.3 Proposition 4

South Africa Breweries (SAB) as a corporate sponsor will have less levels of credibility

Table 28 shows 51% of respondents had high trustworthiness and 11% of respondents (which was also the highest between the three advertisements) had low trustworthiness scores. 62% of respondents were within the group that perceived SAB to have high expertise levels.

SAB had the highest mean score in trustworthiness (4.86) and expertise (4.78). In the literature review, Reih and Belkin (1998) suggest that consumers perceive companies to be building brand image or awareness when addressing social issues. This decreases sincerity of the message (Reih&Belkin, 1998). The proposition is wrong and contradicts the literature. SAB is perceived as trustworthiness and expert in addressing drunk driving.

5.4.4 Conclusion

There is no correlation between trustworthiness and the sponsors however there is significant difference between expertise and sponsors (table 12). According to this study, trustworthiness cannot be increased by selecting a particular sponsor but if the Social marketer wants the audience to view an organisation as experts, corporate (SAB) must be used independently or in the partnership.

The research also revealed significant relationship between the advert sponsors and informational transformational (table 12). This means respondents found the advert as factual, relevant, important and verifiable when the partnership was sponsoring the advert with the likelihood to link the advert to an experience of consuming. Strategic partnerships are beneficial for all sectors (private, public and NGOs). Some of the benefits for the corporate include reputation improvement (Flick & Heblich, 2007), product innovation and volunteerism. For

the NGO, advantages include resource support; improve awareness and networking (Runte, 2009 as cited by Simpson, Lery & Tsarenko, 2011). If respondents found the information to be more useful and more likely to connect it to an experience when using partnership, it can be assumed that partnerships will be more useful for this social issue.

5.5 Proposition 5 discussions:

The relationship between source credibility and level of involvement

The multivariate correlation table 7 shows a positive relationship with a medium effect between personal involvement and trustworthiness (0.35); and personal involvement and expertise (0.33). The below will look at the different source credibility scores for the sponsors and levels of involvement.

5.5.1 The relationship between NGO (People Against Drunken Driving-PADD) as the advertisement sponsor and level of involvement

Respondents were less involved in the advertisement sponsored by the NGO. However, the score was still within the medium involvement category. PADD also had the least mean score (4.29) amongst the three adverts. This could be because PADD is an unknown NGO designed for the study. Respondents with high involvement for PADD were 31%; 61% had medium involvement and 8% had low involvement (as shown below)

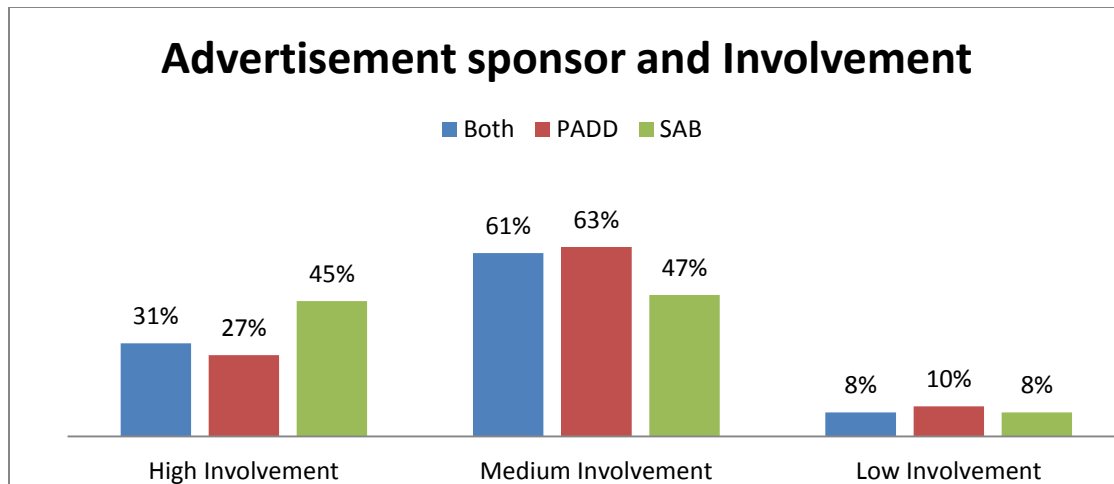


Figure 30: Advertisement sponsor and Involvement

5.5.2. The relationship between the level of involvement and having both SAB and PADD as an advert sponsor

Personal involvement had the second highest when the sponsors were both PADD and SAB. Respondents found more relevance with the co-sponsoring advertisement. This indicates that respondents had perceived relevance of the advert based on inherent values, needs and interest when there was partnership. From the respondents who completed the advert with a partnership, 27% were highly involved; 63% had medium involvement and 10% had low involvement. Respondents related to the message content positively in the partnership.

5.5.3 The relationship between the level of involvement and having SAB as the primary sponsor

Forty-five percent of respondents were deemed to have high level of involvement when SAB sponsored the advert which was the highest amongst the three; 47 % had medium involvement and only 8% had low levels of involvement which was the lowest amongst the three.

SAB had the highest score. Respondents were highly involved when SAB was sponsoring the advert.

5.5.4 Conclusion

Though the overall p-value did not show a relationship between level of involvement and the sponsors, SAB scored the highest and PADD had the least mean scores. The variables are independent of each other. The developers of the elaborated likelihood model suggest that regarding persuasion messaging, advert audience give importance to the advertisement sponsor and the content (Petty & Cacioppo, 1981). The study could not prove the relationship between personal level and the sponsor but table 12 showed a positive correlation between informational transformational advert content (message content) and the sponsor.

5.6 Proposition 6:

The relationship between demographic and message content (Informational and transformational content)

5.6.1 Race and Message content

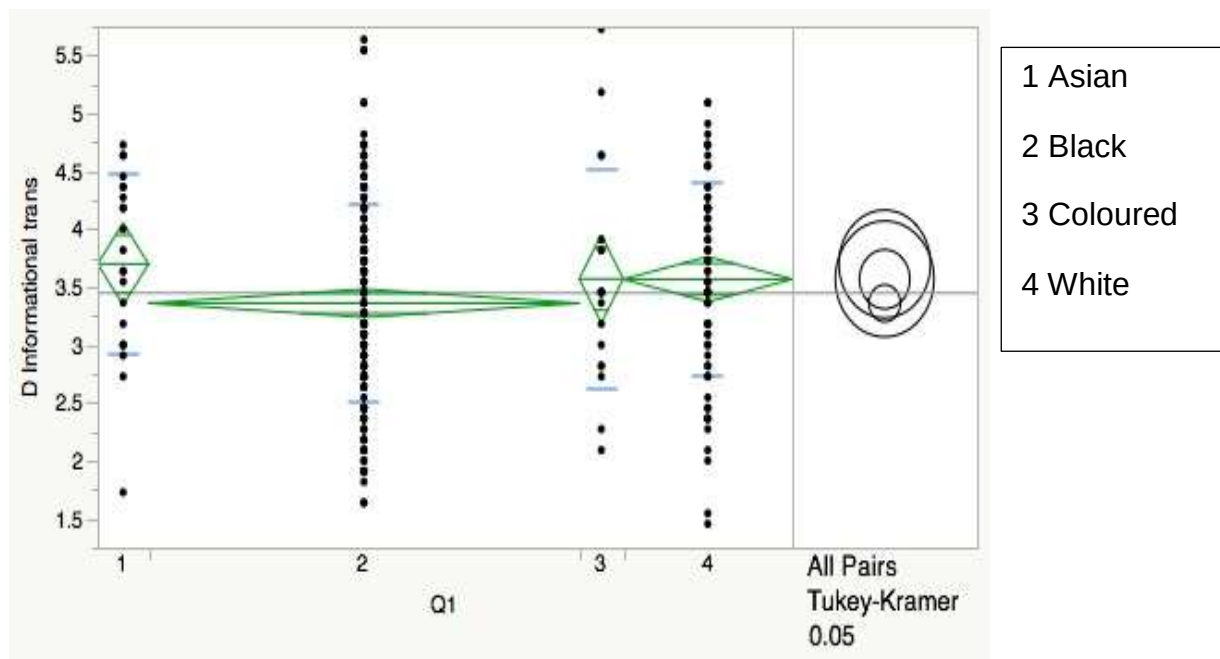


Figure 31: Oneway analysis of content and race

5.6.1.1 Introduction

White respondents had the highest mean score with regards to content, followed by Coloured respondents then Asian respondents and finally, Black respondents had the least score. This can also be seen on the above figure 31.

5.6.1.2 Discussion

There was no detected relationship between race and message content. The two variables are independent from each other.

5.6.2 Gender and Message Content

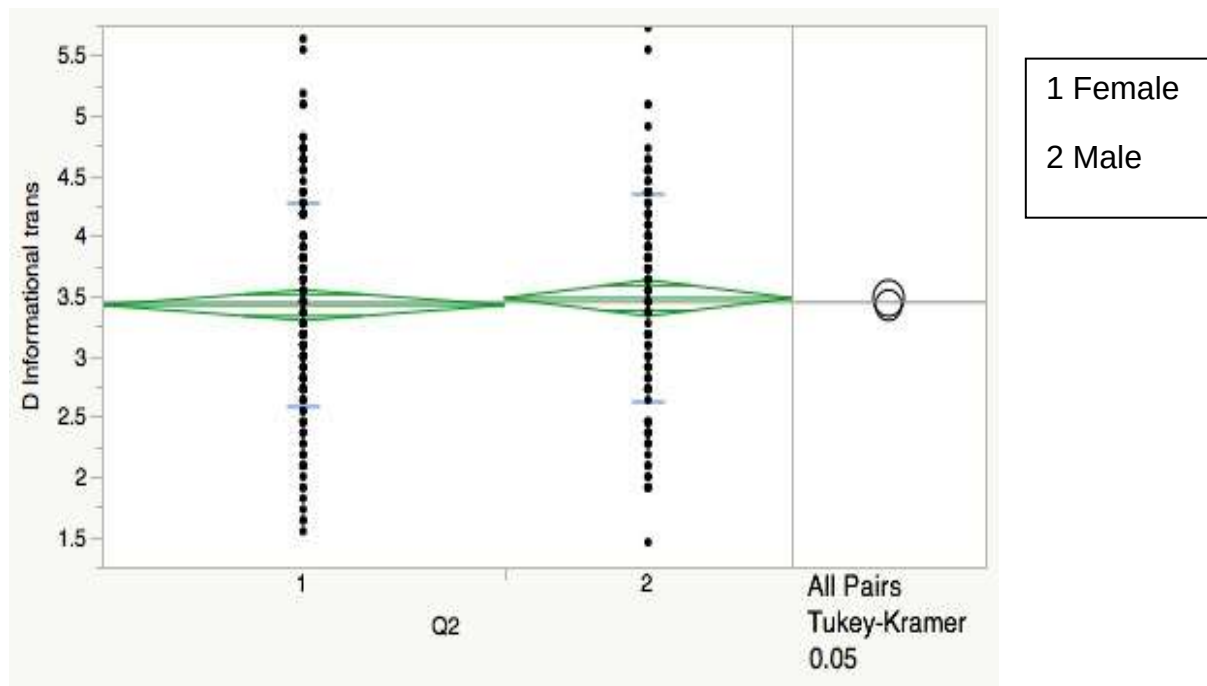


Figure 32: One analysis with message content and gender

5.6.2.1 Introduction

From the graph, it can be noted that the mean score of the males was higher than that of the female respondents. Male respondents had an overall mean score of 3.59 and females 3.45.

5.6.2.2 Discussion

The p-value of 0.5547 indicates that there was no correlation between the message content and the gender demographic. The two variables are independent and do not have a relationship.

5.6.3 Age and Message content

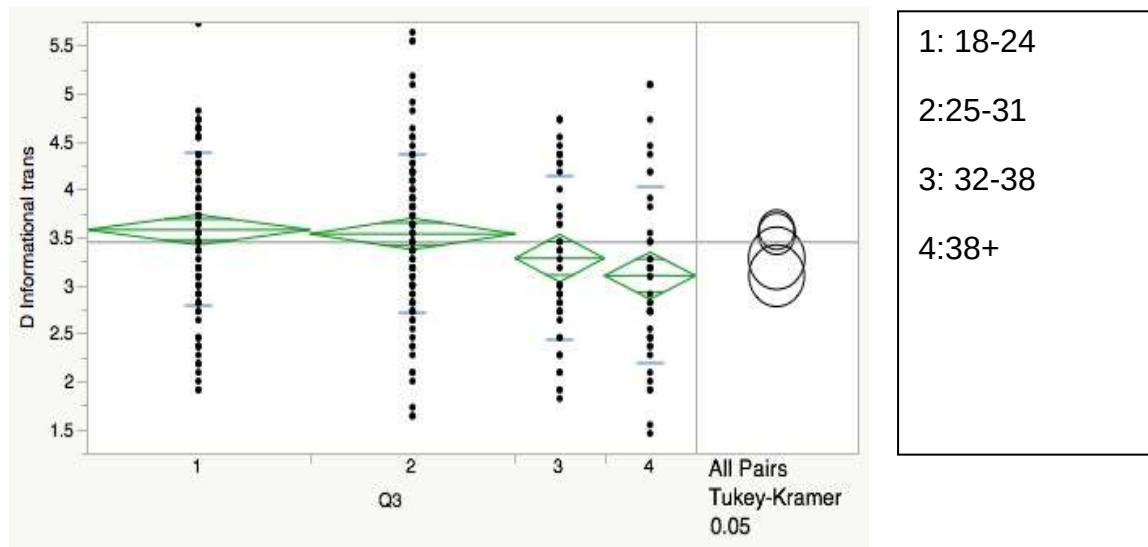


Figure 33: One way analysis between Age and Message Content

5.6.3.1 Introduction

From the summary graph, it is clear that there are differences in the age group. The mean score seems to decrease as people get older. The mean score is higher with age group 18-24 (3.75), followed by 25-31(3.68), then 32-38(3.43) and finally 38+ (3.22).

5.6.3.2 Discussion

The p-value is used to see significant differences and correlation. As displayed in Table 19, message content (informational and transformational ad content) and age have p-value of 0.004. This means that as the age increased, people start to view the information as less clear, logical, factual and relevant. The older the respondents were, the harder it was to connect the advert to an experience. The

social marketers must ensure that the messaging is age relevant and research will need to be conducted so the message can be relevant.

5.6.4 Marital Status and Message content

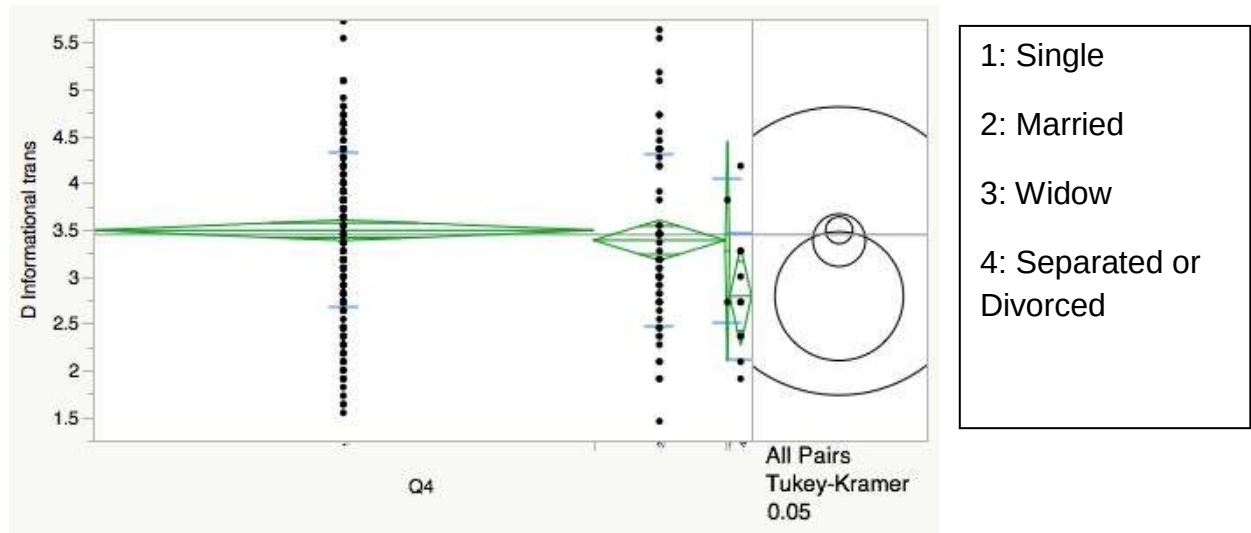


Figure 34: One way analysis between marital status and message content

5.6.4.1 Introduction

From the graph, it is clear that most participants were single and very few widows. This could skew the data. Table 24 indicates that widows respondents had the highest mean score (3.68), followed by married respondents with 3.62. Singles had the third highest (3.59) and finally separated or divorced with the least score of 3.19.

5.6.4.2 Discussion

The p-value does not meet the statistical requirement to establish correlation between the two variables. The two are independent from each other and when design such advertisement for addressing drunk driving, the marital status is not vital.

5.6.5 Level of Education and Message content

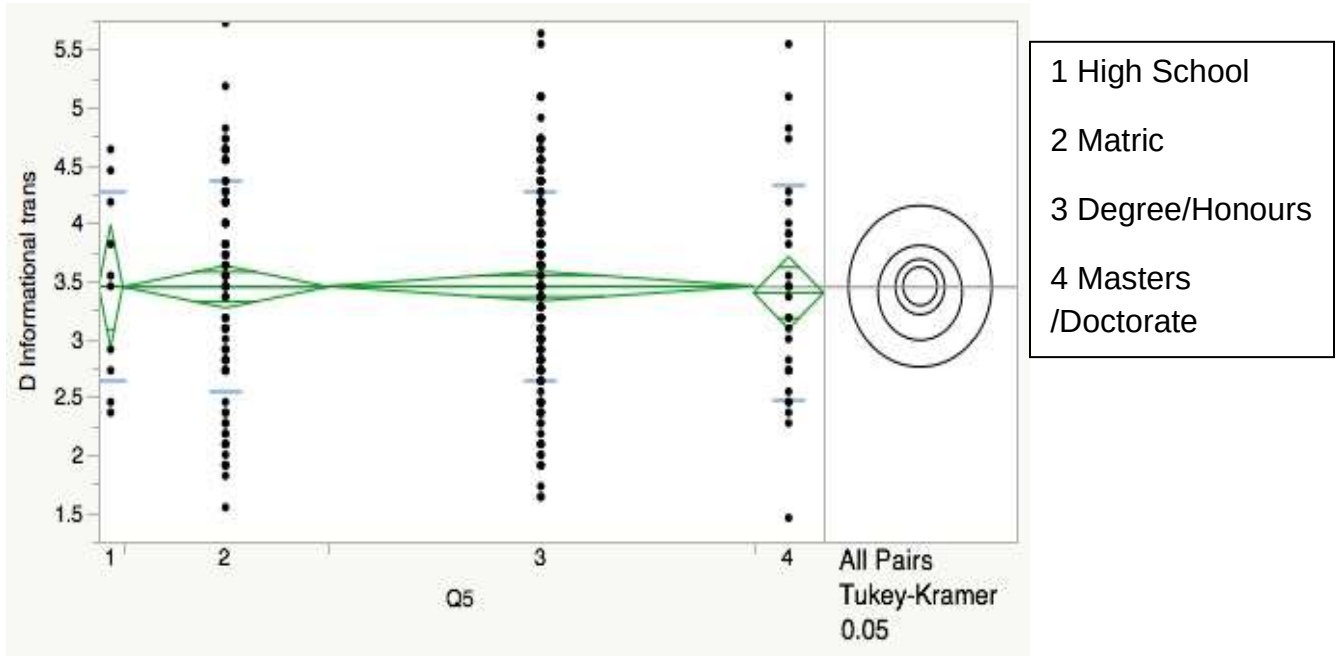


Figure 35: One way analysis of level of education and message content

5.6.5.1 Introduction

Those respondents with either a masters or doctorate had the highest mean score (3.59) and the least score was of respondents with a Matric (3.40). The figures are marginally apart.

5.6.5.2 Discussion

There was no correlation between the level of education of the respondents and message content. The study can conclude that the variables are independent and have no relationship.

5.6.6 Conclusion

Rhodes, Roskos-Ewolden, Eno and Monahan (2009) state that the effectiveness of the advert is depended on the target audience characteristics and must be matched with individual motivation (Rhodes, Roskos-Ewolden, Eno and Monahan, 2009)

The study did show a relationship between message content and age. The different age groups perceive the content on the advert differently. The younger the respondent, the more likely the information was factual, relevant, important and verifiable. The scale also measured transformational ad content which indicates that the younger respondents would most likely connect the experience of drinking alcohol to the advert with better recall.

However, there was no correlation with race, level of education, gender and marital status

To the question, “Was the commercial informative”- there is a positive relationship between the age and the extent to which the respondents found the advert informative. It is therefore assumed that when addressing the issue of drunk driving, the age specific information is important in the design.

The statement “I could really relate to the advert”, has a positive relationship with age, educational level and between those we consume alcohol and those that do not.

The statement “When looking at this advert, I thought of how it might be useful to me” has a positive correlation. Across the age groups, the majority of the respondents thought of how this could apply to them.

Proposition 7: The negatively framed message content has a high degree of involvement.

The advert was negatively framed with the main message as “Don’t turn a good time into doing time”- Regret nothing; don’t drink and drive

Table 7 depicting the multivariate correlations between the construct shows no significant difference between personal involvement and message content. There was a negative correlation score between the two constructs. This contradicts what Tsai & Tsai (2006) wrote. The researchers suggest that negatively framed messages were more effective than positively framed in the high involvement arena.

The following chapter will summarise the findings and give recommendations.

Chapter 6: Conclusion and recommendation

6.1 Introduction

This chapter will conclude the study and present some recommendation for future studies in advertising in social issues. The primary purpose of the study was to understand the factors affecting advertising effectiveness in NGO-corporate when addressing the drunken driving social issue

6.2 Conclusion of the study

The following were the research objectives that the study needed to address.

- To conceptualize the factors that affect advertising effectiveness
 - The integration of the factors that affect advertising effectiveness in NGO-corporate partnerships with the social issue of drunk driving
- To determine the relationship between the factors and attitude towards advertising effectiveness
- To determine if the factors affecting advertising predict the attitude towards advertising in NGO–corporate partnerships
- To determine the difference between the factors that affect advertising and attitude towards NGO–corporate with rigid variables (age, marital status, education level).

From the literature review, the study was able to integrate factors affecting advertising effectiveness. These included involvement, message content and source credibility. Demographics also play a vital role in this type of advertising.

Demographics:

Race

Race did not have correlation with any of the constructs. It can be assumed that race with personal involvement, source credibility and message content.

Gender

Females were found to be more trusting of the advertisement sponsor and content and males were more sceptical. This is an important point to note because it can be concluded that Females and Males have different trust triggers. It will be for research to uncover what the trust triggers are so effective adverts can be designed.

Age

Message content and age were correlated. The younger people seem to find the information clearer, logical, important and could link it to an experience therefore increase recollection of the advert. If Social marketers want to reach older people, they would have to change certain messaging for the different generations. A one size fits all approach would not be feasible.

Marital Status

The study showed correlation between involvement and marital status. The married, divorced or separated were more involved in the advert than the singles. Future research should attempt to understand why the married, divorced or separated were more involved in the adverts. One could assume that because they might have family and spouses, the advert content is important to increase safety.

Level of Education

Level of education was correlated to personal involvement and trustworthiness. The more educated respondents, the more involvement in the advert and the less educated respondents had the least score. The study also uncovered that the less educated respondents were more trusting of the source and the more educated respondents were sceptical. This is vital for designing effective adverts because though the less educated respondents were more trusting of the source, they were not involved in the advert. Likewise, though the more educated

respondents were trusting, they were more involved in the presentation of the content.

Those who consume alcohol and those who don't

There was no correlation between those who consume alcohol and those who don't with any of the construct. The two groups' perception on involvement, source credibility and message content are not too significant.

Sponsors

SAB were regarded more qualified to address the issue of drunken driving scoring higher in trustworthiness and expertise. Though the company has the largest market share in alcohol sales in South Africa, respondents were more favourable towards them.

Partnerships also show high levels of involvement compared to corporate sponsored and NGO. SAB may consider partnering with credible NGOs when addressing this because though the study shows that SAB is regarded as experts, message content (informational and transformation ad content) is more effective when there is a partnerships. This is important because people are likely to recall the advert better and associate an experience with the advert

The partnership had a relationship with expertise. This could be because of the SAB influence as PADD alone scored lower in the expertise. The partnership did have correlation with message content. This means the content was perceived as well presented, precise, logical and important.

The NGO, People Against Drunken Driving was made up for the sake of the study. Even after this fact, respondents trusted them more than they trust the partnership.

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Constructs

When measuring the construct against each other, it is important to note that personal involvement is affected by trustworthiness. People must trust the sponsor to be involved in the advert and they must believe in the expertise of the sponsor.

Though the following was not part of the proposition, the study also showed the following

1. Trust levels differed within the two genders
2. Level of education also affected how people perceived the content.
3. More educated persons were less trusting.

Social marketers must also avoid advertisement that have a blanket approach messaging across all age groups. The extent to which the different age groups found the advert informative varied. The advertisers may have to design different messaging for different age groups.

6.3 Recommendation and future research

The following are recommendations for future studies. Firstly, the study suggests to get more valuable data, any future study must increase the sample size for each advertisement. This will also allow for a wider demographic base. Secondly, future studies must also use a credible NGO known by respondents. PADD was a made-up NGO because of the lack of credible NGOs in the social issue of drunk driving. Thirdly, the study primarily looked at drunk driving; futures studies must use the same factors on a different social issue to examine if this will work for social marketing in its entirety. Fourthly, the study showed that Married and Separated/Divorce were more trust. Future studies must try to understand the triggers that affect the trust element. This is important because drunk driving also affects the wider population irrespective of marital status. Lastly, the study also revealed that people with higher levels of education were more involved. In future

we must aim to understand what can drive more involvement across all people and those less educated.

References

Abdulmajid, M. A. (2009) The Impact Of Source Credibility On Yemeni Male Consumers' Attitudes Toward Print Advertisement, Brand Attitudes And Purchase Intention Of Head Cover Product: The Moderating Role Of Brand Familiarity, Doctoral dissertation, Universiti Sains Malaysia.

Acsinia, I.L. (2010), Theoretical and Applied Economics: Regulations and Best Practices in Public and Non-profit Marketing, 9th International Congress of International Association of Public and Non-profit Marketing, Bucharest, Romania, National School of Political Studies and Public Administration, Faculty of Public Administration

Alves, H. (2010) The Who, Where, and When of Social Marketing, Journal of Nonprofit & Public Sector Marketing, Vol 22(4), pp.288-311

American Marketing Association (2013), Accessed 14 March 2014 from www.ama.org/resources/Pages/Dictionary.aspx

Andreasen, A.R, (1995) Marketing Social Change: Changing Behaviour to Promote Health, Social Development, and the Environment. San Francisco: Jossey-Bass.

Andreasen, A.R, (2002) Marketing Social Marketing in the Social Change Marketplace, Journal of Public Policy & Marketing: Spring 2002, Vol. 21(1), pp. 3-13.

Andreasen, R.A. and Kotler, P(2008) Strategic marketing for nonprofits organization 7th edition Pearson Prentice Hall, Upper Saddle River

Arrive Alive (2012) Alcohol Breathalysers partners with AlcoSense for Southern African Region, Accessed 3 November 2012, from <http://www.arrivealive.co.za/mobile/news.asp?NID=9019>

- Arrive Alive (2013) Drunk Driving and Road Safety, Accessed 8 November 2013, from <http://www.arrivealive.co.za/pages.aspx?i=1259#sthash.NKW5DA2Y.dpuf>
- Atkin, C.K. and Salmon, C. (2010) Communication campaigns in Berger, C., Roloff, M. and Roskos-Ewolden, D (Eds), Handbook of communication science (2nd edition, pp.419-435), Thousand Oak, CA: Sage
- Babbie, E. and Mouton, J. (2009) The practice of social research: South African edition. Oxford University: Cape Town
- Baker, M.J. (2003) The Marketing Book. 5th edition. Burlington MA: Butterworth-Heinemann.
- Baker, M.J. and Saren, M. (2010) Marketing Theory: The Student Text, Sage Publications Ltd London
- Bahari, S.F. (2010) Qualitative versus Quantitative Research Strategies: Constructing Epistemological and Ontological Assumptions, Department of Human Resource Development, Universiti Teknologi Malaysia
- Baur, D. and Hans, P.S (2011) Corporations and NGOs: When Accountability Leads to Co-optation, Journal of Business Ethics, Vol. 106, pp.9-21
- Bearden, W.O., Netemeyer, R.G., and Haws, K.L. (2011) Handbook of marketing scales: Multi-item measure for marketing and consumer behaviour research, 3rd edition, Sage Publications, Thousand Oaks, Los Angeles
- Brenkert, G.G. (2002) Ethical Challenges of Social Marketing, Journal of Public Policy & Marketing: Spring 2002, Vol. 21(1), pp. 14-25
- Burn, C.A. and Bush, B.F (2010) Marketing Research, 6th edition, Pearson/Prentice Hall
- Cavill, N. and Bauman, A. (2004), Changing the way people think about health-enhancing physical activity: do mass media campaigns have a role?, Journal of Sports Sciences, Vol. 22(8)

- Chang, C. (2012) Effectiveness of Consensus Information Advertising: The Moderating Role of Situational Factors and Individual Difference, *Journal of Business & Psychology*, Journal 27(4), pp483-494
- Cismaru, M., Lavack, A.M , and Markewich, E (2009) Social Marketing campaigns aimed at preventing drunk driving, *International Marketing Review*, Vol. 26(3), pp. 292-311
- Commission for global road safety (2006), Make roads safe: A new priority for sustainable development. Accessed 14 November 2013 from <http://www.arrivealive.co.za/documents/makeroadssafe.pdf>
- Cook, T.D. and Reichardt, C.S. (1979) *Qualitative and Quantitative Methods in Evaluation Research*, , Beverly Hills, CA: Sage Publications
- Cottea, J., Coulterb, R.A., and Moore, M (2005) Enhancing or Disrupting guilt: the role of the ad credibility and perceived manipulative intent; *Journal of Business Research*, Vol. 58, pp 361-368
- Crossan, F.(2003) Issues in research: Research Philosophy: Towards an understanding, *Nurse Researcher*. Vol. 11, (1)
- Dash, K.N. (2005) Module: Selection of the research paradigm and methodology, Accessed 21 November 2012 from www.celt.mmu.ac.uk/researchmethods/Modules/Selection_of_methodology/index
- Donovan, R. (2011) Social marketing myth understandings, *Journal of Social Marketing*, Vol. 1,(1), pp. 8-16
- Dubihlela, J. (2011), Youth attitude towards advertisements depicting nudity and alcohol: ethical dilemmas in advertising *South African Journal of Psychology*, Vol. 41(2), pp. 207-217
- Eisend, M. (2006), "Source Credibility Dimensions in Marketing Communication - A Generalized Solution", *Journal of Empirical Generalizations in Marketing Science*, Vol. 10(2)

- Elder R.W., Shults, R.A., Sleet, D.A., Nichols, J.L., Thompson, R.S. and Rajab, W. (2004) Effectiveness of mass media campaigns for reducing drinking and driving and alcohol-related crashes: A systematic review, *American Journal of Preventive Medicine*, Vol. 27(1) pp. 57-65
- Falck, O. and Heblich, S. (2007) Corporate Social Responsibility: Doing well by doing good, *Journal of Business Horizons*, Vol. 50(3), pp. 247-254,
- Fragale, A.R. and Heath, C. (2004), Evolving informational credentials: The (mis)attribution of believable facts to credible sources, *Journal of Personality and Social Psychology*, Vol.30, pp. 225-236
- French, A., Macedo, M., Poulsen, J., Wateron, T., and Yu, A. (n.d.) Multivariate Analysis of Variance (MANOVA), Accessed 22 March 2014 from <http://userwww.sfsu.edu/efu/classes/bio1710/manova/MANOVAnewest.pdf>
- Goldberg, F.S. (2011), Giving people what they want before they know they want it, Vol. 48, pp. 117-122
- Gordon, R, McDermott, L, Hastings, G. (2008), 'Critical issues in social marketing: a review and research agenda', *The Routledge Companion to Nonprofit Marketing*. Abingdon: Routledge, pp. 354-369.
- Grube, J.W., and Wallack, L. (1994), Television beer advertising and drinking knowledge, belief, and intention among schoolchildren, *Journal of Public Health*, Vol. 84 (2), pp.254-259
- Hair, J., Bush, R.P. and Ortinau, D.J. (2000), *Marketing Research: A practical approach for the new millennium*. USA: McGrawhill
- Haldermann, T. and Turner, J.W. (2009), Implementing a community-based social marketing program to increase recycling. *Social Marketing Quarterly*, Vol.15, (3), pp.114-127
- Hall, V.D., Jones, S.C. and Iverson, D.C. (2011). "Consumer perceptions of sponsors of disease awareness advertising", *Journal of Health Education*, Vol. 111(1), pp.5 -19
- Hassan, L.M., Walsh, G., Shui, E.M.K., Hastings, G. and Harris, F. (2007), *Modeling persuasion in social advertising: A study of responsible thinking*

- in antismoking promotion in eight eastern EU (European Union) member states, *Journal of advertising*, Vol. 36(2), pp. 15-31
- Halcomb, E.J. and Andrew, S. (2005) Triangulations as a method for contemporary nursing research, *Nurse research*, Vol.13(2), pp.71-82
- Hebl, M (n.d.) Descriptive Statistics, Accessed 22 March 2014 from <http://onlinestatbook.com/2/introduction/descriptive.html>
- Helmig, B. and Thaler, B. (2010) On the Effectiveness of Social Marketing – What Do We Really Know?, *Journal of Nonprofit & Public Sector Marketing*, Vol. 22, pp. 264-287
- Hirschheim, R. (n.d.), Philosophy of Science and Research method is IS E.J Ourso College of Business, Louisiana State University
- Hope, K. and Waterman, H. (2003) Praiseworthy pragmatism? Validity and action research, *Journal of Advanced Nursing*, Vol. 44(2), pp. 120-127
- Hornik, R.C. (2002). Epilogue: Evaluation design for public health communication programs. In Robert C. Hornik (Ed.), *Public Health Communication: Evidence for Behavior Change*. Mahwah, NJ: Lawrence Erlbaum Associates.
- South African demographics 2013, Accessed 20 October 2013, from http://www.indexmundi.com/south_africa/demographics_profile.html
- Indu, R. and Jagathy Raj, V.P. (2012), Developing a Theoretical Framework for a Study on the Impact of Advertising Credibility of Consumer Healthcare Products, *European Journal of Commerce and Management Research*, Vol. 1(1)
- Kotler, P., and Roberto, E. L. (1989), *Social marketing: Strategies for changing public behavior*
- Kotler, P., Roberto, N., and Lee, N. (2002), *Social Marketing: Improving the Quality of Life*. Thousand Oaks, CA: Sage
- Kotler, P. and Zaltman, G. (1971) Social Marketing: An approach to planned social changes, *Journal of Marketing*, Vol. 35, pp. 3-12

- Kourula, A and Halme M (2008), Types of corporate responsibility and engagement with NGOs: an exploration of business and societal outcome. Vol. 8(4), pp. 557-570
- Kumar, V., Rahman, Z., Kazmi, A. A. and Goyal, P. (2012) Evolution of sustainability as marketing strategy: Beginning of new era, Journal of Social and Behavioral Science, Vol. 37, pp. 482-489
- Krugman, H.E (1965) The impact of television advertising: Learning with Involvement, Public opinion quarterly, Vol. 29, pp. 349-356
- Levitt, S.D. and Porter, J. (2001) "How dangerous and drinking drivers?" Journal of Political Economy, Vol. 109(6), pp.118-237
- Majid, M.A. (2009), The impact of source credibility on Yemeni Male Consumers' Attitude towards Print Advertisement, Brand Attitude and Purchase Intention of Head Cover Product: The moderating role of Brand Familiarity. Unpublished Thesis, Universiti Sains, Malaysia
- Malhotra, N.K., Baalbaki, B.I, and Bechwati, N.N. (2010) Marketing Research: An applied orientation Arab world edition England: Pearson
- Marshall, M. and Oleson, A. (1994) "In the pink: MADD and public health policy in the 1990s", Journal of Public Health Policy, Vol.15(1), pp. 54-70
- Martin, G. J. (2012), The Informational Content of Campaign Advertising. Accessed on 14 November 2013, from http://polisci.emory.edu/faculty/gjmart2/papers/GMartin_Advertising.pdf
- Martin, E.J (2013), Trending Topic: How to Plan better ad campaigns and support that planning, Accessed 12 December 2013, from <http://www.econtentmag.com/Articles/News/News-Feature/How-to-Plan-and-Support-Better-Ad-Campaigns-92849.htm>
- McKay-Nesbitt, J. and DeMoranville, C.W. (2011) A strategy for advancing social marketing, Journal of Social Marketing, Vol.. 2(1), pp. 52-69
- Mounton, J. (2009) How to succeed in your Master's and Doctorate studies: A South African guide and resource book, Van Schaik: Pretoria

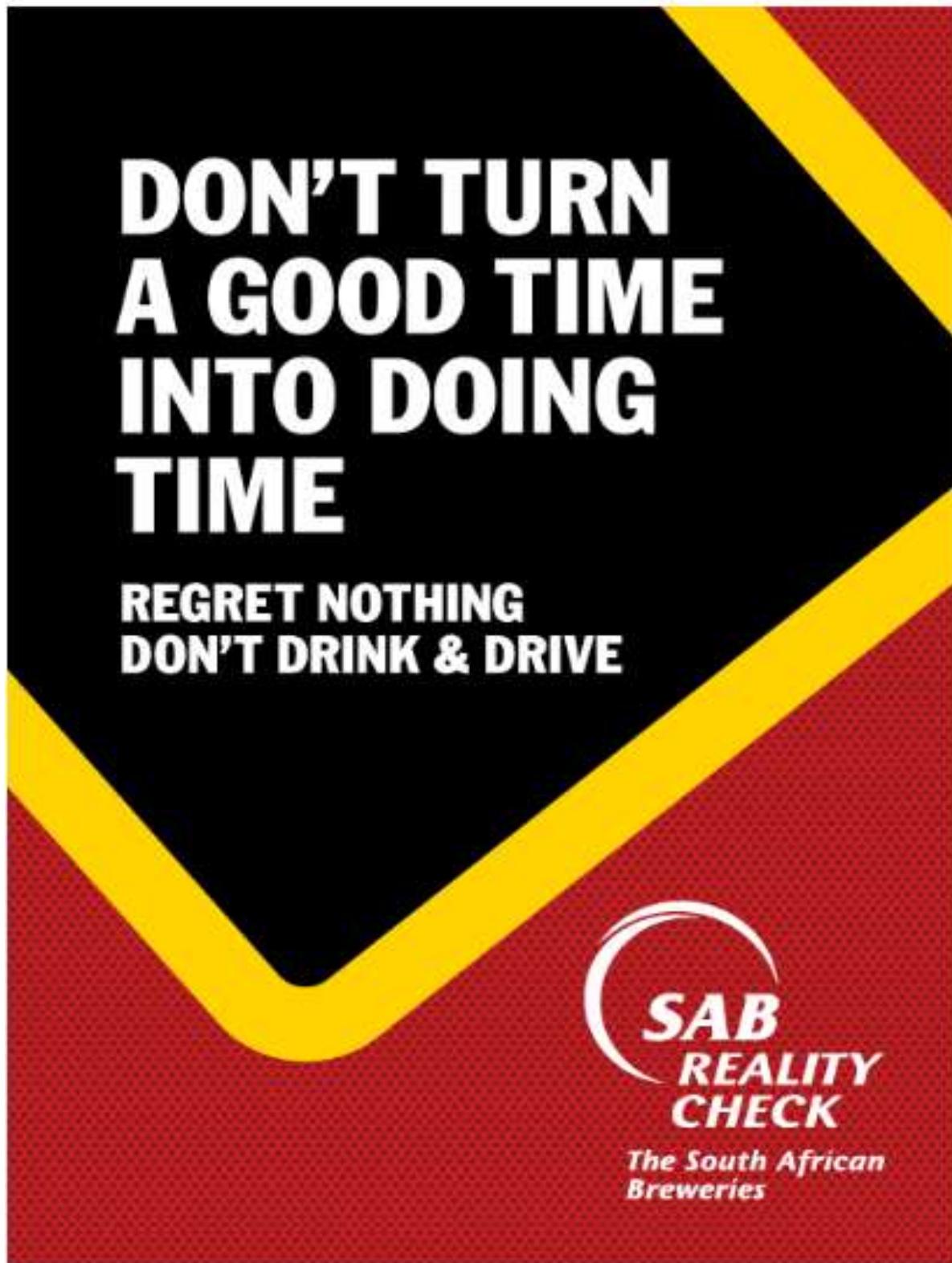
- National Road Safety Strategy (2011), SA Road Safety Strategy 2011-2020: Decade of action and Arrive Alive, Accessed 16 March 2014 from www.arrivealive.co.za/documents/Road%20Safety%20Strategy%20for%20South%20Africa%202011.pdf
- Nunnally, J. (1978) Psychometric theory. New York: McGraw-Hill
- Ohanian, R. (1990), Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness, *Journal of advertising*, Vol. 19(3), pp. 39-52.
- Olie, R.L., Olffen, W., Berends, P. and Hendriks, W. (2005) The essential guide to Masters Thesis in Organisation studies and strategy, Unpublished Thesis Type, Maastricht University, Nederland
- O'Shaughnessy, N. (1996) "Social propaganda and social marketing: a critical difference?", *European Journal of Marketing*, Vol. 30 (10/11), pp.54 - 67
- Park, T., Shenoy, R and Salvendy, G (2008) Effectiveness advertising on mobile phones: a literature review and presentation of results from 53 case studies; *Behaviour & Information Technology*, Vol. 27(5), pp. 355-373
- Petty, R.E., and Cacioppo, J.T. (1981), *Attitudes and Persuasion: Classic and Contemporary Approaches*. Dubuque, IA: William C. Brown Company Publishers,
- Phellas, C.N., Bloch, A. and Seale, C. (2011) Structured methods: interviews, questionnaires and observations. Accessed 16 March 2014 from www.sagepub.com/upm-data/47370_Seale_Chaper_11.pdf
- Pongiannan, K. (2013) Relationship between social factors and the factors affecting effectiveness of advertisement in print and electronic media- An analytical study, *Indian Steams Research Journal*, Vol. 2(12)
- Prochaska, J.O., and DiClemente, C.C. (2005), The trans-theoretical approach: *Handbook of psychotherapy integration*, Vol. 2, 147-171.
- Puto, C.P., and Wells, W.D. (1984), Informational and Transformational Advertising: The Differential Effects of Time. *Advances in consumer research*, Vol. 11(1).

- Rajasekar, S., Philominathan, P. and Chinnathambi, V. (2006), Research Methodology. Accessed 14 November 2013, from www.scribd.com/doc/6949151/Research-Methodology
- Rhodes, N., Roskos-Ewoldsen, D., and Eno, C.A. (2009) The content of cigarette counter-advertising: Are the perceived functions of smoking addressed?, *Journal of Health communication*, Vol. 14, pp. 658-673
- Rice, R.E. and Atkins, C.K. (2013), *Public communication campaigns: 4th edition*, Los Angeles: Sage publications Incorporation.
- Rieh, S.Y., and Belkin, N. J. (1998), Understanding judgment of information quality and cognitive authority in the WWW. In *Proceedings of the 61st annual meeting of the American society for information science*, Vol. 35, pp. 279-289
- Rodgers, S. L.(2005) An Examination of Advertising Credibility and Skepticism in Five Different Media using The Persuasion Knowledge Model, In *American Academy of Advertising*
- Rumsey, D.J. (2011) How to Interpret Standard Deviation in a Statistical Data Set. Accessed 22 March 2014, from <http://www.dummies.com/how-to/content/how-to-interpret-standard-deviation-in-a-statistic.html>
- Runte, M., Bassil, D. and Deshpande, S. (2009) Cause related marketing from the Non-profits perspective: Classifying Goals and experienced outcomes: *Journals of Non-profit and Public Sector Marketing*, Vol. 23(3), pp. 255
- SADD: South African Against Drunk Driving (2013) Accessed 8 November 2013, from <http://www.sadd.org.za/education/statistics>
- Segovia, J.B. (2013) Masking as a persuasive strategy in the adverting for young, *Journal of media education*, Vol. XXL (41), pp 157-165
- Sharma, M. (2007) Editorial: Social Marketing for Reduction in Alcohol Use, *Journal of Alcohol and Drug Education*. Accessed 14 November 2013 from <http://www.thefreelibrary.com/Social+marketing+for+reduction+in+alcohol+use.-a0174101647>

- Sherif, M., and Hovland, C.I. (1961), Social Judgement. New Haven, CT: Yale University Press.
- Siegel, M. (1998) Mass Media Antismoking Campaigns: A Powerful Tool for Health Promotion, American Society of Internal Medicine, Vol. 129, pp. 128-132
- Simpson, D., Lefroy, K. and Tsarenko Y. (2011) Together and Apart: Exploring structures of corporate-NPO relationships.
- Smith, M.J. (1998) Social science in question London: Sage Publications
- Statistics South Africa (2013), Mid-year population estimates. Accessed 25 March 2014 from <http://beta2.statssa.gov.za/publications/P0302/P03022013.pdf>
- Stead, M., Hasting, G., and McDenott, L. (2007) The meaning, effectiveness and future of social marketing, Obesity review, Vol. 8(1), pp 189-193
- Szmigin, I., Bengry-Howell, A., Griffin, Hackley, C. and Mistral, W. (2011) Social Marketing individual responsibility and the “culture of intoxication:”. European Journal of Marketing, Vol. 45(5), pp. 759-779
- Szykman, L.R., Bloom, P.N., and Blazing, J. (2004), Does corporate sponsorship of a socially oriented message make a difference? An investigation of the effects of sponsorship identity on responses to an anti-drinking and driving message. Journal of Consumer Psychology, Vol. 14, pp. 13-20.
- Tajziehchi, S.(2011) Problems and challenging facing developing countries in order to execute the social impact assessment of dams – a review, European Journal of Scientific Research, Vol. 56, pp. 489-495
- The Century Council (2009).Report: State of Drunk Driving Fatalities in the American report .Virginia, Accessed 4 November 2012, from www.centurycouncil.org.
- Tipps, S.W., Berger, P.D., Weinberg, B.D. (2006) The effects of media involvement on print media effectiveness, Journal of promotion management, Vol. 12(2), pp. 54-75

- Times LIVE (2009), Western Cape name and shame drunk driving campaign 'shut down, Accessed 1 February 2014, from <http://www.timeslive.co.za/politics/2013/06/13/western-cape-name-and-shame-drunk-driving-campaign-shut-down>
- Vallie, A. (2012) SAB grow market share and revenue, Accessed 5 October 2012, from <http://www.bdlive.co.za/articles/2011/11/18/sab-grows-market-shareandrevenue.jsessionid=298A58699A4D34A2010ACAC7AE5062DE.present1.bdfm>
- Wang, A. (2009), "Cross-channel integration of advertising: does personal involvement matter?"; Journal of Management Research News, Vol. 32(9), pp. 858 – 873
- Wallack, L. (1990), Media advocacy: Promoting health through mass communication. Health behaviour and health education: Theory, research, and practice, pp. 370-386.
- Welman, J.C. and Kruger, S.J. (2001) Research methodology: For the business and administrative sciences, 2nd edition Cape Town: Oxford University Press South Africa
- Wheeler, R.T (2009), Non-profit Advertising: Impact of celebrity connection, involvement and gender on source credibility and intention to volunteer time or donate money, Journal of non-profit and public sector marketing, Vol. 21, pp.80-107.
- Williams, M. (2013), Name and shame the drunk drivers, Accessed 1 February 2014, from <http://www.iol.co.za/motoring/industry-news/name-and-shame-the-drunk-drivers-1.1531614>
- Wu, S.I. (2001) An experimental study on the relationship between consumer involvement and advertising effectiveness. Asia Pacific Journal of Marketing and Logistics, Vol. 13(1), pp.43-56.

- Yeh, J.T. and Lin, C.L (2010) Measuring the effectiveness of the advertisement sent via mobile phone: implications of the appeal, endorser, and involvement model and purchasing behaviour, *Social Behavior and Personality*. Vol. 38(2) pp 249-256
- Zaichkowsky, J. (1994), The Personal Involvement Inventory: Reduction, Revision and Application to Advertising. *Journal of Advertising*, Vol. XXIII (4)



**DON'T TURN
A GOOD TIME
INTO DOING
TIME**

**REGRET NOTHING
DON'T DRINK & DRIVE**

PADD
People Against Drunken Driving

DON'T TURN A GOOD TIME INTO DOING TIME

**REGRET NOTHING
DON'T DRINK & DRIVE**

PADD
People Against Drunken Driving

SAB
REALITY
CHECK
*The South African
Breweries*

Appendix B : Scales

Personal Involvement Inventory: PII

(Zaichkowsky 1985)

Construct:	Zaichkowsky (1985, p. 342) defines involvement as a person's perceived relevance of the object based on inherent needs, values, and interests. This definition recognizes past definitions of involvement, and the corresponding scale, the Personal Involvement Inventory (PII), is applicable to advertisements, products, or purchase decisions.
Description:	The PII is composed of 20 semantic differential items scored on 7-point scales. Scores on the items are summed to form an overall measure of involvement ranging from a low score of 20 to a high score of 140. As originally developed, the scale was felt to be unidimensional.
Development:	Development of the PII closely followed recommended scaling procedures found in the psychometric literature. Based on the construct's definition, 168 word pairs were initially generated to tap the domain of involvement. These items were then judged for content validity by two panels of expert judges and the author, resulting in 30 semantic differential pairs retained. The remaining items were checked for reliability and content validity over a number of samples, resulting in 20 items retained for the final scale. The final version of the PII was then examined again for reliability and construct validity over several samples.
Samples:	Several samples were used at the various stages of scale development. Along with the author's judgment, two samples of expert judges ($n = 3$ and $n = 5$) rated the content validity of the 168 items, trimming this initial pool to 30 items. A sample of 152 undergraduate students were then used to assess the internal consistency of the 30 items over two products. Adjective pairs with items-to-total correlations of 0.50 were retained, resulting in 26 items. Based on a factor analysis, two more adjective pairs were dropped, with the resulting 24 items explaining 70% of the variance in the data (Zaichkowsky 1985). A second sample comprising 68 undergraduate and 45 MBA students was used to assess test-retest reliability and internal consistency over four product categories (two for the undergraduates and two for the MBAs). (Of this total sample of 113, 32 were lost to attrition, resulting in 81 for the estimates of reliability.) After deleting 4 more items with low items-to-total correlations, the final 20-item scale was formed. (The sample of 45 MBAs was also used to further assess content validity.) Two more samples were used to assess the criterion validity of the 20-item PII. One sample ($n = 68$ undergraduates) was used to elicit the product categories used, and the other sample ($n = 47$ undergraduates) responded to the PII across the products elicited. A final sample used to assess construct validity was composed of 57 clerical/administrative staff members at a major university. In all, four data sets over numerous product categories were used in the development process (not including the expert judges).
Validity:	Several estimates of reliability were obtained by Zaichkowsky (1985). For the second sample ($n = 81$), test-retest reliability was 0.88, 0.89, 0.88, and 0.93 for the four products studied over a 3-week period. Internal consistency for this sample ranged from $\alpha = 0.95$ to $\alpha = 0.97$. Internal consistency was also assessed with the clerical/administrative sample ($n = 57$) over three products with alphas of 0.97, 0.99, and 0.97, and with purchase scenarios via a subsample ($n = 41$) of the clerical/administrative sample over two more products with alphas of 0.97 and 0.98.

Several criterion and construct validity tests were also offered by Zaichkowsky (1985). The pattern of means for products to be hypothesized as high, medium, and low involvement supported the PII's criterion validity over two samples (i.e., the $n = 47$ undergraduate students and the $n = 57$ clerical/administrative sample). Furthermore, the correlations of the PII with a number of behavioral measures relating to product involvement showed that the PII possessed adequate levels of construct validity ($n = 57$). For example, the correlations of the PII with a measure of reading about how a product is made ranged from 0.14 to 0.37 across three product categories. The correlations of the PII with a measure of comparing product characteristics across brands ranged from 0.23 to 0.52 across three product categories, and the correlations of the PII with a measure of having a most preferred brand in a product category ranged from 0.42 to 0.68.

- Scores:** Mean scores across samples and the various products examined were reported (Zaichkowsky 1985, pp. 345-51). An overall grand mean score was reported to be 89.55. In addition, those subjects deemed as low involvement across the products studied scored in the 20 to 69 range, medium involvement in the 70 to 110 range, and high involvement in the 111 to 140 range.
- Source:** Zaichkowsky, Judith Lynne (1985), "Measuring the Involvement Construct," *Journal of Consumer Research*, 12, 341-52.
 © 1985 by University of Chicago Press. Scale items taken from Appendix A (p. 350). Reprinted with permission.
- Other evidence:** Mean scores across eight different product categories are reported in Zaichkowsky (1986). A sample of 230 students rated each product category. Automobiles had the highest mean rating on the PII of 131, and cigarettes had the lowest mean rating of 49. Mean scores were also broken down by gender, and many of the differences on the PII between males and females were significant in a direction that supports the PII's validity. See also the next several pages (i.e., revised versions of the PII).
- Other source:** Zaichkowsky, Judith Lynne (1986), "The Emotional Aspect of Product Involvement," in *Advances in Consumer Research*, Vol. 14, eds. Melanie Wallendorf and Paul Anderson, Provo, UT: Association for Consumer Research, pp. 32-5.

Personal Involvement Inventory: PII*(Zeithaml 1985)**PII Instructions*

The purpose of this study is to measure a person's involvement or interest in [product category]. To take this measure, we need you to judge [product category] against a series of descriptive scales according to how YOU perceive the product you will be shown. Here is how you are to use these scales.

If you feel that the [product] is **very closely** related to one end of the scale, you should place your check mark as follows:

Unimportant  Important

or

Unimportant  Important

If you feel that the [product] is **quite closely** related to one or the other end of the scale (but not extremely), you should place your check mark as follows:

Appealing  Unappealing

or

Appealing  Unappealing

If you feel that the [product] seems **only slightly** related to one or the other end of the scale (but not really neutral), you should place your check mark as follows:

Uninterested  Interested

or

Uninterested  Interested

Important:

1. Be sure that you check every scale for every [product]; do not omit any.
2. Never put more than one check mark on a single scale.

Make each item a separate and independent judgment. Work at fairly high speed through this questionnaire. Do not worry or puzzle over individual items. It is your first impressions, the immediate feelings about the items, that we want. On the other hand, please do not be careless, because we want your true impressions.

The PII Items

1. important—unimportant*
2. of no concern—of concern to me
3. irrelevant—relevant
4. means a lot to me—means nothing to me*
5. useless—useful

6. valuable—worthless*
7. trivial—fundamental
8. beneficial—not beneficial*
9. matters to me—doesn't matter*
10. uninterested—interested
11. significant—insignificant*
12. vital—superfluous*
13. boring—interesting
14. unexciting—exciting
15. appealing—unappealing*
16. mundane—fascinating
17. essential—nonessential*
18. undesirable—desirable
19. wanted—unwanted*
20. not needed—needed

Note: Items are scored on 7-point scales. * Denotes items that are reverse scored.

Informational and Transformational Ad Content

(Puto and Wells 1984)

Construct:	An informational advertisement was defined as an ad that provides consumers with factual, relevant brand data in a clear and logical manner such that they have greater confidence in their ability to assess the merits of buying the brand after having seen the advertisement. An important aspect of the definition is that the ad becomes informational if consumers perceive it as such. For an ad to be judged informational, it must reflect the following characteristics: (a) present factual, relevant information about the brand; (b) present information which is immediately and obviously important to the potential consumer; and (c) present data which the consumer accepts as being verifiable. A transformational advertisement is one that associates the experience of using (consuming) the advertised brand with a unique set of psychological characteristics which typically would not be associated with the brand experience to the same degree without exposure to the advertisement. Specifically, the advertisement itself links the brand with the capacity to provide the consumer with an experience that is different from the consumption experience which would normally be expected to occur without ad exposure. For an ad to be judged transformational, it must reflect the following characteristics: (a) the experience of using the product must be made richer, warmer, more exciting, and/or more enjoyable than that obtained solely from an objective ad description; and (b) the experience of the advertisement and the experience of using the brand must be so tightly connected that the consumers cannot remember the brand without recalling the experience generated by the advertisement. The transformation occurs when the descriptors are explicitly related by consumers to the experience of owning or consuming the advertised brand. Advertisements can be classified as belonging to one of four basic categories: (a) high transformational/low information, (b) low transformational/high information, (c) high transformational/high information, and (d) low transformational/low information (Puto and Wells 1984, p. 638).
Description:	Puto and Wells's measures include 23 items scored on 6-point <i>strongly agree to strongly disagree</i> scales. Fifteen of the items tap the transformation construct, while the eight remaining relate to the information construct. The responses are averaged across the items within each subscale to form indices of each subscale.
Development:	Scale items which were considered candidates for inclusion on the informational scales were derived from items used in prior research on the informational content of advertisements (e.g., Aaker and Norris 1982). Additionally, a set of items was generated from the definition of informational advertisements. Although research with respect to the emotional and experiential aspects of transformation was also examined, the majority of this research was concerned with measuring empathetic tendencies of individuals. Because the research objectives of this study were concerned with products, it was necessary to develop original items for this aspect of the transformational scale. Personal relevance aspects of the transformation scale were derived from the viewer response profile measures (Schlinger 1979). In sum, a total of 23 items were retained to represent the transformational and informational measures. To test these items, approximately 400 television commercials were reviewed, and 20 were selected for the initial study. The two basic criteria for commercial selection were that they (a) were mainly informational or mainly transformational, and (b) promoted products of interest to the test audience. From these 20 commercials, 5 were kept as informational ads and 8 as transformational ads (i.e., 13 in all).

Subjects were then exposed to the 13 commercials, and immediately after seeing each commercial, they reported their prior exposure to the commercial and their overall opinion of each ad. Lastly, subjects responded to the 23 transformational and informational items with respect to the commercials. Reliability and validity checks were then assessed.

- Samples:** Two judges, knowledgeable of the definitions of informational and transformational ads but blind to prior classifications of the ads, independently judged the commercials with respect to the information and transformation constructs. The subjects were 130 undergraduate psychology students.
- Validity:** Reliability coefficients were computed separately for each commercial and then averaged across the 13 test commercials. The average internal consistency reliability estimates across advertisements were 0.73 and 0.88 for the information and transformation scales, respectively. The mean scale values for the information and transformation scales for each commercial differed at the $p < 0.01$ level (one-tailed t test). These differences reflect the authors' *a priori* assessment of an ad either being primarily informational or primarily transformational, and offer evidence for the validity of the scales. (Those commercials below the 3.5 midpoint were classified as being "low" on the specific dimension, whereas those above it were classified as being "high.")
- Scores:** Means and standard deviations for each commercial were presented in Table 4 (p. 642) of the Puto and Wells (1984) study. As an example, the mean information and transformation scores for the first advertisement (i.e., an informational toothbrush advertisement) were 4.00 ($SD = 0.69$) and 3.08 ($SD = 0.70$), respectively.
- Source:** Puto, Christopher P. and William D. Wells (1984), "Informational and Transformational Advertising: The Differential Effects of Time," in *Advances in Consumer Research*, Vol. 11, ed. Thomas C. Kinnear, Provo, UT: Association for Consumer Research, pp. 638-43.
- © 1984 by the Association for Consumer Research. Scale items taken from Table 1 (p. 641). Reprinted with permission.
- References:** Aaker, David A. and Donald Norris (1982), "Characteristics of TV Commercials Perceived as Informative," *Journal of Advertising Research*, 22, 61-70.
- Schlenger, Mary (1979), "A Profile of Responses to Commercials," *Journal of Advertising Research*, 19, 37-46.

Informational and Transformational Ad Content

(Puto and Wells 1984)

1. I learned something from this commercial that I didn't know before about (this brand).
2. I would like to have an expertise like the one shown in the commercial.
3. The commercial did not seem to be speaking directly to me.
4. There is nothing special about (this brand) that makes it different from the others.
5. While I watched this commercial, I thought how this brand might be useful to me.
6. The commercial did not teach me what to look for when buying (this product).
7. This commercial was meaningful to me.
8. This commercial was very uninformative.
9. (This brand) fits my lifestyle very well.
10. I could really relate to this commercial.
11. Using (this brand) makes me feel good about myself.
12. If they had to, the company could provide evidence to support the claims made in this commercial.
13. It's hard to give a specific reason, but somehow (this brand) is not really for me.
14. This commercial did not really hold my attention.
15. This commercial reminded me of some important facts about (this brand) which I already knew.
16. If I could change my lifestyle, I would make it less like the people who use (this brand).
17. When I think of (this brand), I think of this commercial.
18. I felt as though I were right there in the commercial, experiencing the same thing.
19. I can now accurately compare (this brand) with other competing brands on matters that are important to me.
20. This commercial did not remind me of any experiences or feelings I've had in my own life.
21. I would have less confidence in using (this brand) now than before I saw this commercial.
22. It is the kind of commercial that keeps running through your head after you've seen it.
23. It's hard to put into words, but this commercial leaves me with a good feeling about using (this brand).

Notes: () denotes brand name of the advertised product. Items 1, 4, 6, 8, 12, 15, 19, and 21 compose the informational content measure. The remaining items compose the transformational content scale.

Although reverse coding is not specified by the authors, it seems that items 3, 6, 8, 12, 14, and 20 need such coding to reflect higher transformational and informational scores. Items scored on 6-point scales from *strongly agree* to *strongly disagree*.

Expertise, Trustworthiness, and Attractiveness of Celebrity Endorsers

(Ohanian 1990)

Construct:	The celebrity endorser's source credibility is posited to be characterized by three dimensions: the source's expertise, trustworthiness, and attractiveness (Ohanian 1990). In the persuasive communications literature, these three dimensions have been shown to be effective in attitude change studies. Each of the dimensions is briefly defined below. <i>Expertise:</i> Consistent with the work of Hovland, Janis, and Kelley (1963), Ohanian views expertise as the extent to which the communicator is perceived to be a source of valid assertions about the object/message. This includes the source's competence, expertise, and qualifications with regard to the object/message. <i>Trustworthiness:</i> Also consistent with Hovland et al. (1963), trustworthiness is viewed as the degree of confidence in the communicator's intent to communicate the assertions he or she considers most valid. This includes both trust and acceptance of speaker and message. <i>Attractiveness:</i> In this context, attractiveness is referred to as physical attractiveness of the source to the listener, and to a lesser extent, the emotional attractiveness of the source. This includes elements of physical beauty, sexiness, chicness, and elegance.
Description:	Each dimension of source credibility is composed of five semantic differential items scored on 7-point scales. Thus, the measure is multidimensional, and scores on each dimension are derived by summing the responses per items within each dimension.
Development:	Development of the scale closely adhered to recommended scaling procedures. Based on definitions of the construct dimensions, 182 adjective pairs were initially generated. Based on author judgment and a sample of 38 student judges, this initial pool was trimmed to 104 items. Then, 52 students were supplied with the definitions of the source components and eliminated those items they felt did not represent the definitions, resulting in 72 adjective pairs. Using three celebrity spokespersons and several product categories (derived from a pretest of $n = 40$), two samples responded to the 72 items. Via exploratory factor analysis using stringent <i>a priori</i> decision rules and coefficient alpha statistics, five items within each dimension with the highest item-to-total correlations were retained. The final five-item scales were then subjected to confirmatory factor analysis and multitrait-multimethod (MTMM) analysis using another sample. Reliability and validity checks were also gathered.
Samples:	Several samples were used throughout the scale development process. Three samples of 38, 52, and 40 students were used to judge the initial pool of items or generate celebrity names and products required for scale development. Two more samples of 250 and 240 students were used in the exploratory factor analyses to derive the final five-item scales. For the confirmatory factor analyses, two more samples of 138 and 127 nonstudents were used to examine the factor structure and further validate the scales.
Validity:	Construct reliability from confirmatory factor analysis (via LISREL) showed strong internal consistency for the three subscales. These estimates were 0.90 and 0.89 for attractiveness, 0.90 and 0.90 for trustworthiness, and 0.89 and 0.89 for expertise across the samples of 138 and 127, respectively. The correlations among the factors across these two samples ranged from 0.32 to 0.62, and the hypothesized three-factor model offered the best fit to the data. In sum, the reliability and dimensionality of the scales were supported.

Numerous assessments of convergent, discriminant, and nomological validity are offered by Ohanian (1990, Table 5, p. 48). The correlations across measures used in these analyses range from 0.15 to 0.66, and they offer support for the scale's validity. Also, MTMM analysis also supports the discriminant and convergent validity for the measures.

- Scores:** Mean or percentage scores were not reported.
- Source:** Ohanian, Roobina (1990), "Construction and Validation of a Scale to Measure Celebrity Endorsers' Perceived Expertise, Trustworthiness, and Attractiveness," *Journal of Advertising*, 19, 39-52.
- Scale items taken from Appendix (p. 50). © 1990; reprinted with permission of the *Journal of Advertising*.
- Reference:** Hovland, Carl I., Irving K. Janis, and Harold H. Kelley (1963), *Communication and Persuasion*, New Haven, CT: Yale University Press.

Expertise, Trustworthiness, and Attractiveness of Celebrity Endorsers

(Ohanian 1990)

Attractiveness

1. unattractive—attractive
2. not classy—classy
3. ugly—beautiful
4. plain—elegant
5. not sexy—sexy

Trustworthiness

6. undependable—dependable
7. dishonest—honest
8. unreliable—reliable
9. insincere—sincere
10. untrustworthy—trustworthy

Expertise

11. not an expert—expert
12. inexperienced—experienced
13. unknowledgeable—knowledgeable
14. unqualified—qualified
15. unskilled—skilled

Note: Items scored on 7-point scales.

Appendix C: Questionnaire

SECTION A: Participants Information

1. Race

Asian	
Black	
Coloured	
White	

2. Gender

Female	
Male	

3. Age

18-24	
24-31	
32-38	
38+	

4. Marital status

Single	
Married	
Widow	
Seperated/Divorced	

5. Educational level

High School	
Matric certificate	
Degree/Honours	
Master/Doctorate	

6. Do you consume alcohol?

Yes	
No	

Please answer the below regarding the advertisement attached.

Directions:

To take this measure, you need to judge the advertisement against a series of descriptive words according to how you perceive the advertisement attached. Here is how you are to answer.

If you feel that the advertisement is closely related to one end of the scale, you should place a cross as follows

important	1	2	3	4	5	6	7	Unimportant
-----------	---	---	---	---	---	---	--------------	-------------

If you feel that the advertisement is closely related to one or the other end of the scale (but not extremely) you should place your cross mark as follows

important	1	2	3	4	5	6	7	Unimportant
-----------	---	--------------	---	---	---	---	---	-------------

If you feel the advertisement seems on slightly related to one or the other end of the scale (but not really neutral), you should place you cross as follow.

important	1	2	3	4	5	6	7	Unimportant
-----------	---	---	---	---	--------------	---	---	-------------

SECTION B: Personal Involvement

Work at fairly high speed through the next 13 questions. Do not worry or puzzle over individual items.

What is your first impression or immediate feeling of the advertisement attached?

1	important	1	2	3	4	5	6	7	unimportant*
2	of no concern	1	2	3	4	5	6	7	of concern to me
3	irrelevant	1	2	3	4	5	6	7	relevant
4	means a lot to me	1	2	3	4	5	6	7	means nothing to me*
5	useless	1	2	3	4	5	6	7	useful
6	trivial	1	2	3	4	5	6	7	Fundamental
7	beneficial	1	2	3	4	5	6	7	nor beneficial*
8	uninterested	1	2	3	4	5	6	7	interested
9	significant	1	2	3	4	5	6	7	not significant*
10	vital	1	2	3	4	5	6	7	superfluous*
11	boring	1	2	3	4	5	6	7	interesting
12	essential	1	2	3	4	5	6	7	nonessential
13	not needed	1	2	3	4	5	6	7	needed

SECTION C (1): Trustworthiness

The next set of words will measure the extent to which you trust the source/company sponsoring the advertisement

14	Undependable	1	2	3	4	5	6	7	Dependable
15	Dishonest	1	2	3	4	5	6	7	Honest
16	Unreliable	1	2	3	4	5	6	7	Reliable
17	Insincere	1	2	3	4	5	6	7	Sincere
18	Untrustworthy	1	2	3	4	5	6	7	Trustworthy

SECTION C (2): Expertise

The next set of words will measure the extent to which you regard the source to be an expert in addressing the issue.

19	Not an Expert	1	2	3	4	5	6	7	Expert
20	Inexperienced	1	2	3	4	5	6	7	Experienced
21	Unknowledgeable	1	2	3	4	5	6	7	Knowledgeable
22	Unqualified	1	2	3	4	5	6	7	Qualified
23	Unskilled	1	2	3	4	5	6	7	Skilled

SECTION D: Informational and Transformational Ad content

The next 10 statements are structured differently. Please indicate to what extent you either strongly agree, agree, somewhat agree, somewhat disagree, disagree or strongly disagree with the below statements

24	I learned something from this advert that I didn't know before about (this brand)	strongly agree	agree	somewhat agree	somewhat disagree	disagree	strongly disagree
25	It is hard to give a specific reason, but somehow this advert is not really for me	strongly agree	agree	somewhat agree	somewhat disagree	disagree	strongly disagree
26	There is nothing special about this advert that makes it different from the others	strongly agree	agree	somewhat agree	somewhat disagree	disagree	strongly disagree
27	The advert was meaningful to me	strongly agree	agree	somewhat agree	somewhat disagree	disagree	strongly disagree
28	The commercial was informative	strongly agree	agree	somewhat agree	somewhat disagree	disagree	strongly disagree
29	I could really relate to the advert	strongly agree	agree	somewhat agree	somewhat disagree	disagree	strongly disagree
30	If they could, the company could provide evidence to support the claims made in the advert	strongly agree	agree	somewhat agree	somewhat disagree	disagree	strongly disagree
31	It is the kind of advert that keeps running through your head after you've seen it	strongly agree	agree	somewhat agree	somewhat disagree	disagree	strongly disagree
32	If I could change my lifestyle, I would make it less like the people that use this brand/alcohol	strongly agree	agree	somewhat agree	somewhat disagree	disagree	strongly disagree
33	This brand fits my lifestyle very well	strongly agree	agree	somewhat agree	somewhat disagree	disagree	strongly disagree
34	I can now accurately compare with other competing brands on matters that are important to me	strongly agree	agree	somewhat agree	somewhat disagree	disagree	strongly disagree
35	When looking at the advert, I thought of how this might be useful to me	strongly agree	agree	somewhat agree	somewhat disagree	disagree	strongly disagree
36	It is hard to put it in words, but this commercial leaves me with a good feeling about the brand	strongly agree	agree	somewhat agree	somewhat disagree	disagree	strongly disagree

Thank you for your participation in this research initiative.

Regards,

Luvhimba Taz Phaswana

Appendix D: Multivariate and Cronbrach Alpha

Multivariate Correlations

	Sec A.1 2	Sec A.2	Sec A.3	Sec A.4 2	Sec A.5	Sec A.6	Sec A.7 2	Sec A.8	Sec A.9 2	Sec A.10 2	Sec A.11	Sec A.12	Sec A.13
Sec A.1 2	1.00	0.55	0.53	0.57	0.51	0.36	0.47	0.54	0.50	0.56	0.31	-0.5	0.54
Sec A.2	0.55	1.00	0.60	0.47	0.47	0.36	0.32	0.53	0.32	0.33	0.37	-0.3	0.48
Sec A.3	0.53	0.60	1.00	0.41	0.55	0.38	0.36	0.45	0.38	0.35	0.33	-0.3	0.50
Sec A.4 2	0.57	0.47	0.41	1.00	0.47	0.34	0.46	0.51	0.45	0.51	0.32	-0.5	0.39
Sec A.5	0.51	0.47	0.55	0.47	1.00	0.47	0.53	0.57	0.41	0.41	0.39	-0.5	0.55
Sec A.6	0.36	0.36	0.38	0.34	0.47	1.00	0.39	0.39	0.36	0.40	0.28	-0.4	0.40
Sec A.7 2	0.47	0.32	0.36	0.46	0.53	0.39	1.00	0.45	0.59	0.56	0.33	-0.6	0.50
Sec A.8	0.54	0.53	0.45	0.51	0.57	0.39	0.45	1.00	0.50	0.43	0.57	-0.4	0.56
Sec A.9 2	0.50	0.32	0.38	0.45	0.41	0.36	0.59	0.50	1.00	0.70	0.33	-0.6	0.51
Sec A.10 2	0.56	0.33	0.35	0.51	0.41	0.40	0.56	0.43	0.70	1.00	0.28	-0.7	0.53
Sec A.11	0.31	0.37	0.33	0.32	0.39	0.28	0.33	0.57	0.33	0.28	1.00	-0.2	0.35
Sec A.12	-0.5	-0.3	-0.3	-0.5	-0.5	-0.4	-0.6	-0.4	-0.6	-0.7	-0.2	1.00	-0.5
Sec A.13	0.54	0.48	0.50	0.39	0.55	0.40	0.50	0.56	0.51	0.53	0.35	-0.5	1.00

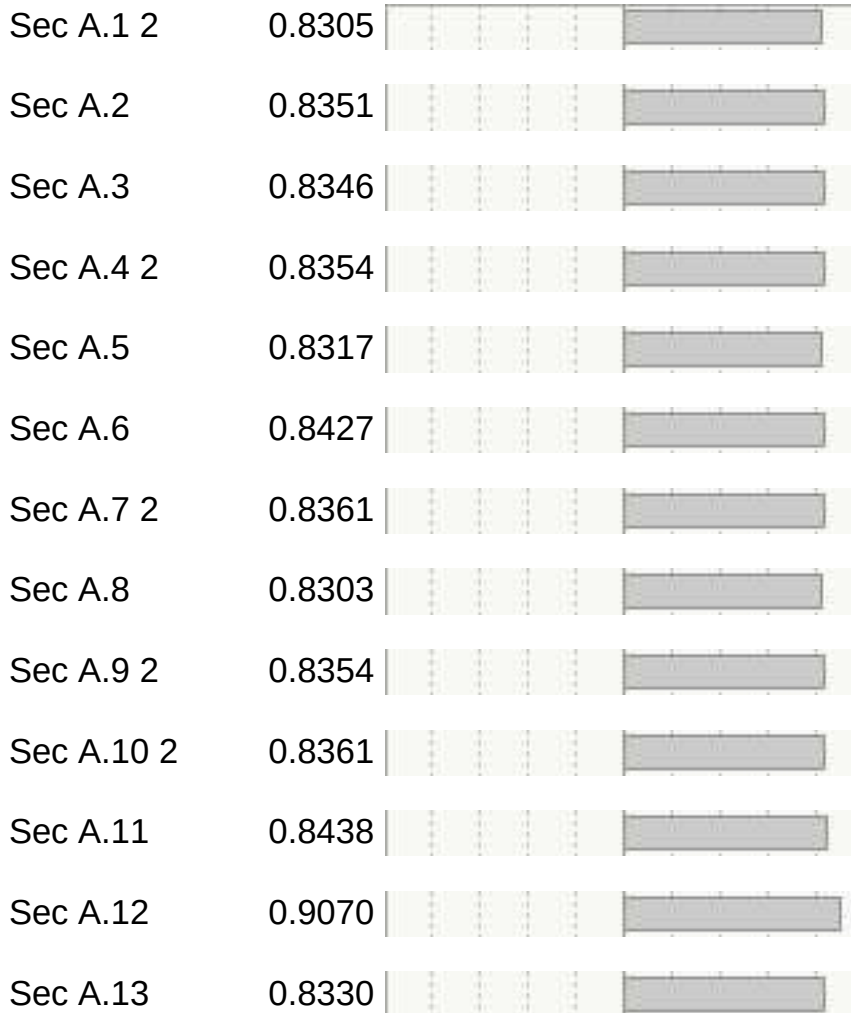
Cronbach's α

α Plot Alpha

Entire set	0.8532	
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Excluded Col

α Plot Alpha

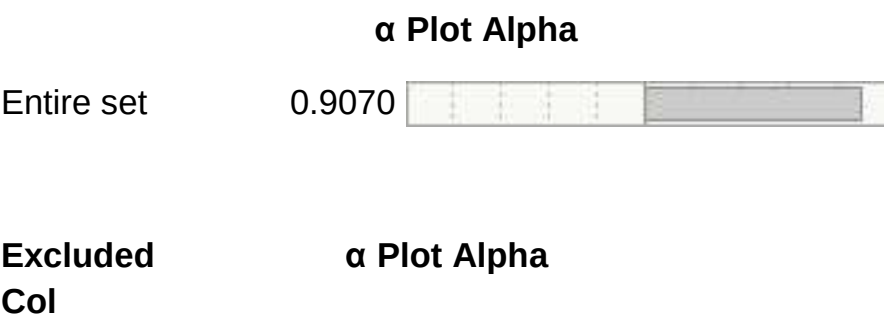


Multivariate

	Sec A.2	Sec A.3	Sec A.5	Sec A.6	Sec A.8	Sec A.11	Sec A.13
Sec A.2	1.0000	0.6018	0.4677	0.3560	0.5264	0.3727	0.4795
Sec A.3	0.6018	1.0000	0.5518	0.3761	0.4489	0.3279	0.4954
Sec A.5	0.4677	0.5518	1.0000	0.4699	0.5679	0.3868	0.5478
Sec A.6	0.3560	0.3761	0.4699	1.0000	0.3938	0.2846	0.3951
Sec A.8	0.5264	0.4489	0.5679	0.3938	1.0000	0.5710	0.5596
Sec A.11	0.3727	0.3279	0.3868	0.2846	0.5710	1.0000	0.3544
Sec A.13	0.4795	0.4954	0.5478	0.3951	0.5596	0.3544	1.0000
Sec A.1 2	0.5471	0.5341	0.5094	0.3556	0.5425	0.3100	0.5385
Sec A.4 2	0.4734	0.4084	0.4746	0.3384	0.5128	0.3226	0.3937
Sec A.7 2	0.3175	0.3600	0.5315	0.3901	0.4502	0.3286	0.4981
Sec A.9 2	0.3226	0.3828	0.4082	0.3569	0.4968	0.3328	0.5134
Sec A.10 2	0.3343	0.3451	0.4124	0.3989	0.4260	0.2792	0.5339

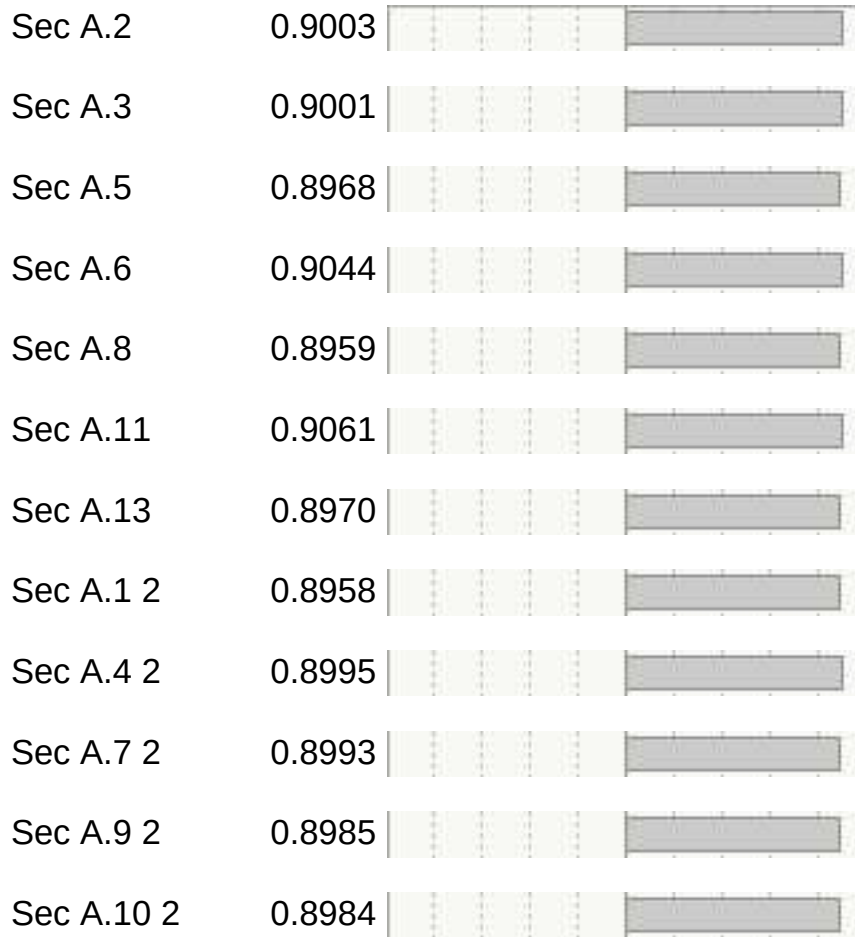
Correlations

Cronbach's α



**Excluded
Col**

α Plot Alpha



Trustworthiness

Multivariate Correlations

	Sec B.1	Sec B.2	Sec B.3	Sec B.4	Sec B.5
Sec B.1	1.0000	0.6800	0.6602	0.5553	0.6111
Sec B.2	0.6800	1.0000	0.6908	0.7001	0.6753
Sec B.3	0.6602	0.6908	1.0000	0.6618	0.7284
Sec B.4	0.5553	0.7001	0.6618	1.0000	0.7355
Sec B.5	0.6111	0.6753	0.7284	0.7355	1.0000

Cronbach's α

	α Plot Alpha
Entire set	0.9097 

Excluded Col

	α Plot Alpha
Sec B.1	0.9022 
Sec B.2	0.8841 
Sec B.3	0.8851 
Sec B.4	0.8917 
Sec B.5	0.8845 

Expertise**Multivariate Correlations**

	Sec C.1	Sec C.2	Sec C.3	Sec C.4	Sec C.5
Sec C.1	1.0000	0.6748	0.5878	0.6366	0.6571
Sec C.2	0.6748	1.0000	0.6948	0.6833	0.7271
Sec C.3	0.5878	0.6948	1.0000	0.7293	0.7014
Sec C.4	0.6366	0.6833	0.7293	1.0000	0.7380
Sec C.5	0.6571	0.7271	0.7014	0.7380	1.0000

Cronbach's α **α Plot Alpha**

Entire set	0.9119	
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**Excluded
Col** **α Plot Alpha**

Sec C.1	0.9081	
Sec C.2	0.8874	
Sec C.3	0.8933	
Sec C.4	0.8878	
Sec C.5	0.8853	

Information Transformational AD content

Multivariate Correlations

	Sec D.1	Sec D.2 2	Sec D.3 2	Sec D.4	Sec D.5	Sec D.6	Sec D.7	Sec D.8	Sec D.9 2	Sec D.10	Sec D.11	Sec D.12	Sec D.13
Sec D.1	1.00	0.01	0.26	0.32	0.36	0.32	-0.0	0.32	-0.2	0.26	0.40	0.34	0.25
Sec D.2 2	0.01	1.00	0.36	0.32	0.21	0.40	0.03	0.24	-0.1	0.31	0.19	0.27	0.28
Sec D.3 2	0.26	0.36	1.00	0.36	0.36	0.28	-0.1	0.36	-0.2	0.10	0.29	0.26	0.33
Sec D.4	0.32	0.32	0.36	1.00	0.53	0.55	0.00	0.40	-0.1	0.32	0.33	0.39	0.40
Sec D.5	0.36	0.21	0.36	0.53	1.00	0.48	0.01	0.38	-0.2	0.25	0.36	0.48	0.46
Sec D.6	0.32	0.40	0.28	0.55	0.48	1.00	0.06	0.36	-0.2	0.35	0.38	0.49	0.35
Sec D.7	-0.0	0.03	-0.1	0.00	0.01	0.06	1.00	0.11	-0.1	0.10	0.06	0.15	0.12
Sec D.8	0.32	0.24	0.36	0.40	0.38	0.36	0.11	1.00	-0.2	0.34	0.36	0.41	0.46
Sec D.9 2	-0.2	-0.1	-0.2	-0.1	-0.2	-0.2	-0.1	-0.2	1.00	-0.1	-0.3	-0.3	-0.3
Sec D.10	0.26	0.31	0.10	0.32	0.25	0.35	0.10	0.34	-0.1	1.00	0.34	0.40	0.33
Sec D.11	0.40	0.19	0.29	0.33	0.36	0.38	0.06	0.36	-0.3	0.34	1.00	0.46	0.49
Sec D.12	0.34	0.27	0.26	0.39	0.48	0.49	0.15	0.41	-0.3	0.40	0.46	1.00	0.51
Sec D.13	0.25	0.28	0.33	0.40	0.46	0.35	0.12	0.46	-0.3	0.33	0.49	0.51	1.00

Cronbach's α

α Plot Alpha

Entire set

0.7905



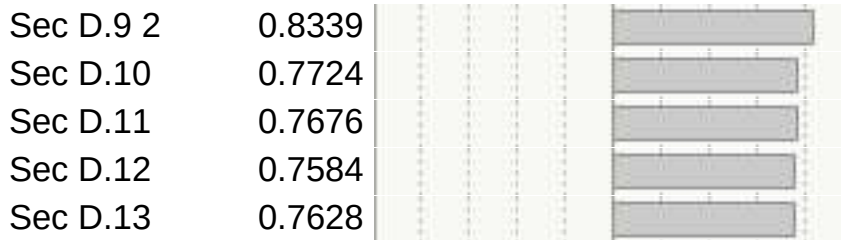
Excluded Col

α Plot Alpha

Sec D.1	0.7790	
Sec D.2 2	0.7802	
Sec D.3 2	0.7767	
Sec D.4	0.7609	
Sec D.5	0.7612	
Sec D.6	0.7576	
Sec D.7	0.8052	
Sec D.8	0.7633	

Excluded Col

α Plot Alpha



Multivariate Correlations

	Sec D.1	Sec D.3 2	Sec D.4	Sec D.5	Sec D.6	Sec D.8	Sec D.10
Sec D.1	1.0000	0.2600	0.3231	0.3625	0.3163	0.3191	0.2561
Sec D.3 2	0.2600	1.0000	0.3636	0.3589	0.2784	0.3640	0.1040
Sec D.4	0.3231	0.3636	1.0000	0.5284	0.5513	0.3980	0.3181
Sec D.5	0.3625	0.3589	0.5284	1.0000	0.4782	0.3753	0.2550
Sec D.6	0.3163	0.2784	0.5513	0.4782	1.0000	0.3642	0.3514
Sec D.8	0.3191	0.3640	0.3980	0.3753	0.3642	1.0000	0.3405
Sec D.10	0.2561	0.1040	0.3181	0.2550	0.3514	0.3405	1.0000
Sec D.11	0.4046	0.2856	0.3296	0.3648	0.3774	0.3604	0.3432
Sec D.12	0.3444	0.2620	0.3891	0.4796	0.4886	0.4121	0.3991
Sec D.13	0.2529	0.3315	0.3986	0.4616	0.3510	0.4570	0.3272
Sec D.9	0.2012	0.1859	0.1469	0.1674	0.1737	0.2003	0.1107

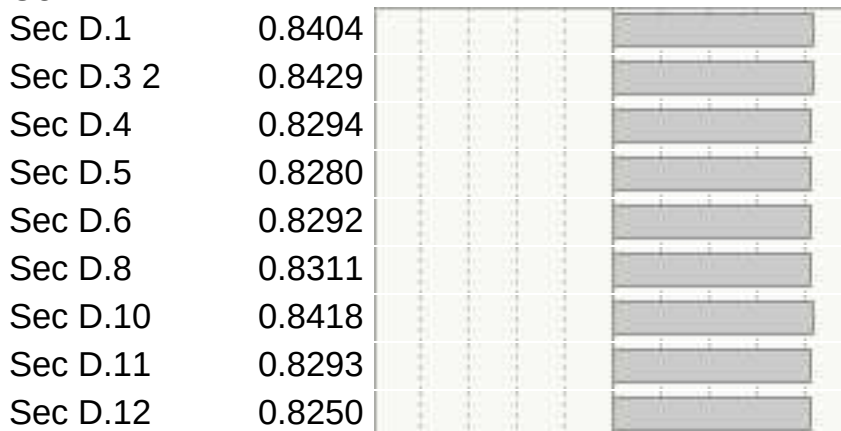
Cronbach's α

α Plot Alpha



Excluded Col

α Plot Alpha



**Excluded
Col**

α Plot Alpha

Sec D.13

0.8283



Sec D.9

0.8494



Appendix E: Pilot questionnaire

Gender:: Male Female

Ethnicity: Africa White Asian Coloured

Age: 18-24 25-31 32-38 38+

Marital status :Single Married

Educational Level: High School Matric certification Degree Honours

Master/doctorate

Personal Involvement

Work at fairly high speed through the next 13 questions. Do not worry or puzzle over individual items. It is your first impression, the immediate feeling of the advertisement attached.

1	important	1	2	3	4	5	6	7	unimportant*
2	of no concern	1	2	3	4	5	6	7	of concern to me
3	irrelevant	1	2	3	4	5	6	7	relevant
4	means a lot to me	1	2	3	4	5	6	7	means nothing to me*
5	useless	1	2	3	4	5	6	7	useful
6	trivial	1	2	3	4	5	6	7	Fundamental
7	beneficial	1	2	3	4	5	6	7	nor beneficial*
8	uninterested	1	2	3	4	5	6	7	interested
9	significant	1	2	3	4	5	6	7	not significant*
10	vital	1	2	3	4	5	6	7	superfluous*
11	boring	1	2	3	4	5	6	7	interesting
12	essential	1	2	3	4	5	6	7	nonessential
13	not needed	1	2	3	4	5	6	7	needed

Trustworthiness

The next set of question will measure the extent to which you trust the source/company on the advertisement

14 Undependable	1	2	3	4	5	6	7 Dependable
15 Dishonest	1	2	3	4	5	6	7 Honest
16 Unreliable	1	2	3	4	5	6	7 Reliable
17 Insincere	1	2	3	4	5	6	7 Sincere
18 Untrustworthy	1	2	3	4	5	6	7 Trustworthy

Expertise

The next set of questions will measure the extent to which you regard the source to be an expert in the address issue

19	Not an Expert	1	2	3	4	5	6	7	Expert
20	Inexperienced	1	2	3	4	5	6	7	Experienced
21	Unknowledgeable	1	2	3	4	5	6	7	Knowledgeable
22	Unqualified	1	2	3	4	5	6	7	Qualified
22	Unskilled	1	2	3	4	5	6	7	Skilled

Informational and Transformational Ad content

The next 10 questions are structured differently. Please indicate to what extent you either strongly agree, agree, somewhat agree, somewhat disagree, disagree or strongly disagree with the below statements

23	I learned something from this advert that I didn't know before about (this brand)	strongly agree	agree	somewhat agree	somewhat disagree	disagree	strongly disagree
24	The advert did not seem to be speaking directly to me	strongly agree	agree	somewhat agree	somewhat disagree	disagree	strongly disagree
25	There is nothing special about this advert that makes it different from the others	strongly agree	agree	somewhat agree	somewhat disagree	disagree	strongly disagree
26	The advert was meaningful to me	strongly agree	agree	somewhat agree	somewhat disagree	disagree	strongly disagree
27	The commercial was informative	strongly agree	agree	somewhat agree	somewhat disagree	disagree	strongly disagree
28	I could really relate to the advert	strongly agree	agree	somewhat agree	somewhat disagree	disagree	strongly disagree
29	if they could, the company could provide evidence to support the claims made in the advert	strongly agree	agree	somewhat agree	somewhat disagree	disagree	strongly disagree
30	The advert does not hold my attention	strongly agree	agree	somewhat agree	somewhat disagree	disagree	strongly disagree
31	if I could change my lifestyle, I would make it less like the people that use this brand/alcohol	strongly agree	agree	somewhat agree	somewhat disagree	disagree	strongly disagree
32	this advert did not remind me of any experiences or feelings ive had in my own life	strongly agree	agree	somewhat agree	somewhat disagree	disagree	strongly disagree

Appendix F: Introductory letter

Dear Participant,

My name is Luvhimba Taz Phaswana and I am a student at the Wits Business School. An integral part of my studies on the Masters in Management of Strategic Marketing program is to submit a research dissertation that will contribute to the body of knowledge. I am researching the factors affecting advertising effectiveness in NGO-corporate partnerships within South Africa. I am inviting you to participate in the research study by completing the survey.

The following survey will require approximately 15 minutes to complete. You will note that the research questionnaire contains 4 sub-questionnaires that need to be completed. Please answer all the questions in the questionnaire. There is no compensation for participating in the survey or any known risks. In order to ensure that information provided is confidential, please do not insert your name. Copies of the project will be provided to the Wits Business School and could be viewed by my programme supervisor. I am making use of one type of methods for the survey; paper based. If you choose to participate in this project, please answer the questions as honestly as possible.

At this point, it is important for me to remind you that participation is voluntary and you may refuse to participate at any time. Thank you for taking the time to assist me in educational endeavours'. The data collected will provide useful insights in how corporate and non-profit organisations can effectively use advertising in dealing with social issue that are detrimental to our society.

If you would like a summary copy of this study once complete, please complete the request form below. Completion and return of the questionnaire will indicate your willingness to participate in the study.

If you have additional questions, please contact me on the number listed below.

If you are not satisfied with the way in which the study is being conducted, you may report (anonymously if you so choose) any complaints to the program manager Ms Tozi Zeka (+27) 11 717 3510 or email Tozi.Zeka@wits.ac.za

Sincerely,

Luvhimba Taz Phaswana

Student number 524 067

Email address: taz.phaswana@gmail.com/ cellphone number (+27) 72 174 4677

Request of information form

Please send me a copy of the results from the study.

Name_____

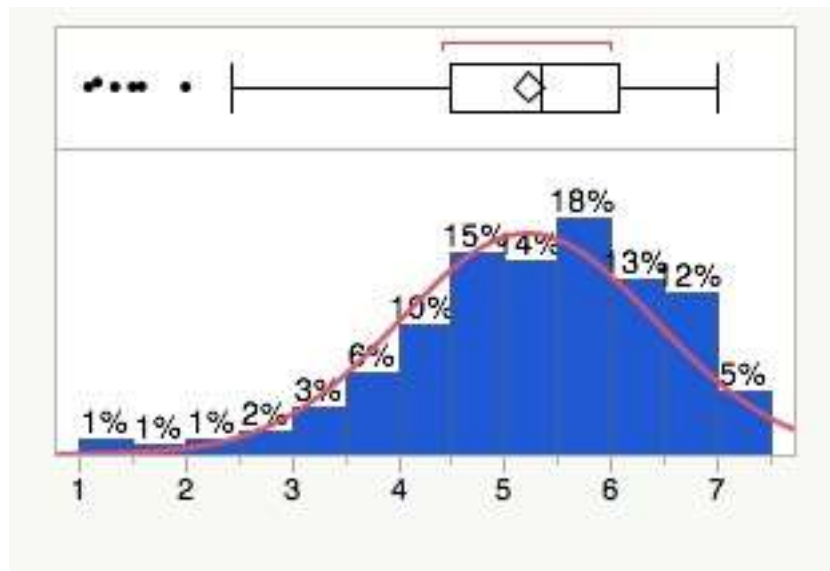
Email address_____

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Appendix G: Mean, Standard deviation and variance

Distributions

A Personal involvement



Normal(5.22611,1.20445)

Quantiles

100.0%	maximum	7
99.5%		7
97.5%		7
90.0%		6.75
75.0%	quartile	6.08333
50.0%	median	5.33333
25.0%	quartile	4.5
10.0%		3.66667
2.5%		2.41667
0.5%		1.12542
0.0%	minimum	1.08333

Summary Statistics

Mean	5.2261111
Std Dev	1.2044502
Std Err Mean	0.069539

Upper 95% Mean 5.3629589
 Lower 95% Mean 5.0892633
 N 300

Fitted Normal

Parameter Estimates

Type	Parameter	Estimate	Lower 95%	Upper 95%
Location	μ	5.2261111	5.0892633	5.3629589
Dispersion	σ	1.2044502	1.1151665	1.3093949

$-2\log(\text{Likelihood}) = 961.977015353801$

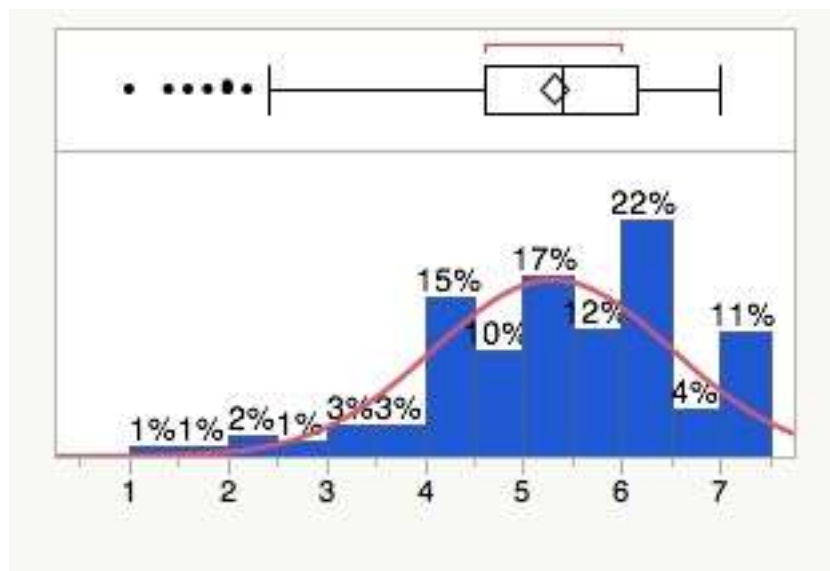
Goodness-of-Fit Test

Shapiro-Wilk W Test

W	Prob<W
0.955448	<.0001*

Note: H_0 = The data is from the Normal distribution. Small p-values reject H_0 .

B Trustworthiness



Normal(5.30733,1.21157)

Quantiles

100.0%	maximum	7
99.5%		7
97.5%		7
90.0%		7
75.0%	quartile	6.15
50.0%	median	5.4
25.0%	quartile	4.6
10.0%		4
2.5%		2.105
0.5%		1.202
0.0%	minimum	1

Summary Statistics

Mean	5.3073333
Std Dev	1.2115717
Std Err Mean	0.0699501
Upper 95% Mean	5.4449903
Lower 95% Mean	5.1696764
N	300

Fitted Normal

Parameter Estimates

Type	Parameter	Estimate	Lower 95%	Upper 95%
Location	μ	5.3073333	5.1696764	5.4449903
Dispersion	σ	1.2115717	1.1217601	1.3171369

-2log(Likelihood) = 965.514169873277

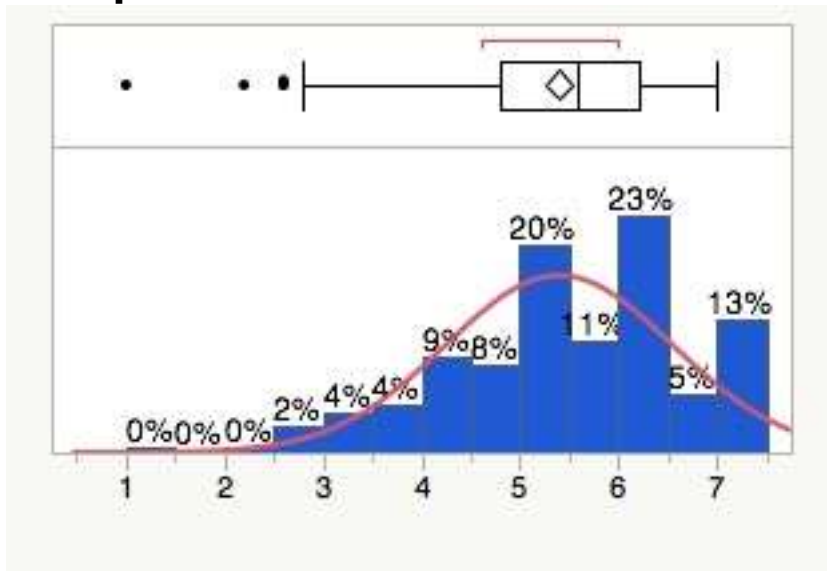
Goodness-of-Fit Test

Shapiro-Wilk W Test

W	Prob<W
0.946909	<.0001*

Note: Ho = The data is from the Normal distribution. Small p-values reject Ho.

C Expertise



Normal(5.40267,1.15466)

Quantiles

100.0%	maximum	7
99.5%		7
97.5%		7
90.0%		7
75.0%	quartile	6.2
50.0%	median	5.6
25.0%	quartile	4.8
10.0%		3.8
2.5%		2.8
0.5%		1.606
0.0%	minimum	1

Summary Statistics

Mean	5.4026667
Std Dev	1.1546588
Std Err Mean	0.0666643
Upper 95% Mean	5.5338572
Lower 95% Mean	5.2714761
N	300

Fitted Normal Parameter Estimates

Type	Parameter	Estimate	Lower 95%	Upper 95%
Location	μ	5.402667	5.2714761	5.5338572
Dispersion	σ	1.1546588	1.0690661	1.2552652

$-2\log(\text{Likelihood}) = 936.646068634687$

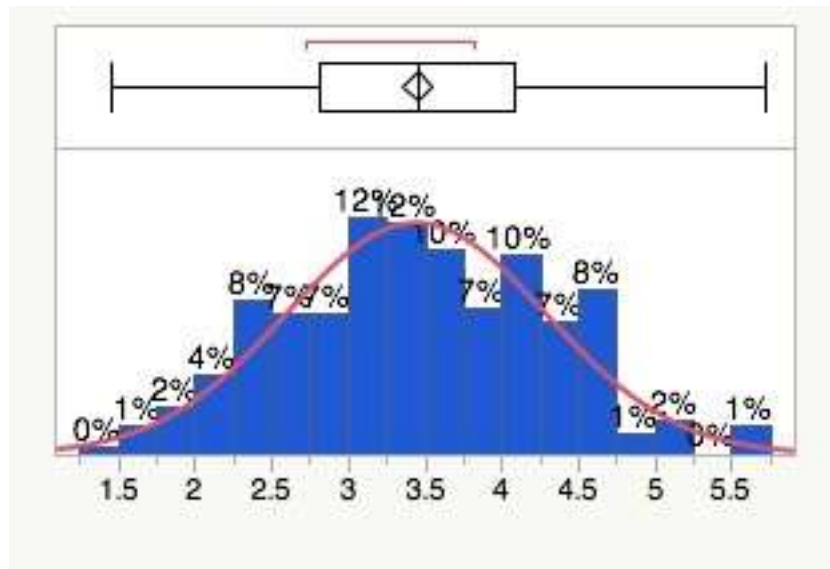
Goodness-of-Fit Test

Shapiro-Wilk W Test

W	Prob<W
0.951550	<.0001*

Note: H_0 = The data is from the Normal distribution. Small p-values reject H_0 .

D Informational trans



Normal(3.44788,0.84819)

Quantiles

100.0% maximum 5.72727

99.5%		5.68136
97.5%		5.09091
90.0%		4.54545
75.0%	quartile	4.09091
50.0%	median	3.45455
25.0%	quartile	2.81818
10.0%		2.36364
2.5%		1.90909
0.5%		1.50045
0.0%	minimum	1.45455

Summary Statistics

Mean	3.4478788
Std Dev	0.8481943
Std Err Mean	0.0489705
Upper 95% Mean	3.5442493
Lower 95% Mean	3.3515082
N	300

Fitted Normal

Parameter Estimates

Type	Parameter	Estimate	Lower 95%	Upper 95%
Location	μ	3.4478788	3.3515082	3.5442493
Dispersion	σ	0.8481943	0.7853192	0.9220982

-2log(Likelihood) = 751.57578911683

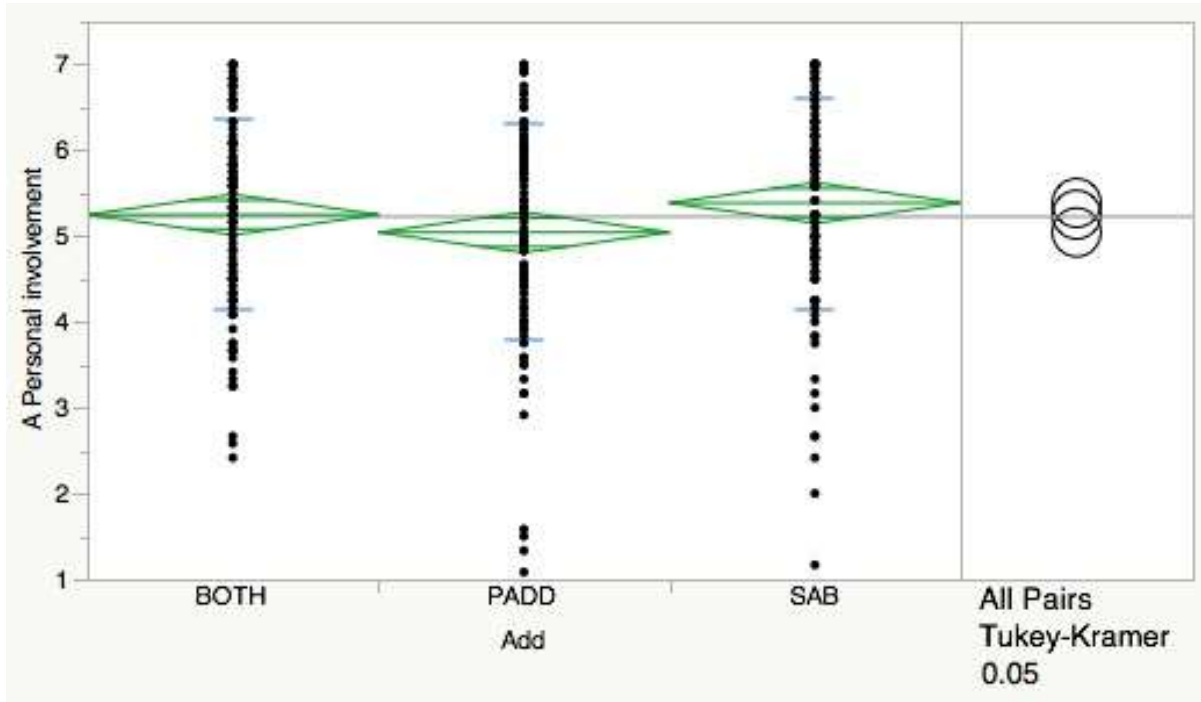
Goodness-of-Fit Test

Shapiro-Wilk W Test

W	Prob<W
0.992558	0.1397

Note: Ho = The data is from the Normal distribution. Small p-values reject Ho.

Oneway Analysis of A Personal involvement By Add



Oneway Anova Summary of Fit

Rsquare 0.013706
 Adj Rsquare 0.007064
 Root Mean Square Error 1.200188
 Mean of Response 5.226111
 Observations (or Sum Wgts) 300

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Add	2	5.94505	2.97252	2.0636	0.1288
Error	297	427.81431	1.44045		
C. Total	299	433.75935			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
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Level	Number	Mean	Std Error	Lower 95%	Upper 95%
BOTH	100	5.24917	0.12002	5.0130	5.4854
PADD	100	5.04333	0.12002	4.8071	5.2795
SAB	100	5.38583	0.12002	5.1496	5.6220

Std Error uses a pooled estimate of error variance

Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
BOTH	100	14931.0	15050.0	149.310	-0.167
PADD	100	13796.5	15050.0	137.965	-1.770
SAB	100	16422.5	15050.0	164.225	1.938

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
4.6136	2	0.0996

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
BOTH	100	1.107411	0.9026333	0.8941667
PADD	100	1.255766	0.9824667	0.9816667
SAB	100	1.232091	0.9772500	0.9641667

Test	F Ratio	DFNum	DFDen	Prob > F
O'Brien[.5]	0.6431	2	297	0.5264
Brown-Forsythe	0.3866	2	297	0.6797
Levene	0.3839	2	297	0.6815
Bartlett	0.8823	2	.	0.4138

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
1.9132	2	197.36	0.1503

Means Comparisons

Comparisons for all pairs using Tukey-Kramer HSD

Confidence Quantile

q*	Alpha
2.35560	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

	SAB	BOTH	PADD
SAB	-0.39982	-0.26315	-0.05732
BOTH	-0.26315	-0.39982	-0.19399
PADD	-0.05732	-0.19399	-0.39982

Positive values show pairs of means that are significantly different.

Connecting Letters Report

Level	Mean
SAB A	5.3858333
BOTH A	5.2491667
PADD A	5.0433333

Levels not connected by same letter are significantly different.

Level	- Level	Difference	Std Err Dif	Lower CL	Upper CL	p-Value
SAB	PADD	0.3425000	0.1697323	-0.057321	0.7423209	0.1097
BOTH	PADD	0.2058333	0.1697323	-0.193988	0.6056542	0.4466
SAB	BOTH	0.1366667	0.1697323	-0.263154	0.5364876	0.7001



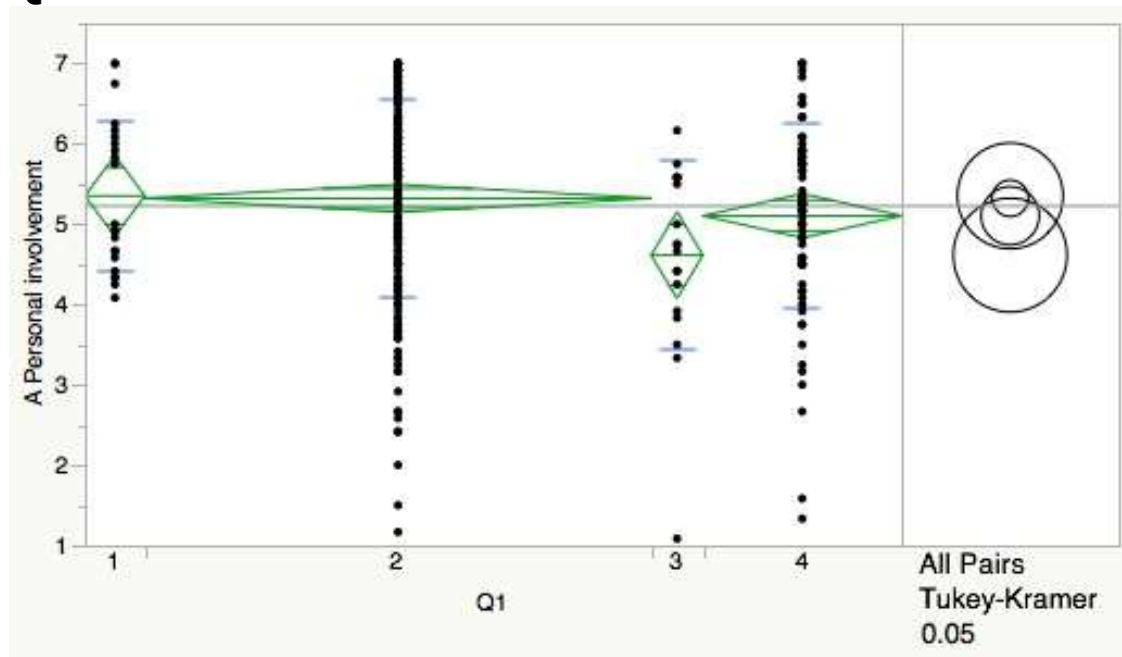
Ordered Differences Report

Nonparametric Comparisons For Each Pair Using Wilcoxon Method

q* Alpha
1.95996 0.05

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower CL	Upper CL
SAB	PADD	17.5100	8.182080	2.14004	0.0324*	0.333333	0.000000	0.666667
SAB	BOTH	9.9200	8.181549	1.21248	0.2253	0.166667	-0.083333	0.500000
PADD	BOTH	-7.5400	8.182276	-0.92150	0.3568	-0.166667	-0.500000	0.166667

Oneway Analysis of A Personal involvement By Q1



Oneway Anova Summary of Fit

Rsquare 0.023649

Adj Rsquare	0.013753
Root Mean Square Error	1.196139
Mean of Response	5.226111
Observations (or Sum Wgts)	300

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Q1	3	10.25788	3.41929	2.3899	0.0689
Error	296	423.50147	1.43075		
C. Total	299	433.75935			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
1	22	5.35227	0.25502	4.8504	5.8542
2	186	5.32168	0.08771	5.1491	5.4943
3	19	4.61404	0.27441	4.0740	5.1541
4	73	5.10388	0.14000	4.8284	5.3794

Std Error uses a pooled estimate of error variance

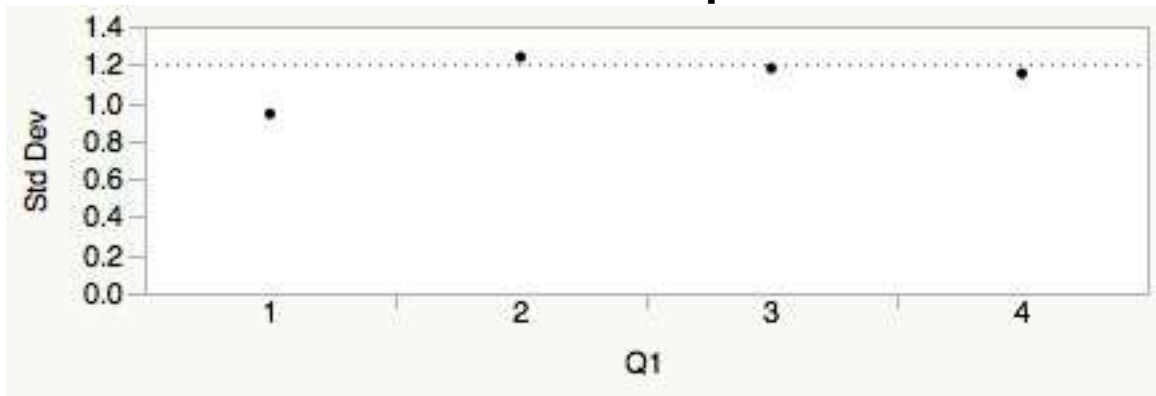
Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
1	22	3382.00	3311.00	153.727	0.180
2	186	29552.5	27993.0	158.884	2.138
3	19	1967.50	2859.50	103.553	-2.437
4	73	10248.0	10986.5	140.384	-1.145

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
8.3320	3	0.0396*

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
1	22	0.941030	0.838843	0.8068182
2	186	1.239314	1.009818	0.9937276
3	19	1.180543	0.859187	0.8464912
4	73	1.152759	0.859354	0.8424658

Test	F Ratio	DFNum	DFDen	Prob > F
O'Brien[.5]	0.5847	3	296	0.6255
Brown-Forsythe	0.9840	3	296	0.4006
Levene	1.1109	3	296	0.3449
Bartlett	0.9037	3	.	0.4384

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
2.4154	3	52.822	0.0767

Means Comparisons

Comparisons for all pairs using Tukey-Kramer
HSD

Confidence Quantile

q*	Alpha
2.58371	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

	1	2	4	3
1	-0.9318	-0.6662	-0.5033	-0.2297
2	-0.6662	-0.3205	-0.2090	-0.0367
4	-0.5033	-0.2090	-0.5115	-0.3061
3	-0.2297	-0.0367	-0.3061	-1.0027

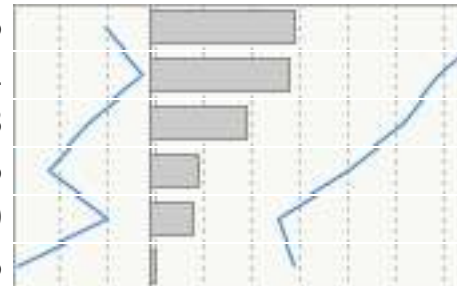
Positive values show pairs of means that are significantly different.

Connecting Letters Report

Level		Mean
1	A	5.3522727
2	A	5.3216846
4	A	5.1038813
3	A	4.6140351

Levels not connected by same letter are significantly different.

Level	- Level	Difference	Std Err Dif	Lower CL	Upper CL	p-Value
3	3	0.7382376	0.3746152	-0.229660	1.706135	0.2015
3	3	0.7076495	0.2880881	-0.036687	1.451986	0.0691
3	3	0.4898462	0.3080614	-0.306096	1.285788	0.3858
4	4	0.2483914	0.2909180	-0.503257	1.000040	0.8285
4	4	0.2178033	0.1652013	-0.209029	0.644636	0.5519
2	2	0.0305881	0.2696780	-0.666182	0.727358	0.9995



Ordered Differences Report

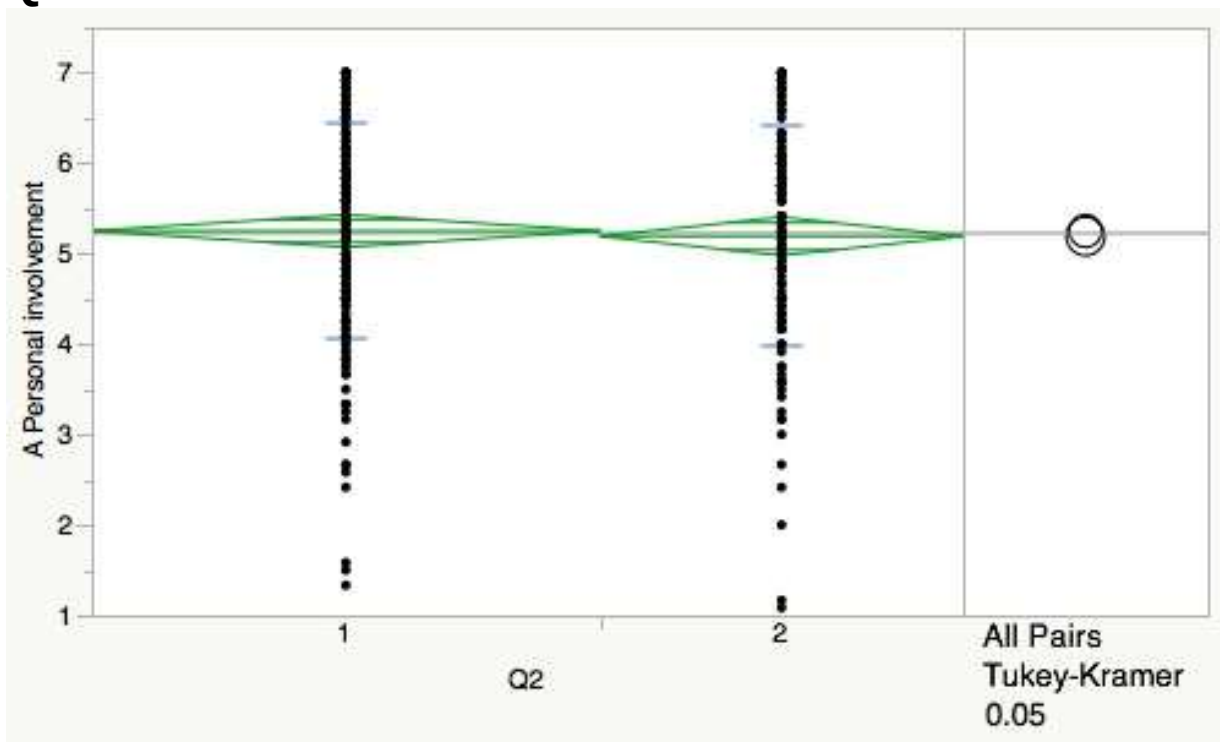
Nonparametric Comparisons For Each Pair Using Wilcoxon Method

q* Alpha
1.95996 0.05

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower CL	Upper CL
4	3	12.1053	6.87220	1.76148	0.0782	0.416667	-0.08333	1.00000
2	1	3.0499	13.56463	0.22484	0.8221	0.083333	-0.41667	0.58333

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower CL	Upper CL
4	1	-3.3717	6.70010	-0.50324	0.6148	-0.166667	-0.66667	0.41667
3	1	-7.2093	3.74746	-1.92379	0.0544	-0.541667	-1.33333	0.00000
4	2	-16.4712	10.34192	-1.59267	0.1112	-0.250000	-0.58333	0.08333
3	2	-36.8060	14.28251	-2.57700	0.0100*	-0.750000	-1.25000	-0.16667

Oneway Analysis of A Personal involvement By Q2



Oneway Anova Summary of Fit

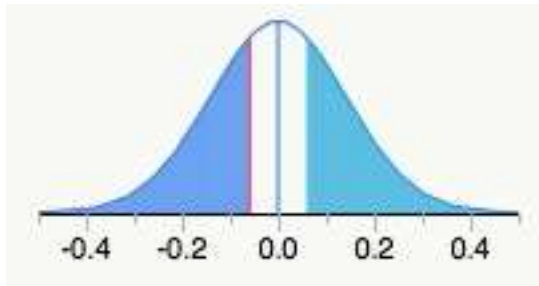
Rsquare	0.000598
Adj Rsquare	-0.00276
Root Mean Square Error	1.206109
Mean of Response	5.226111
Observations (or Sum Wgts)	300

t Test

2-1

Assuming equal variances

Difference	-0.05962	t Ratio	-0.4221
Std Err Dif	0.14125	DF	298
Upper CL Dif	0.21834	Prob > t	0.6733
Lower CL Dif	-0.33758	Prob > t	0.6634
Confidence	0.95	Prob < t	0.3366



Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Q2	1	0.25918	0.25918	0.1782	0.6733
Error	298	433.50017	1.45470		
C. Total	299	433.75935			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
1	175	5.25095	0.09117	5.0715	5.4304
2	125	5.19133	0.10788	4.9790	5.4036

Std Error uses a pooled estimate of error variance

Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
1	175	26591.0	26337.5	151.949	0.342
2	125	18559.0	18812.5	148.472	-0.342

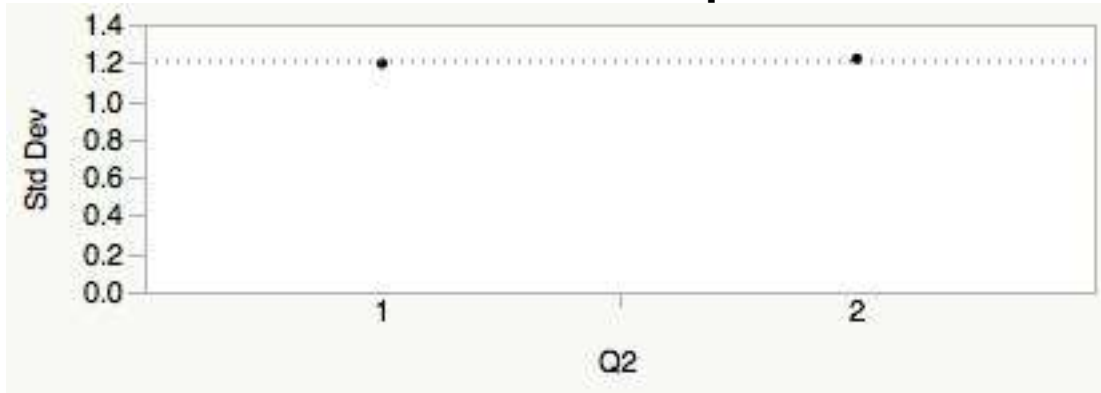
2-Sample Test, Normal Approximation

S	Z	Prob> Z
18559	-0.34167	0.7326

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
0.1172	1	0.7321

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
1	175	1.195991	0.9609034	0.9566667
2	125	1.220165	0.9621013	0.9540000

Test	F Ratio	DFNum	DFDen	p-Value
O'Brien[.5]	0.0447	1	298	0.8328
Brown-Forsythe	0.0009	1	298	0.9755
Levene	0.0002	1	298	0.9887
Bartlett	0.0579	1	.	0.8098
F Test 2-sided	1.0408	124	174	0.8026

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
0.1770	1	263.99	0.6743

t Test
0.4207

Means Comparisons

Comparisons for all pairs using Tukey-Kramer HSD

Confidence Quantile

q*	Alpha
1.96796	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

	1	2
1	-0.25375	-0.21835
2	-0.21835	-0.30024

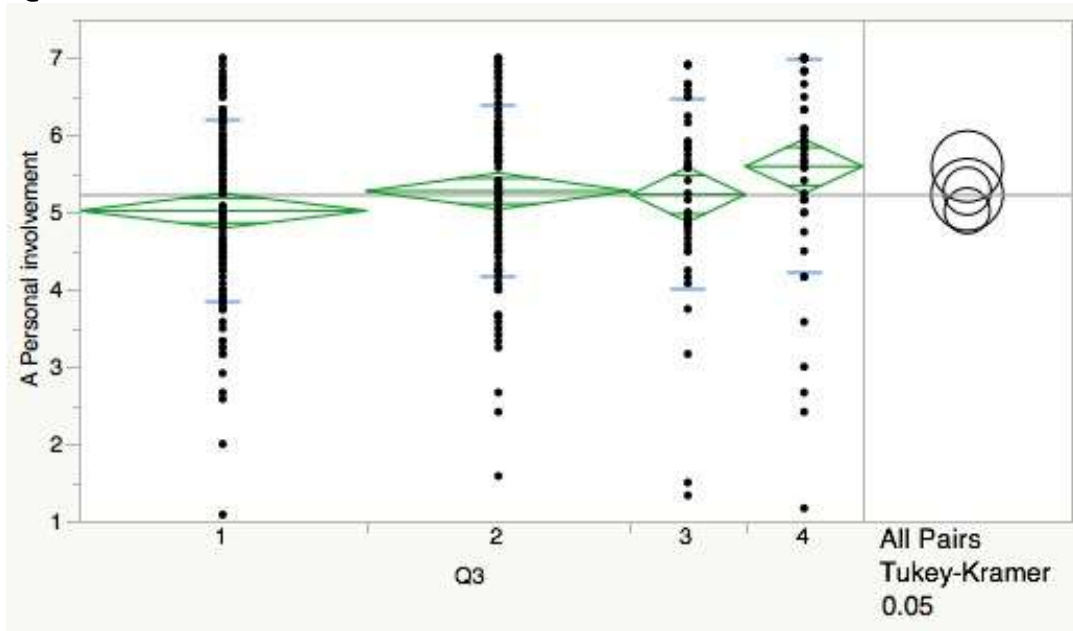
Positive values show pairs of means that are significantly different.

Nonparametric Comparisons For Each Pair Using Wilcoxon Method

q*	Alpha
1.95996	0.05

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower
2	1	-3.46971	10.15504	-0.341674	0.7326	-0.083333	-0.3333

Oneway Analysis of A Personal involvement By Q3



Oneway Anova Summary of Fit

Rsquare	0.025404
Adj Rsquare	0.015527
Root Mean Square Error	1.195063
Mean of Response	5.226111
Observations (or Sum Wgts)	300

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Q3	3	11.01939	3.67313	2.5719	0.0543
Error	296	422.73997	1.42818		
C. Total	299	433.75935			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
1	110	5.02348	0.11394	4.7992	5.2477
2	101	5.27805	0.11891	5.0440	5.5121

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
3	44	5.23295	0.18016	4.8784	5.5875
4	45	5.59815	0.17815	5.2475	5.9487

Std Error uses a pooled estimate of error variance

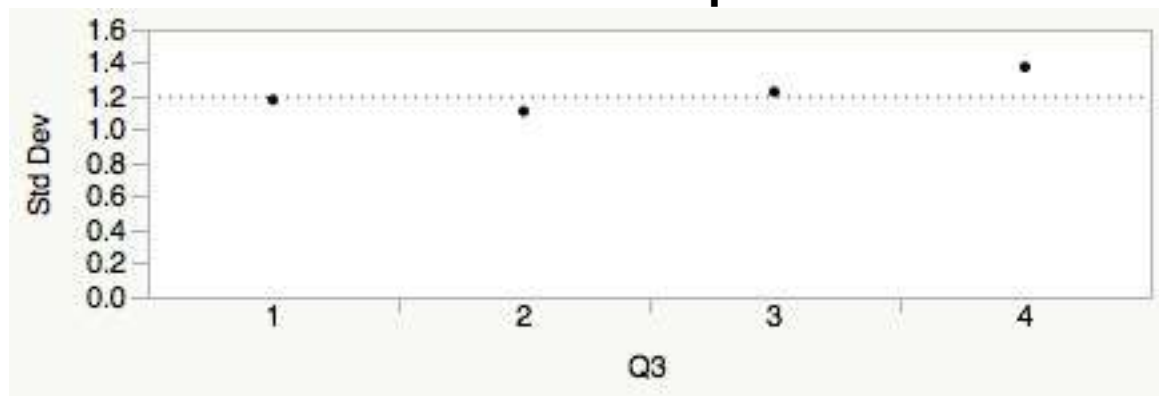
Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
1	110	14710.5	16555.0	133.732	-2.548
2	101	15455.5	15200.5	153.025	0.359
3	44	6670.50	6622.00	151.602	0.090
4	45	8313.50	6772.50	184.744	2.872

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
11.2237	3	0.0106*

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
1	110	1.179275	0.960275	0.9598485
2	101	1.110698	0.891890	0.8869637
3	44	1.226271	0.904959	0.8958333
4	45	1.374517	1.022963	0.9944444

Test	F Ratio	DFNum	DFDen	Prob > F
O'Brien[.5]	0.7562	3	296	0.5195
Brown-Forsythe	0.3069	3	296	0.8204
Levene	0.4014	3	296	0.7521

Test	F Ratio	DFNum	DFDen	Prob > F
Bartlett	0.9974	3	.	0.3928

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
2.2188	3	116.98	0.0896

Means Comparisons

Comparisons for all pairs using Tukey-Kramer HSD

Confidence Quantile

q*	Alpha
2.58371	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

	4	2	3	1
4	-0.65094	-0.23331	-0.28944	0.02828
2	-0.23331	-0.43450	-0.51264	-0.17095
3	-0.28944	-0.51264	-0.65830	-0.34130
1	0.02828	-0.17095	-0.34130	-0.41635

Positive values show pairs of means that are significantly different.

Connecting Letters Report

Level	Mean
4 A	5.5981481
2 A B	5.2780528
3 A B	5.2329545
1 B	5.0234848

Levels not connected by same letter are significantly different.

Level	- Level	Difference	Std Err Dif	Lower CL	Upper CL	p-Value
1		0.5746633	0.2114726	0.028279	1.121047	0.0349*

3	0.3651936	0.2533688	-0.289438	1.019826	0.4746
2	0.3200953	0.2141905	-0.233311	0.873502	0.4421
1	0.2545680	0.1646929	-0.170951	0.680087	0.4116
1	0.2094697	0.2131712	-0.341303	0.760242	0.7595
3	0.0450983	0.2158678	-0.512642	0.602838	0.9968



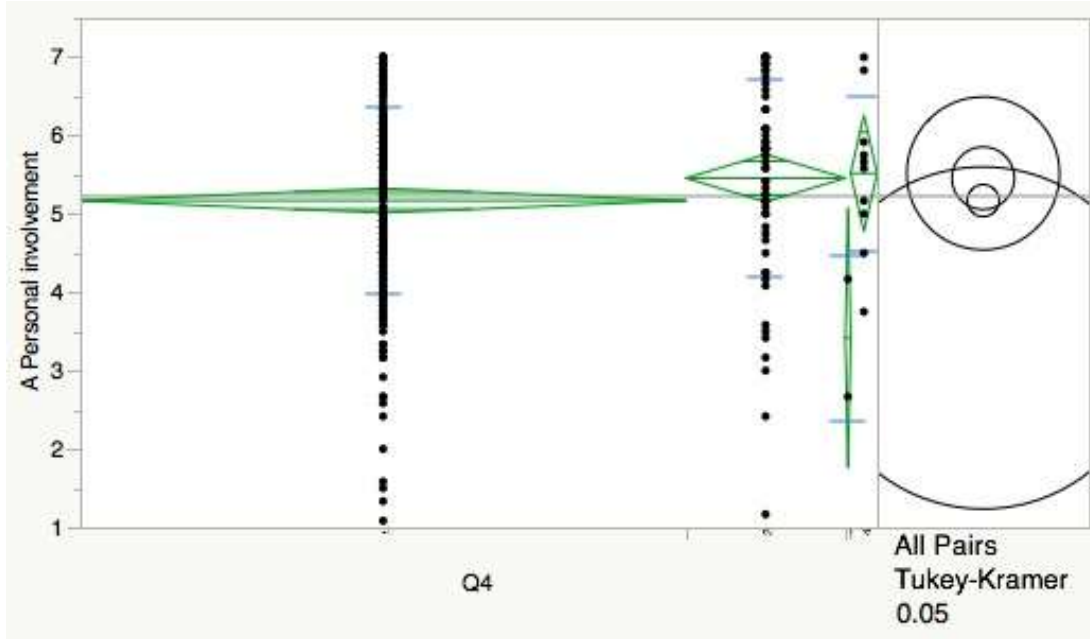
Ordered Differences Report

Nonparametric Comparisons For Each Pair Using Wilcoxon Method

q* Alpha
1.95996 0.05

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower CL	Upper CL
4	1	25.1444	7.939610	3.16696	0.0015*	0.6666667	0.250000	1.083333
4	2	15.7243	7.574266	2.07602	0.0379*	0.4166667	0.000000	0.833333
2	1	13.5792	8.411008	1.61446	0.1064	0.2500000	-0.083333	0.583333
4	3	11.1025	5.471320	2.02922	0.0424*	0.4166667	0.000000	0.916667
3	1	10.3409	7.952155	1.30039	0.1935	0.2500000	-0.166667	0.666667
3	2	-0.9462	7.583574	-0.12477	0.9007	0.0000000	-0.416667	0.416667

Oneway Analysis of A Personal involvement By Q4



Oneway Anova Summary of Fit

Rsquare 0.026048
 Adj Rsquare 0.016177
 Root Mean Square Error 1.194669
 Mean of Response 5.226111
 Observations (or Sum Wgts) 300

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Q4	3	11.29841	3.76614	2.6388	0.0498*
Error	296	422.46094	1.42723		
C. Total	299	433.75935			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
1	228	5.16886	0.07912	5.0132	5.3246

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
2	60	5.45556	0.15423	5.1520	5.7591
3	2	3.41667	0.84476	1.7542	5.0792
4	10	5.51667	0.37779	4.7732	6.2602

Std Error uses a pooled estimate of error variance

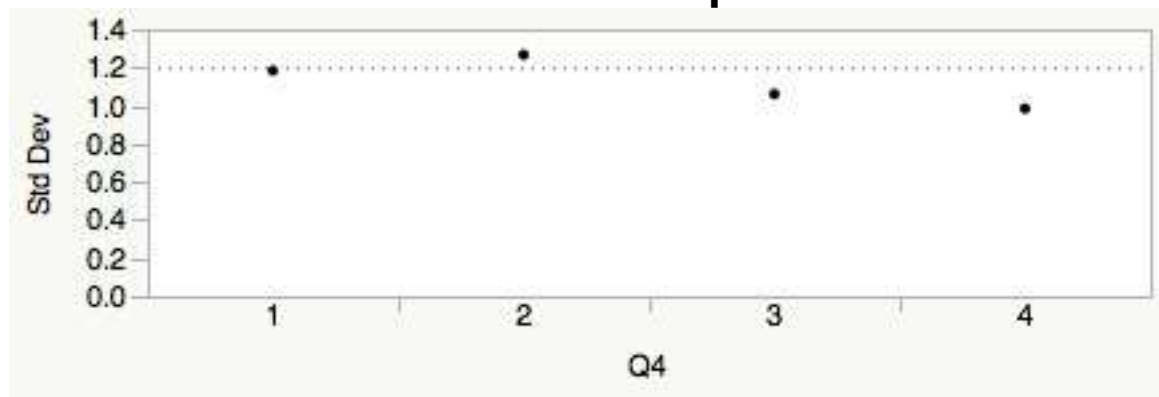
Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
1	228	33223.5	34314.0	145.717	-1.699
2	60	10197.5	9030.00	169.958	1.942
3	2	63.000	301.000	31.500	-1.943
4	10	1666.00	1505.00	166.600	0.595

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
7.8260	3	0.0497*

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
1	228	1.183483	0.9530432	0.9466374
2	60	1.266740	0.9711111	0.9555556
3	2	1.060660	0.7500000	0.7500000
4	10	0.984290	0.7300000	0.7166667

Test	F Ratio	DFNum	DFDen	Prob > F
O'Brien[.5]	0.3671	2	295	0.6931
Brown-Forsythe	0.3572	3	296	0.7840

Test	F Ratio	DFNum	DFDen	Prob > F
Levene	0.3831	3	296	0.7653
Bartlett	0.3208	3	.	0.8103

Warning: Small sample sizes. Use Caution.

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
2.3706	3	4.5636	0.1966

Means Comparisons

Comparisons for all pairs using Tukey-Kramer HSD

Confidence Quantile

q*	Alpha
2.58371	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

	4	2	1	3
4	-1.3804	-0.9932	-0.6495	-0.2909
2	-0.9932	-0.5635	-0.1612	-0.1798
1	-0.6495	-0.1612	-0.2891	-0.4400
3	-0.2909	-0.1798	-0.4400	-3.0867

Positive values show pairs of means that are significantly different.

Connecting Letters Report

Level		Mean
4	A	5.5166667
2	A	5.4555556
1	A	5.1688596
3	A	3.4166667

Levels not connected by same letter are significantly different.

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges- Lehmann	Lower CL	Upper CL
2	1	23.2737	12.07960	1.92669	0.0540	0.33333	0.00000	0.666667
4	1	17.0671	22.23613	0.76754	0.4428	0.25000	-0.41667	1.000000
4	3	5.1000	2.79285	1.82609	0.0678	2.08333	.	.
4	2	-1.3417	6.94331	-0.19323	0.8468	-0.08333	-0.83333	0.750000
3	2	-25.3167	12.95467	-1.95425	0.0507	-2.25000	-4.16667	0.083333
3	1	-90.2851	47.24009	-1.91120	0.0560	-1.83333	-3.58333	0.083333

Ordered Differences Report

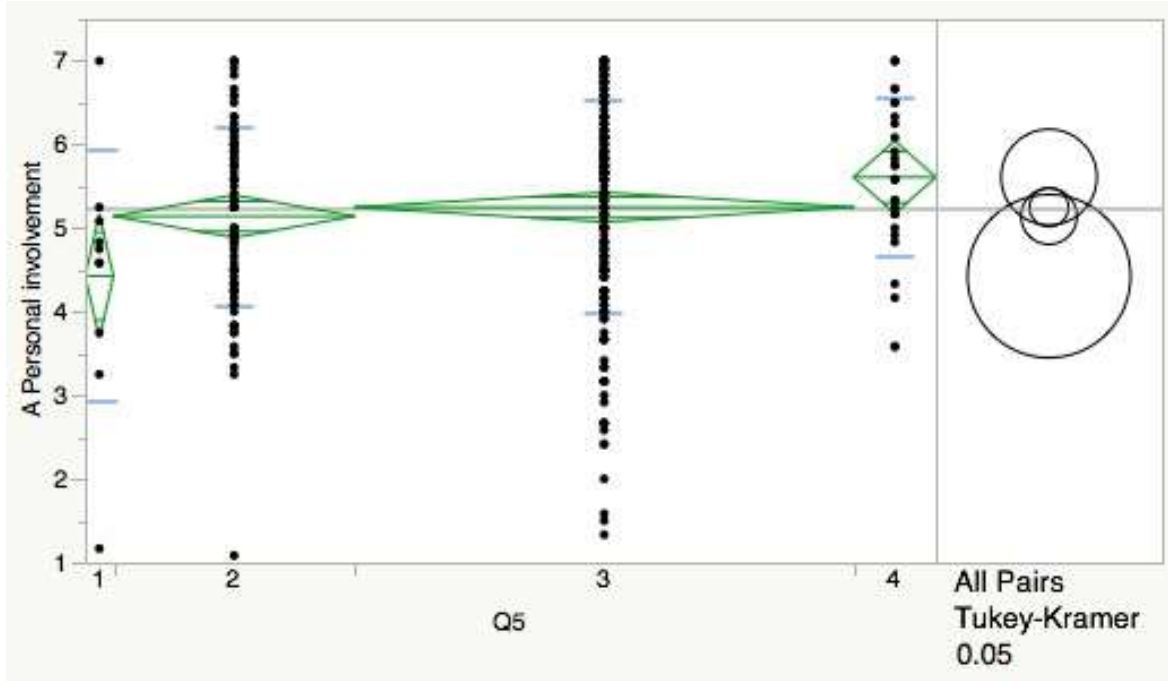
Level	- Level	Difference	Std Err Dif	Lower CL	Upper CL	p-Value
3		2.100000	0.9253863	-0.290931	4.490931	0.1076
3		2.038889	0.8587221	-0.179801	4.257579	0.0843
3		1.752193	0.8484552	-0.439970	3.944356	0.1670
1		0.347807	0.3859833	-0.649462	1.345076	0.8043
1		0.286696	0.1733407	-0.161167	0.734558	0.3501
2		0.061111	0.4080570	-0.993190	1.115413	0.9988



Nonparametric Comparisons For Each Pair Using Wilcoxon Method

q* Alpha
1.95996 0.05

Oneway Analysis of A Personal involvement By Q5



Oneway Anova Summary of Fit

Rsquare	0.026243
Adj Rsquare	0.016374
Root Mean Square Error	1.194548
Mean of Response	5.226111
Observations (or Sum Wgts)	300

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Q5	3	11.38332	3.79444	2.6591	0.0484*
Error	296	422.37603	1.42695		
C. Total	299	433.75935			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
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Level	Number	Mean	Std Error	Lower 95%	Upper 95%
1	10	4.42500	0.37775	3.6816	5.1684
2	85	5.14118	0.12957	4.8862	5.3962
3	176	5.24953	0.09004	5.0723	5.4267
4	29	5.60920	0.22182	5.1726	6.0457

Std Error uses a pooled estimate of error variance

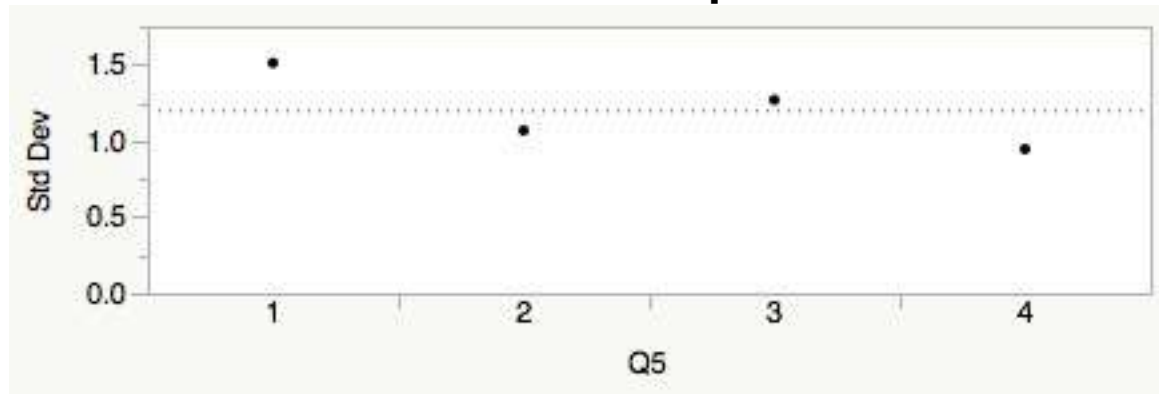
Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
1	10	986.500	1505.00	98.650	-1.921
2	85	11932.5	12792.5	140.382	-1.270
3	176	27126.0	26488.0	154.125	0.862
4	29	5105.00	4364.50	176.034	1.667

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
7.5545	3	0.0562

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
1	10	1.509972	1.021667	0.958333
2	85	1.067499	0.863645	0.859804
3	176	1.267434	1.019483	1.004261
4	29	0.945201	0.739398	0.738506

Test	F Ratio	DFNum	DFDen	Prob > F
O'Brien[.5]	1.7712	3	296	0.1527

Test	F Ratio	DFNum	DFDen	Prob > F
Brown-Forsythe	1.3918	3	296	0.2454
Levene	1.8581	3	296	0.1367
Bartlett	2.3105	3	.	0.0741

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
2.5892	3	35.864	0.0680

Means Comparisons

Comparisons for all pairs using Tukey-Kramer HSD

Confidence Quantile

q*	Alpha
2.58371	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

	4	3	2	1
4	-0.8105	-0.2589	-0.1957	0.0524
3	-0.2589	-0.3290	-0.2993	-0.1788
2	-0.1957	-0.2993	-0.4734	-0.3156
1	0.0524	-0.1788	-0.3156	-1.3803

Positive values show pairs of means that are significantly different.

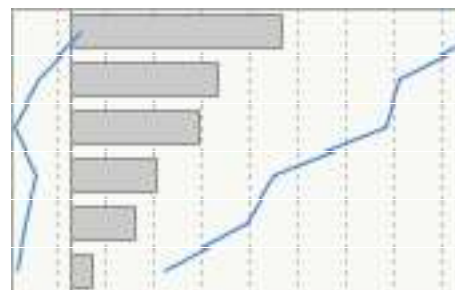
Connecting Letters Report

Level	Mean
4 A	5.6091954
3 A B	5.2495265
2 A B	5.1411765
1 B	4.4250000

Levels not connected by same letter are significantly different.

Level	- Level	Difference	Std Err Dif	Lower CL	Upper CL	p-Value
-------	---------	------------	-------------	----------	----------	---------

1	1.184195	0.4380635	0.052366	2.316025	0.0363*
1	0.824527	0.3883327	-0.178813	1.827866	0.1481
1	0.716176	0.3993522	-0.315634	1.747987	0.2786
2	0.468019	0.2568903	-0.195712	1.131749	0.2651
3	0.359669	0.2394007	-0.258873	0.978211	0.4374
2	0.108350	0.1577823	-0.299314	0.516014	0.9021



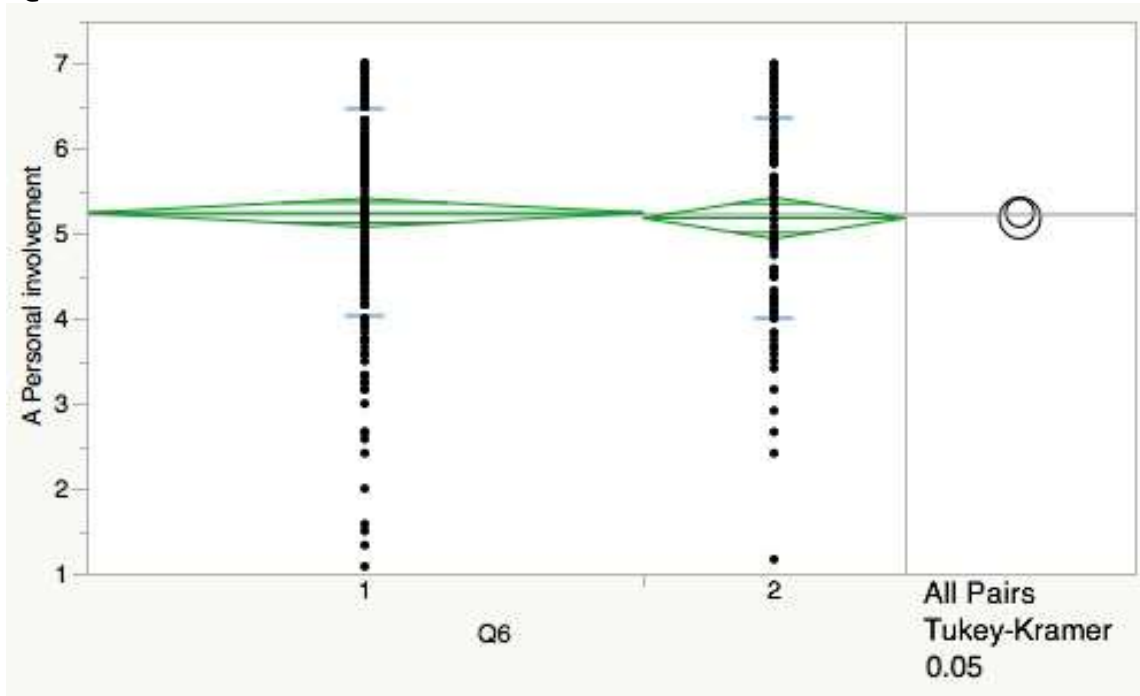
Ordered Differences Report

Nonparametric Comparisons For Each Pair Using Wilcoxon Method

q* Alpha
1.95996 0.05

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower CL	Upper CL
3	1	32.12727	17.49532	1.836335	0.0663	0.875000	-0.083333	1.666667
2	1	14.64118	9.21110	1.589515	0.1119	0.666667	-0.166667	1.416667
4	2	14.38296	7.10381	2.024682	0.0429*	0.500000	0.000000	0.916667
4	3	13.89694	11.88402	1.169381	0.2423	0.250000	-0.166667	0.750000
3	2	11.85491	9.96726	1.189386	0.2343	0.166667	-0.083333	0.500000
4	1	11.02759	4.17637	2.640472	0.0083*	1.083333	0.333333	1.916667

Oneway Analysis of A Personal involvement By Q6



Oneway Anova Summary of Fit

Rsquare	0.000576
Adj Rsquare	-0.00278
Root Mean Square Error	1.206122
Mean of Response	5.226111
Observations (or Sum Wgts)	300

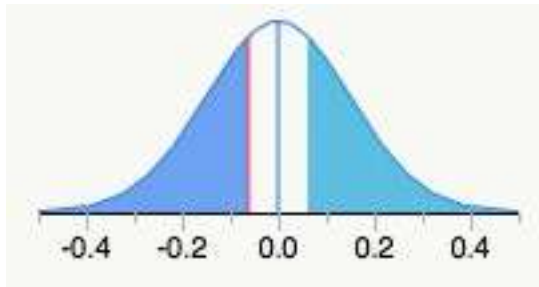
t Test

2-1

Assuming equal variances

Difference	-0.06189	t Ratio	-0.41457
Std Err Dif	0.14928	DF	298
Upper CL Dif	0.23189	Prob > t	0.6788

Lower CL Dif	-0.35566	Prob > t	0.6606
Confidence	0.95	Prob < t	0.3394



Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Q6	1	0.25002	0.25002	0.1719	0.6788
Error	298	433.50933	1.45473		
C. Total	299	433.75935			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
1	204	5.24592	0.08445	5.0797	5.4121
2	96	5.18403	0.12310	4.9418	5.4263

Std Error uses a pooled estimate of error variance

Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
1	204	31132.0	30702.0	152.608	0.613
2	96	14018.0	14448.0	146.021	-0.613

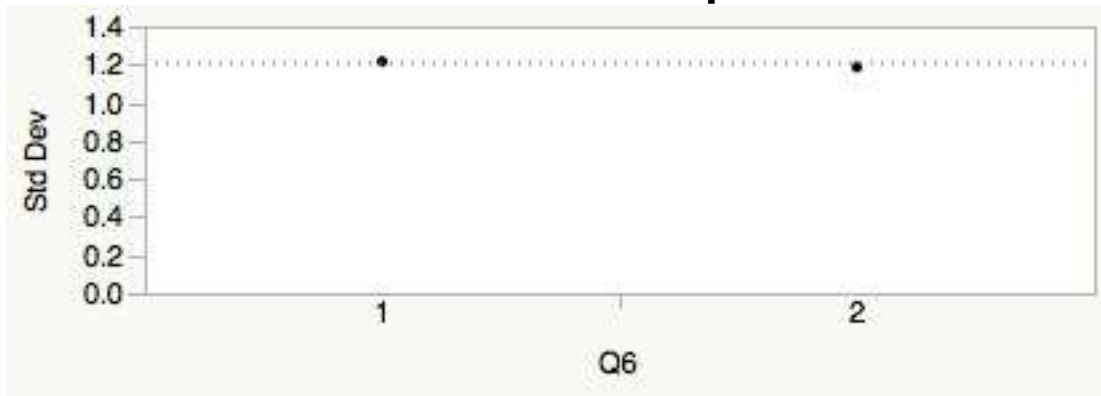
2-Sample Test, Normal Approximation

S	Z	Prob> Z
14018	-0.61302	0.5399

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
0.3767	1	0.5394

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
1	204	1.215598	0.9499872	0.9444444
2	96	1.185618	0.9805411	0.9791667

Test	F Ratio	DFNum	DFDen	p-Value
O'Brien[.5]	0.0603	1	298	0.8062
Brown-Forsythe	0.1446	1	298	0.7040
Levene	0.1156	1	298	0.7341
Bartlett	0.0799	1	.	0.7774
F Test 2-sided	1.0512	203	95	0.7937

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
0.1750	1	190.43	0.6762

t Test
0.4183

Means Comparisons

Comparisons for all pairs using Tukey-Kramer HSD

Confidence Quantile

q*	Alpha
1.96796	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

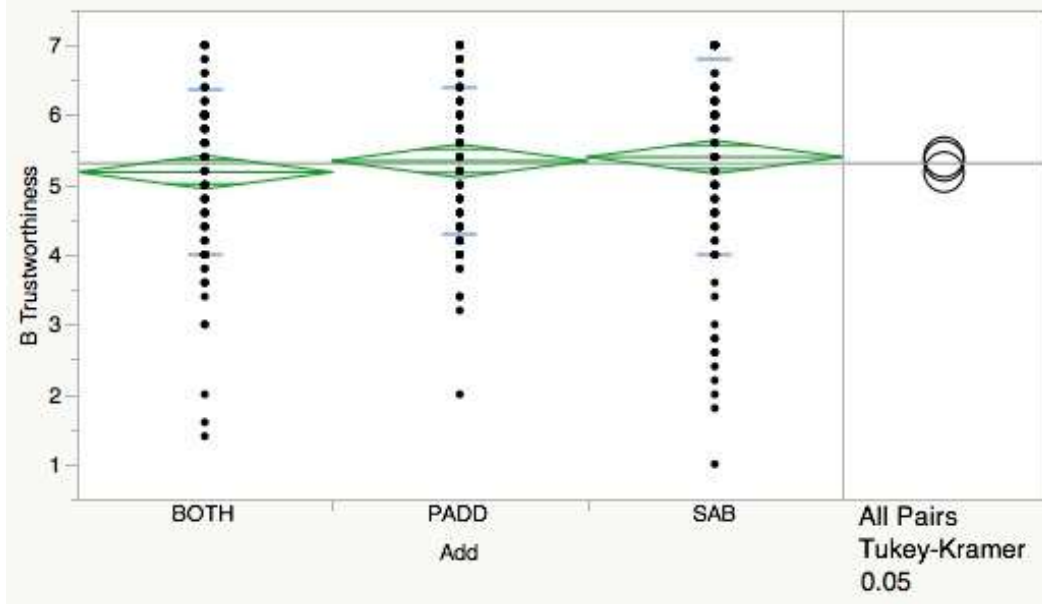
	1	2
1	-0.23502	-0.23189
2	-0.23189	-0.34260

Positive values show pairs of means that are significantly different.

Nonparametric Comparisons For Each Pair Using Wilcoxon Method

		q*	Alpha						
		1.95996	0.05						
Level	- Level	Score Mean	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower CL	Upper CL	
		Difference							
2	1	-6.57935	10.73260	-0.613025	0.5399	-0.083333	-0.333333	0.166667	

Oneway Analysis of B Trustworthiness By Add



Oneway Anova Summary of Fit

Rsquare 0.005726
 Adj Rsquare -0.00097
 Root Mean Square Error 1.212159
 Mean of Response 5.307333
 Observations (or Sum Wgts) 300

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Add	2	2.51307	1.25653	0.8552	0.4263
Error	297	436.39080	1.46933		
C. Total	299	438.90387			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
BOTH	100	5.18200	0.12122	4.9434	5.4206
PADD	100	5.34200	0.12122	5.1034	5.5806
SAB	100	5.39800	0.12122	5.1594	5.6366

Std Error uses a pooled estimate of error variance

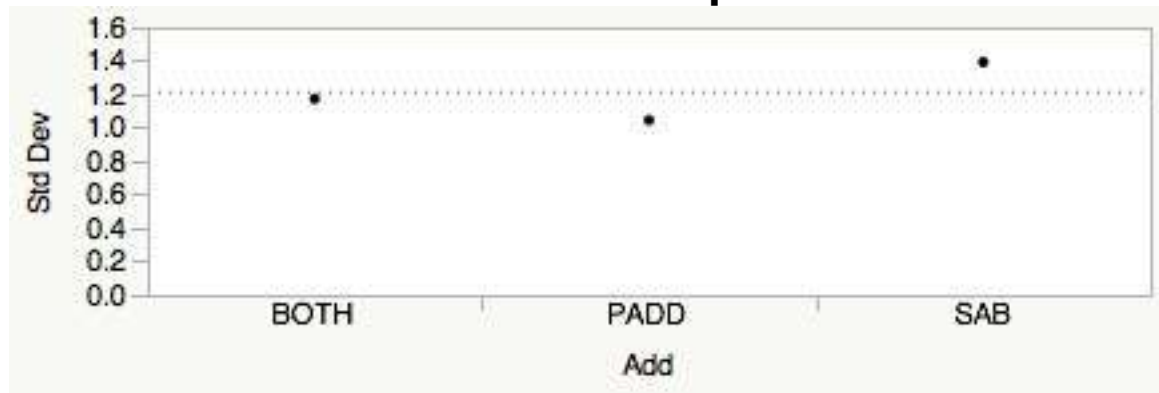
Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
BOTH	100	13973.5	15050.0	139.735	-1.523
PADD	100	14890.0	15050.0	148.900	-0.226
SAB	100	16286.5	15050.0	162.865	1.750

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
3.6250	2	0.1632

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
BOTH	100	1.172787	0.936520	0.922000
PADD	100	1.045353	0.878640	0.874000
SAB	100	1.392765	1.082400	1.078000

Test	F Ratio	DFNum	DFDen	Prob > F
O'Brien[.5]	3.2729	2	297	0.0393
Brown-Forsythe	1.9861	2	297	0.1390
Levene	2.1218	2	297	0.1216
Bartlett	4.1571	2	.	0.0157

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
0.8314	2	195.48	0.4370

Means Comparisons

Comparisons for all pairs using Tukey-Kramer HSD

Confidence Quantile

q*	Alpha
2.35560	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

	SAB	PADD	BOTH
SAB	-0.40381	-0.34781	-0.18781
PADD	-0.34781	-0.40381	-0.24381
BOTH	-0.18781	-0.24381	-0.40381

Positive values show pairs of means that are significantly different.

Connecting Letters Report

Level	Mean
SAB A	5.3980000
PADD A	5.3420000
BOTH A	5.1820000

Levels not connected by same letter are significantly different.

Ordered Differences Report

Level	- Level	Difference	Std Err Dif	Lower CL	Upper CL	p-Value
SAB	BOTH	0.2160000	0.1714252	-0.187809	0.6198087	0.4190
PADD	BOTH	0.1600000	0.1714252	-0.243809	0.5638087	0.6196
SAB	PADD	0.0560000	0.1714252	-0.347809	0.4598087	0.9429

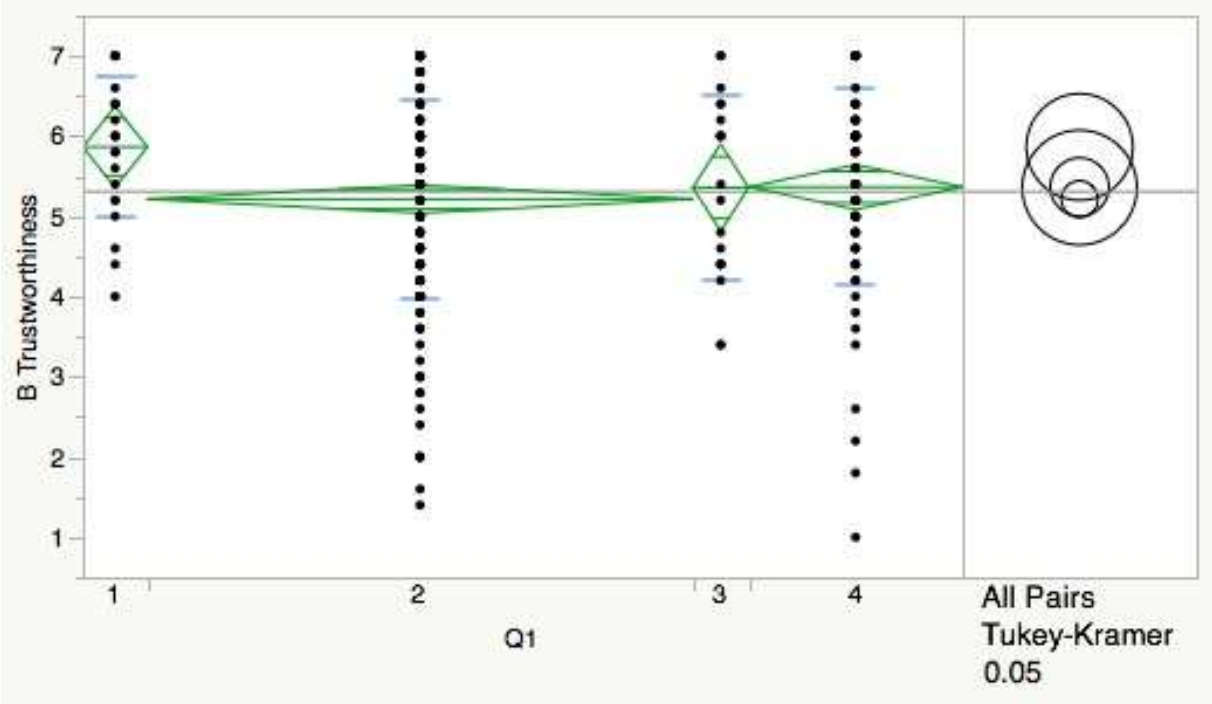


Nonparametric Comparisons For Each Pair Using Wilcoxon Method

q*

						q^*		
						1.95996		
Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower CL	Upper CL
SAB	BOTH	14.89000	8.160768	1.824583	0.0681	0.4000000	0.000000	0.6000000
SAB	PADD	9.82000	8.161920	1.203148	0.2289	0.2000000	-0.200000	0.6000000
PADD	BOTH	6.62000	8.162178	0.811058	0.4173	0.2000000	-0.200000	0.4000000

Oneway Analysis of B Trustworthiness By Q1



Oneway Anova Summary of Fit

Rsquare	0.019858
Adj Rsquare	0.009924
Root Mean Square Error	1.205545
Mean of Response	5.307333

Observations (or Sum Wgts) 300

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Q1	3	8.71559	2.90520	1.9990	0.1142
Error	296	430.18828	1.45334		
C. Total	299	438.90387			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
1	22	5.86364	0.25702	5.3578	6.3695
2	186	5.21398	0.08839	5.0400	5.3879
3	19	5.35789	0.27657	4.8136	5.9022
4	73	5.36438	0.14110	5.0867	5.6421

Std Error uses a pooled estimate of error variance

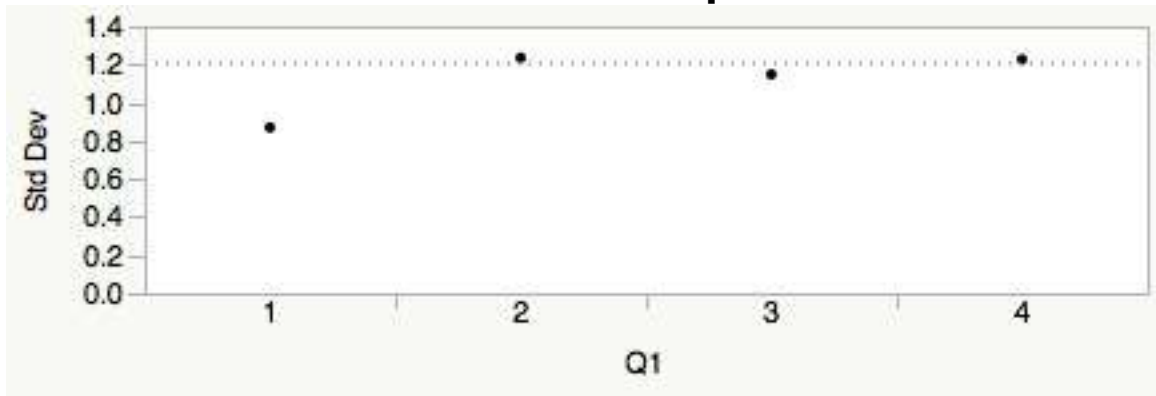
Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
1	22	4192.00	3311.00	190.545	2.254
2	186	26623.5	27993.0	143.137	-1.882
3	19	2905.00	2859.50	152.895	0.123
4	73	11429.5	10986.5	156.568	0.688

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
6.4342	3	0.0923

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
1	22	0.869343	0.694215	0.6818182
2	186	1.235169	1.004475	0.9924731
3	19	1.148098	0.991690	0.9894737
4	73	1.226713	0.912216	0.9068493

Test	F Ratio	DFNum	DFDen	Prob > F
O'Brien[.5]	0.7369	3	296	0.5307
Brown-Forsythe	1.2448	3	296	0.2936
Levene	1.3634	3	296	0.2541
Bartlett	1.3163	3	.	0.2670

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
3.2341	3	53.666	0.0293*

Means Comparisons

Comparisons for all pairs using Tukey-Kramer
HSD

Confidence Quantile

q*	Alpha
2.58371	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

	1	4	3	2
1	-0.9391	-0.2583	-0.4698	-0.0526
4	-0.2583	-0.5156	-0.7957	-0.2798
3	-0.4698	-0.7957	-1.0106	-0.6063
2	-0.0526	-0.2798	-0.6063	-0.3230

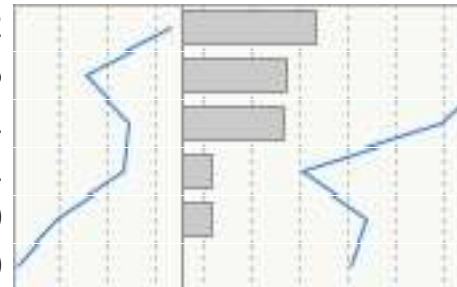
Positive values show pairs of means that are significantly different.

Connecting Letters Report

Level		Mean
1	A	5.8636364
4	A	5.3643836
3	A	5.3578947
2	A	5.2139785

Levels not connected by same letter are significantly different.

Level	- Level	Difference	Std Err Dif	Lower CL	Upper CL	p-Value
2		0.6496579	0.2717986	-0.052591	1.351907	0.0812
3		0.5057416	0.3775611	-0.469767	1.481250	0.5385
4		0.4992528	0.2932057	-0.258306	1.256812	0.3241
2		0.1504051	0.1665004	-0.279784	0.580594	0.8031
2		0.1439162	0.2903535	-0.606273	0.894106	0.9600
3		0.0064888	0.3104839	-0.795712	0.808690	1.0000



Ordered Differences Report

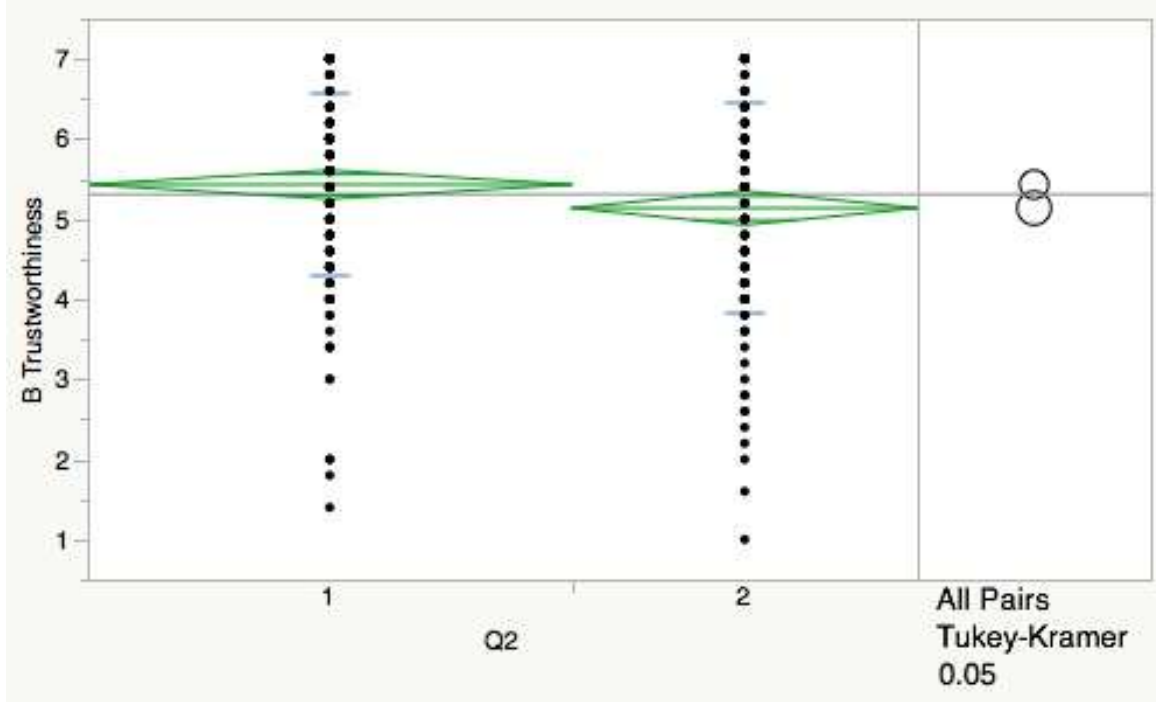
Nonparametric Comparisons For Each Pair Using Wilcoxon Method

q* Alpha
1.95996 0.05

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower CL	Upper CL
4	2	11.7502	10.31982	1.13860	0.2549	0.200000	-0.20000	0.4000000

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges- Lehmann	Lower CL	Upper CL
3	2	6.5549	14.25391	0.45987	0.6456	0.200000	-0.60000	0.6000000
4	3	1.1608	6.85178	0.16941	0.8655	0.000000	-0.60000	0.6000000
3	1	-4.8553	3.73370	-1.30039	0.1935	-0.400000	-1.20000	0.2000000
4	1	-11.2983	6.67778	-1.69192	0.0907	-0.400000	-1.00000	0.0000000
2	1	-32.4809	13.53539	-2.39971	0.0164*	-0.600000	-1.00000	0.0000000

Oneway Analysis of B Trustworthiness By Q2



Oneway Anova Summary of Fit

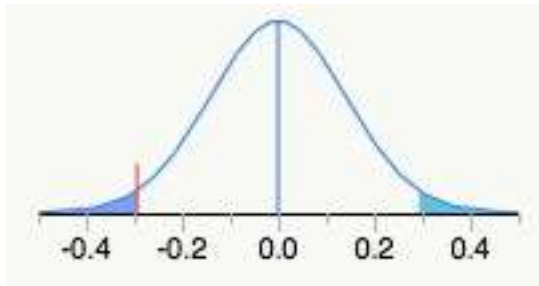
Rsquare	0.014332
Adj Rsquare	0.011024
Root Mean Square Error	1.204875
Mean of Response	5.307333
Observations (or Sum Wgts)	300

t Test

2-1

Assuming equal variances

Difference	-0.29371	t Ratio	-2.0816
Std Err Dif	0.14110	DF	298
Upper CL Dif	-0.01603	Prob > t	0.0382*
Lower CL Dif	-0.57139	Prob > t	0.9809
Confidence	0.95	Prob < t	0.0191*



Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Q2	1	6.29038	6.29038	4.3330	0.0382*
Error	298	432.61349	1.45172		
C. Total	299	438.90387			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
1	175	5.42971	0.09108	5.2505	5.6090
2	125	5.13600	0.10777	4.9239	5.3481

Std Error uses a pooled estimate of error variance

Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
1	175	27710.5	26337.5	158.346	1.858
2	125	17439.5	18812.5	139.516	-1.858

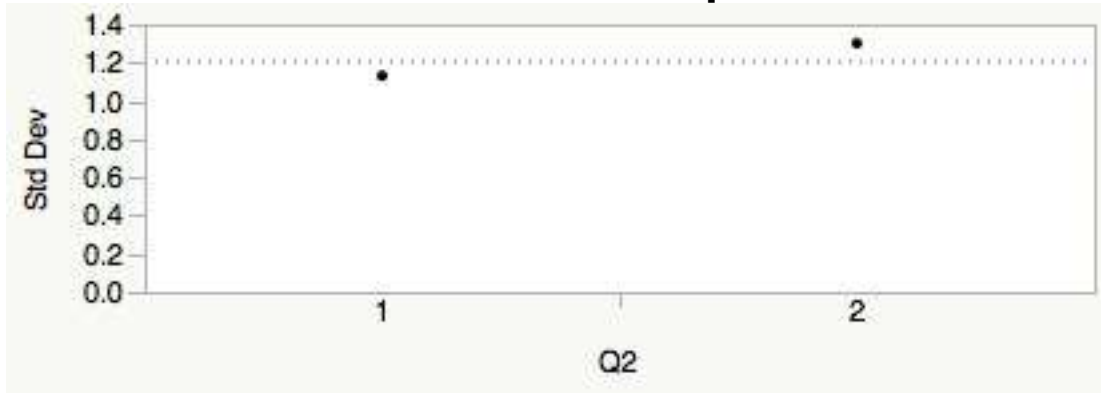
2-Sample Test, Normal Approximation

S	Z	Prob> Z
17439.5	-1.85780	0.0632

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
3.4539	1	0.0631

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
1	175	1.131182	0.896418	0.885714
2	125	1.301265	1.055232	1.044800

Test	F Ratio	DFNum	DFDen	p-Value
O'Brien[.5]	2.3136	1	298	0.1293
Brown-Forsythe	3.1850	1	298	0.0753
Levene	3.5867	1	298	0.0592
Bartlett	2.8669	1	.	0.0904
F Test 2-sided	1.3233	124	174	0.0886

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
4.1359	1	243.44	0.0431*

t Test
2.0337

Means Comparisons

Comparisons for all pairs using Tukey-Kramer HSD

Confidence Quantile

q*	Alpha
1.96796	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

	1	2
1	-0.25349	0.01603
2	0.01603	-0.29993

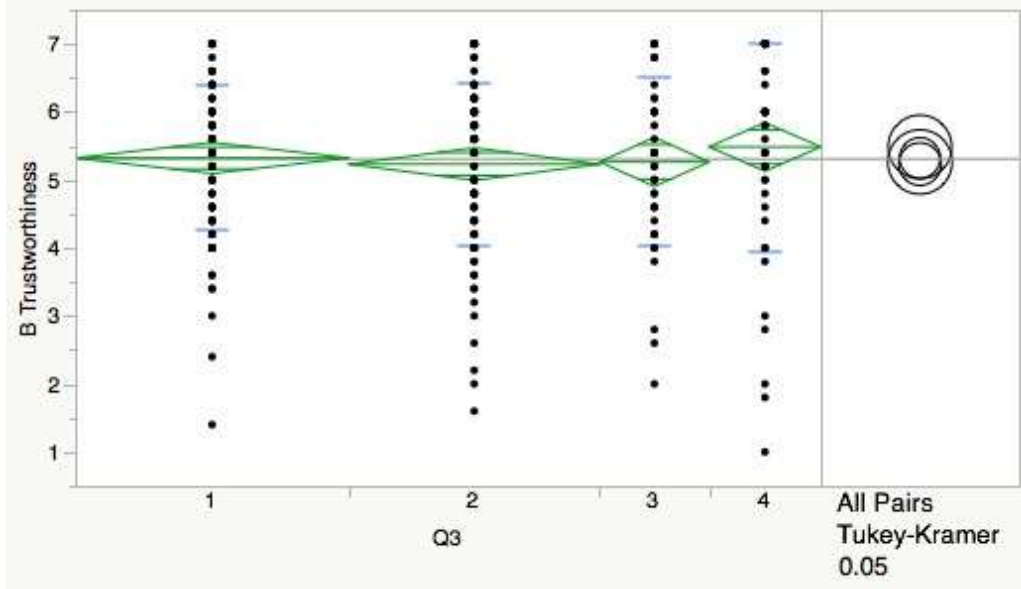
Positive values show pairs of means that are significantly different.

Nonparametric Comparisons For Each Pair Using Wilcoxon Method

q*	Alpha
1.95996	0.05

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower CL	Upper CL
2	1	-18.8229	10.13179	-1.85780	0.0632	-0.200000	-0.600000	0

Oneway Analysis of B Trustworthiness By Q3



Oneway Anova Summary of Fit

Rsquare 0.004777
 Adj Rsquare -0.00531
 Root Mean Square Error 1.214784
 Mean of Response 5.307333
 Observations (or Sum Wgts) 300

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Q3	3	2.09669	0.69890	0.4736	0.7009
Error	296	436.80718	1.47570		
C. Total	299	438.90387			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
1	110	5.32182	0.11583	5.0939	5.5498
2	101	5.23168	0.12088	4.9938	5.4696
3	44	5.26364	0.18314	4.9032	5.6240
4	45	5.48444	0.18109	5.1281	5.8408

Std Error uses a pooled estimate of error variance

Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
1	110	16352.5	16555.0	148.659	-0.280
2	101	14620.0	15200.5	144.752	-0.819
3	44	6427.50	6622.00	146.080	-0.366
4	45	7750.00	6772.50	172.222	1.826

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
3.4472	3	0.3277

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
1	110	1.069029	0.867107	0.860000
2	101	1.200577	0.979355	0.964356
3	44	1.231956	0.978926	0.972727
4	45	1.528808	1.164642	1.120000

Test	F Ratio	DFNum	DFDen	Prob > F
O'Brien[.5]	2.5530	3	296	0.0557
Brown-Forsythe	1.2267	3	296	0.3001
Levene	1.8428	3	296	0.1394
Bartlett	2.9055	3	.	0.0333

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
0.3513	3	114.8	0.7883

Means Comparisons

Comparisons for all pairs using Tukey-Kramer HSD

Confidence Quantile

q*	Alpha
2.58371	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

	4	1	3	2
4	-0.66169	-0.39277	-0.44463	-0.30978
1	-0.39277	-0.42322	-0.50168	-0.34241
3	-0.44463	-0.50168	-0.66916	-0.53499
2	-0.30978	-0.34241	-0.53499	-0.44167

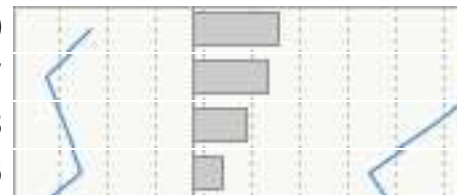
Positive values show pairs of means that are significantly different.

Connecting Letters Report

Level		Mean
4	A	5.4844444
1	A	5.3218182
3	A	5.2636364
2	A	5.2316832

Levels not connected by same letter are significantly different.

Level	- Level	Difference	Std Err Dif	Lower CL	Upper CL	p-Value
2		0.2527613	0.2177251	-0.309778	0.8153001	0.6520
3		0.2208081	0.2575499	-0.444627	0.8862428	0.8267
1		0.1626263	0.2149623	-0.392774	0.7180268	0.8738
2		0.0901350	0.1674107	-0.342406	0.5226760	0.9496



3	0.0581818	0.2166889	-0.501680	0.6180435	0.9932
2	0.0319532	0.2194300	-0.534991	0.5988970	0.9989



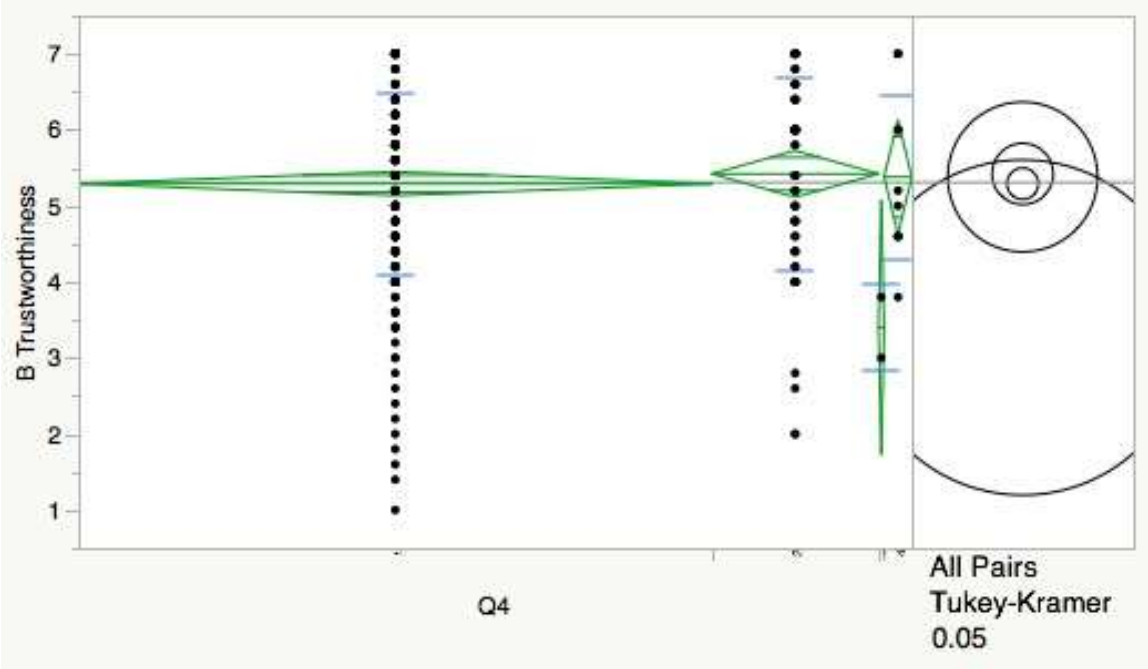
Ordered Differences Report

Nonparametric Comparisons For Each Pair Using Wilcoxon Method

q* Alpha
1.95996 0.05

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower CL	Upper CL
4	2	12.9135	7.555348	1.70919	0.0874	0.4000000	0.000000	0.800000
4	1	12.8227	7.914357	1.62019	0.1052	0.4000000	0.000000	0.800000
4	3	7.3942	5.445821	1.35777	0.1745	0.4000000	-0.200000	1.000000
3	2	0.5221	7.570850	0.06896	0.9450	0.0000000	-0.400000	0.400000
3	1	-1.4477	7.935315	-0.18244	0.8552	0.0000000	-0.400000	0.400000
2	1	-3.0577	8.394856	-0.36423	0.7157	0.0000000	-0.400000	0.200000

Oneway Analysis of B Trustworthiness By Q4



Oneway Anova Summary of Fit

Rsquare	0.018568
Adj Rsquare	0.008621
Root Mean Square Error	1.206338
Mean of Response	5.307333
Observations (or Sum Wgts)	300

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Q4	3	8.14941	2.71647	1.8667	0.1353
Error	296	430.75446	1.45525		
C. Total	299	438.90387			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
1	228	5.29123	0.07989	5.1340	5.4485
2	60	5.42000	0.15574	5.1135	5.7265
3	2	3.40000	0.85301	1.7213	5.0787
4	10	5.38000	0.38148	4.6292	6.1308

Std Error uses a pooled estimate of error variance

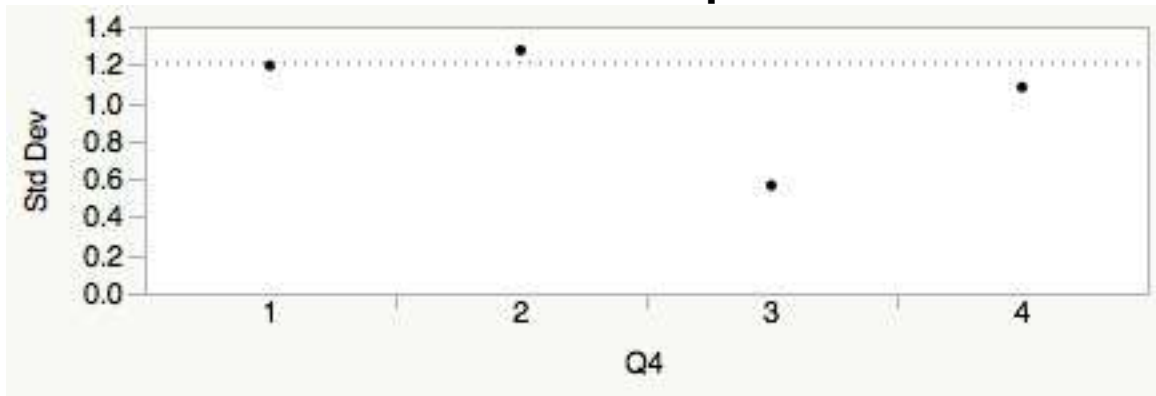
Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
1	228	33996.0	34314.0	149.105	-0.496
2	60	9622.00	9030.00	160.367	0.987
3	2	42.500	301.000	21.250	-2.116
4	10	1489.50	1505.00	148.950	-0.056

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
5.3065	3	0.1507

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
1	228	1.194743	0.947645	0.933333
2	60	1.274894	1.033333	1.033333
3	2	0.565685	0.400000	0.400000
4	10	1.080946	0.896000	0.860000

Test	F Ratio	DFNum	DFDen	Prob > F
O'Brien[.5]	0.2390	2	295	0.7875
Brown-Forsythe	0.6637	3	296	0.5750
Levene	0.6588	3	296	0.5780
Bartlett	0.4006	3	.	0.7526

Warning: Small sample sizes. Use Caution.

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
5.9422	3	4.7354	0.0457*

Means Comparisons

Comparisons for all pairs using Tukey-Kramer HSD

Confidence Quantile

q*	Alpha
2.58371	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

	2	4	1	3
2	-0.5691	-1.0246	-0.3235	-0.2204
4	-1.0246	-1.3939	-0.9182	-0.4343
1	-0.3235	-0.9182	-0.2919	-0.3223
3	-0.2204	-0.4343	-0.3223	-3.1168

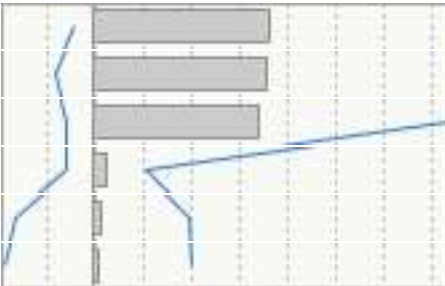
Positive values show pairs of means that are significantly different.

Connecting Letters Report

Level		Mean
2	A	5.4200000
4	A	5.3800000
1	A	5.2912281
3	A	3.4000000

Levels not connected by same letter are significantly different.

Level	- Level	Difference	Std Err Dif	Lower CL	Upper CL	p-Value
3		2.020000	0.8671101	-0.22036	4.260362	0.0937
3		1.980000	0.9344255	-0.43429	4.394286	0.1494
3		1.891228	0.8567429	-0.32235	4.104805	0.1236
1		0.128772	0.1750339	-0.32347	0.581009	0.8826
1		0.088772	0.3897536	-0.91824	1.095783	0.9958
4		0.040000	0.4120429	-1.02460	1.104600	0.9997



Ordered Differences Report

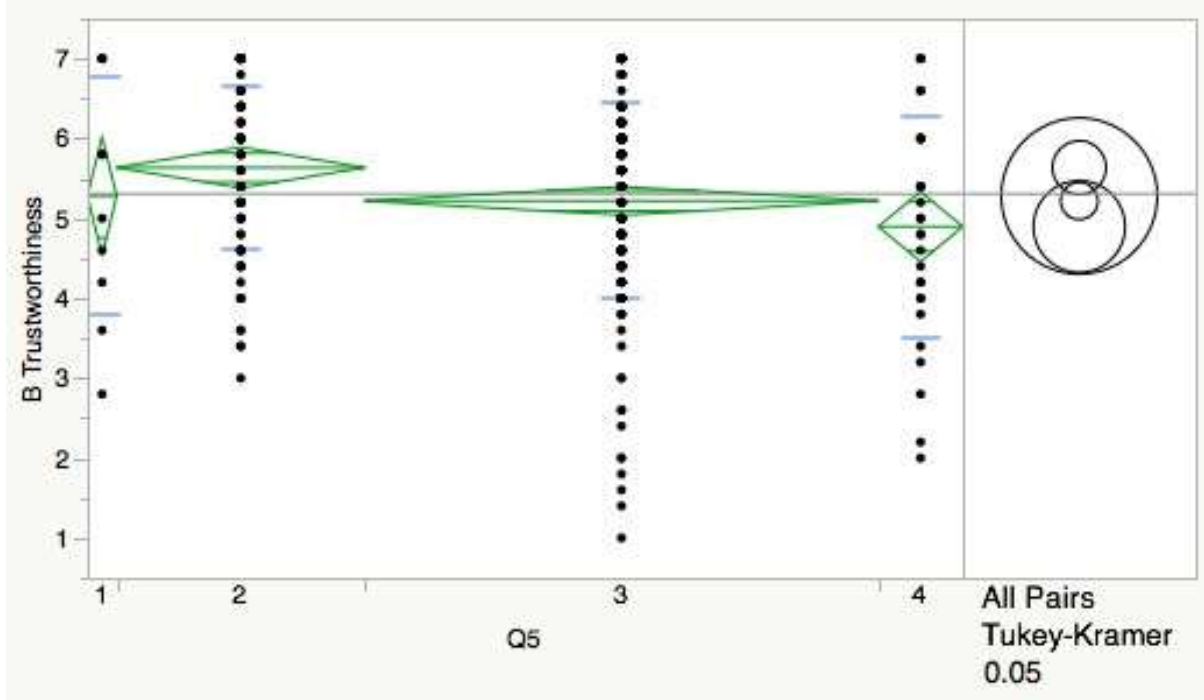
Nonparametric Comparisons For Each Pair Using Wilcoxon Method

q* Alpha
1.95996 0.05

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower CL	Upper CL
2	1	10.9368	12.05226	0.90745	0.3642	0.20000	-0.20000	0.400000

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower CL	Upper CL
4	3	5.4000	2.75846	1.95762	0.0503	1.80000	.	.
4	1	-0.4697	22.18967	-0.02117	0.9831	0.00000	-0.80000	0.800000
4	2	-2.2750	6.91415	-0.32904	0.7421	0.00000	-1.00000	0.600000
3	2	-26.6083	12.90997	-2.06107	0.0393*	-2.20000	-3.80000	-0.200000
3	1	-99.1118	47.14756	-2.10216	0.0355*	-2.00000	-3.20000	-0.200000

Oneway Analysis of B Trustworthiness By Q5



Oneway Anova Summary of Fit

Rsquare	0.035184
Adj Rsquare	0.025405
Root Mean Square Error	1.196083
Mean of Response	5.307333
Observations (or Sum Wgts)	300

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Q5	3	15.44228	5.14743	3.5981	0.0140*
Error	296	423.46159	1.43061		
C. Total	299	438.90387			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
1	10	5.28000	0.37823	4.5356	6.0244
2	85	5.63529	0.12973	5.3800	5.8906
3	176	5.21818	0.09016	5.0407	5.3956
4	29	4.89655	0.22211	4.4594	5.3337

Std Error uses a pooled estimate of error variance

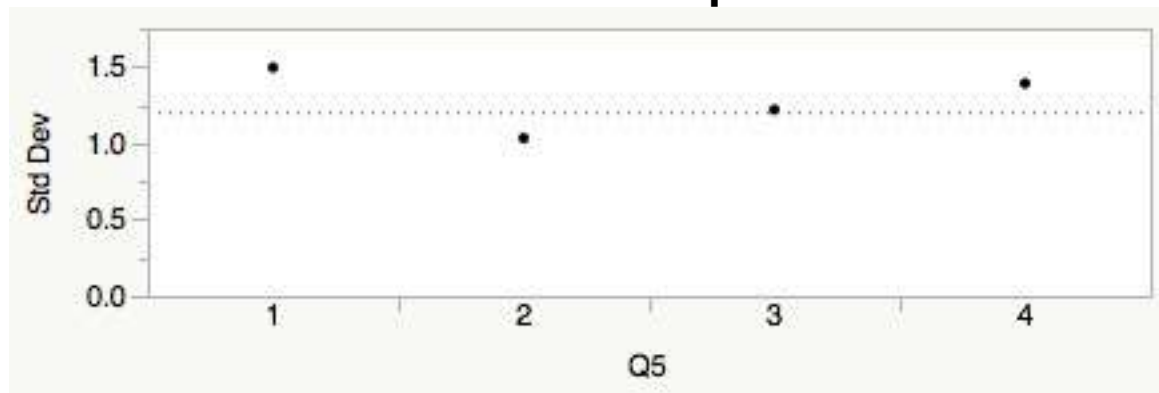
Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
1	10	1489.50	1505.00	148.950	-0.056
2	85	14701.5	12792.5	172.959	2.826
3	176	25376.0	26488.0	144.182	-1.506
4	29	3583.00	4364.50	123.552	-1.764

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
9.4833	3	0.0235*

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
1	10	1.494285	1.240000	1.240000
2	85	1.032416	0.856747	0.847059
3	176	1.218200	0.961983	0.945455
4	29	1.390396	1.113912	1.110345

Test	F Ratio	DFNum	DFDen	Prob > F
O'Brien[.5]	1.6572	3	296	0.1763
Brown-Forsythe	1.5035	3	296	0.2137
Levene	1.5947	3	296	0.1907
Bartlett	1.9228	3	.	0.1234

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
3.7427	3	34.838	0.0197*

Means Comparisons

Comparisons for all pairs using Tukey-Kramer HSD

Confidence Quantile

q*	Alpha
2.58371	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

	2	1	3	4
2	-0.4740	-0.6778	0.0089	0.0742
1	-0.6778	-1.3820	-0.9428	-0.7498
3	0.0089	-0.9428	-0.3294	-0.2977
4	0.0742	-0.7498	-0.2977	-0.8116

Positive values show pairs of means that are significantly different.

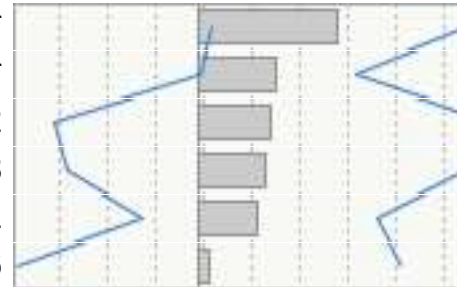
Connecting Letters Report

Level	Mean
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Level			Mean
2	A		5.6352941
1	A	B	5.2800000
3		B	5.2181818
4		B	4.8965517

Levels not connected by same letter are significantly different.

Level	- Level	Difference	Std Err Dif	Lower CL	Upper CL	p-Value
4		0.7387424	0.2572202	0.074160	1.403325	0.0226*
3		0.4171123	0.1579849	0.008925	0.825300	0.0431*
4		0.3834483	0.4386261	-0.749835	1.516732	0.8182
1		0.3552941	0.3998651	-0.677842	1.388430	0.8108
4		0.3216301	0.2397081	-0.297707	0.940967	0.5371
3		0.0618182	0.3888314	-0.942810	1.066446	0.9986



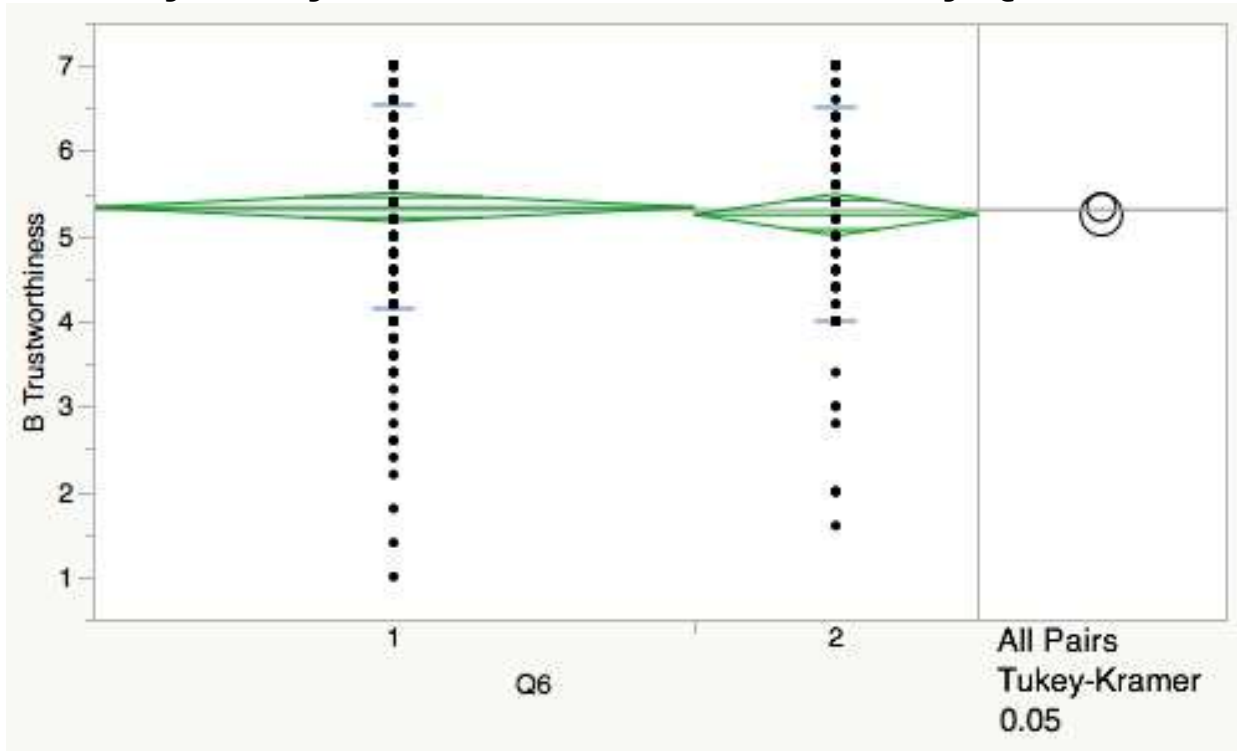
Ordered Differences Report

Nonparametric Comparisons For Each Pair Using Wilcoxon Method

q* Alpha
1.95996 0.05

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower CL	Upper CL
2	1	6.3147	9.17375	0.68835	0.4912	0.200000	-0.60000	1.20000
3	1	-2.1665	17.45815	-0.12410	0.9012	0.000000	-1.00000	1.00000
4	1	-2.6897	4.16789	-0.64533	0.5187	-0.400000	-1.60000	0.80000
4	3	-14.9412	11.85924	-1.25988	0.2077	-0.400000	-0.80000	0.20000
4	2	-17.9440	7.08181	-2.53382	0.0113*	-0.800000	-1.20000	-0.20000
3	2	-25.5243	9.94363	-2.56690	0.0103*	-0.400000	-0.60000	0.00000

Oneway Analysis of B Trustworthiness By Q6



Oneway Anova Summary of Fit

Rsquare	0.001136
Adj Rsquare	-0.00222
Root Mean Square Error	1.212914
Mean of Response	5.307333
Observations (or Sum Wgts)	300

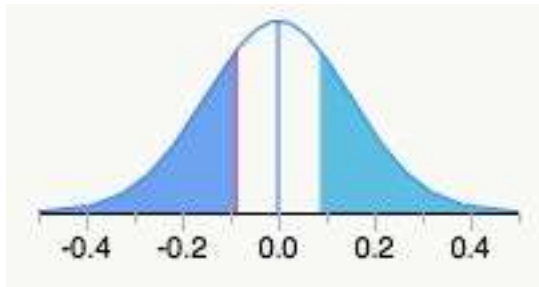
t Test

2-1

Assuming equal variances

Difference	-0.08738	t Ratio	-0.58205
Std Err Dif	0.15012	DF	298
Upper CL Dif	0.20805	Prob > t	0.5610

Lower CL Dif	-0.38281	Prob > t	0.7195
Confidence	0.95	Prob < t	0.2805



Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Q6	1	0.49840	0.49840	0.3388	0.5610
Error	298	438.40547	1.47116		
C. Total	299	438.90387			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
1	204	5.33529	0.08492	5.1682	5.5024
2	96	5.24792	0.12379	5.0043	5.4915

Std Error uses a pooled estimate of error variance

Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
1	204	31047.0	30702.0	152.191	0.493
2	96	14103.0	14448.0	146.906	-0.493

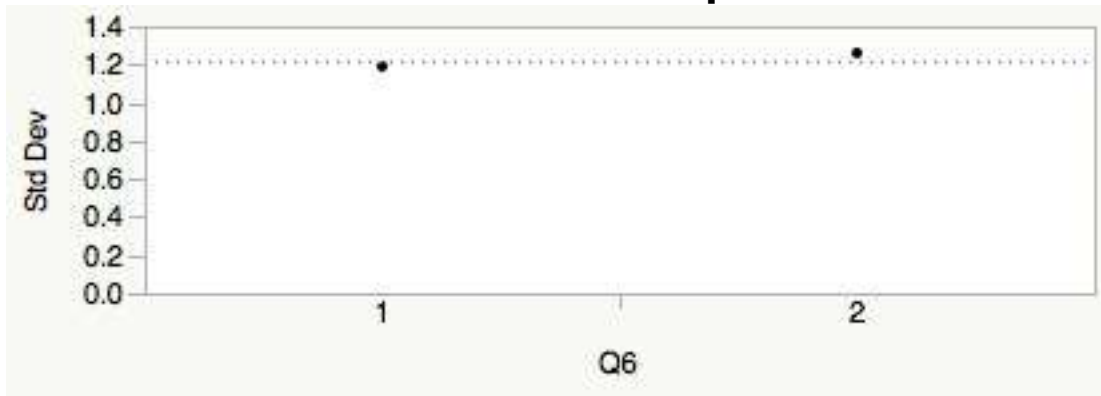
2-Sample Test, Normal Approximation

S	Z	Prob> Z
14103	-0.49283	0.6221

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
0.2436	1	0.6216

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
1	204	1.189995	0.949423	0.9411765
2	96	1.260491	1.010590	0.9979167

Test	F Ratio	DFNum	DFDen	p-Value
O'Brien[.5]	0.3460	1	298	0.5569
Brown-Forsythe	0.3687	1	298	0.5442
Levene	0.4651	1	298	0.4958
Bartlett	0.4328	1	.	0.5106
F Test 2-sided	1.1220	95	203	0.4970

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
0.3250	1	176.84	0.5693

t Test
0.5701

Means Comparisons

Comparisons for all pairs using Tukey-Kramer HSD

Confidence Quantile

q*	Alpha
1.96796	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

	1	2
1	-0.23634	-0.20805
2	-0.20805	-0.34453

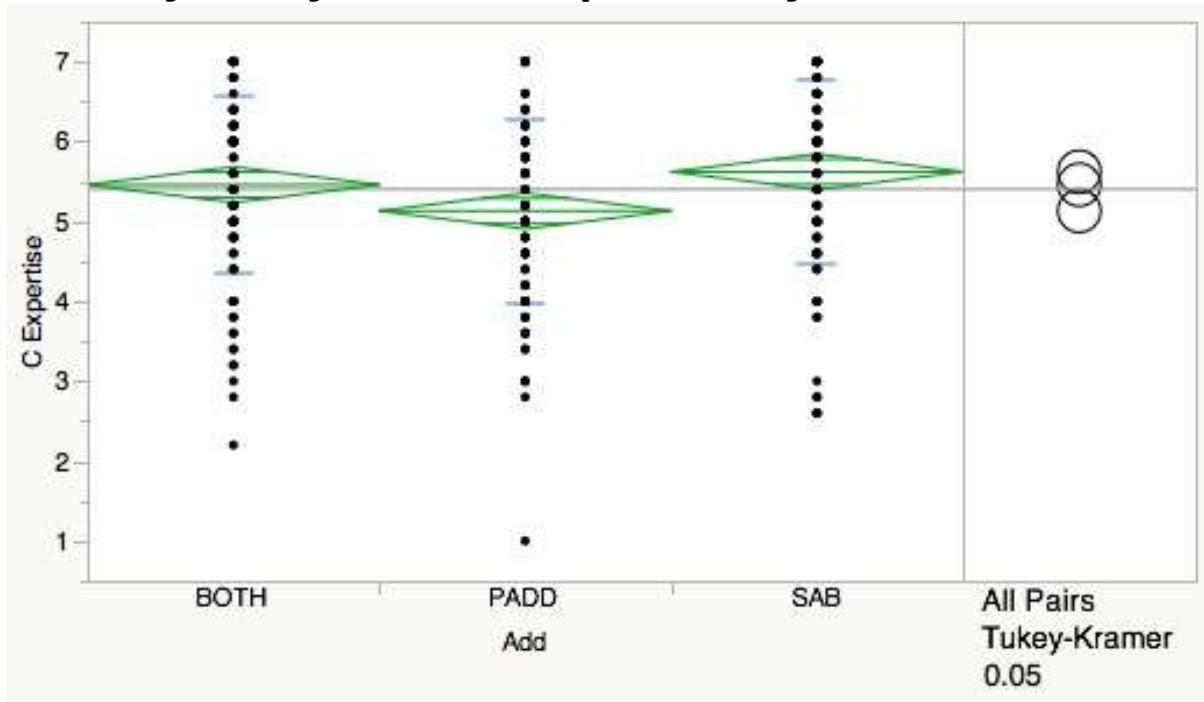
Positive values show pairs of means that are significantly different.

Nonparametric Comparisons For Each Pair Using Wilcoxon Method

q*	Alpha
1.95996	0.05

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower CL	Upper CL
2	1	-5.27727	10.70803	-0.492833	0.6221	0	-0.400000	0.2000000

Oneway Analysis of C Expertise By Add



Oneway Anova Summary of Fit

Rsquare 0.031267
 Adj Rsquare 0.024744
 Root Mean Square Error 1.140284
 Mean of Response 5.402667
 Observations (or Sum Wgts) 300

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Add	2	12.46427	6.23213	4.7930	0.0089*
Error	297	386.17360	1.30025		
C. Total	299	398.63787			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
BOTH	100	5.45800	0.11403	5.2336	5.6824

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
PADD	100	5.13000	0.11403	4.9056	5.3544
SAB	100	5.62000	0.11403	5.3956	5.8444

Std Error uses a pooled estimate of error variance

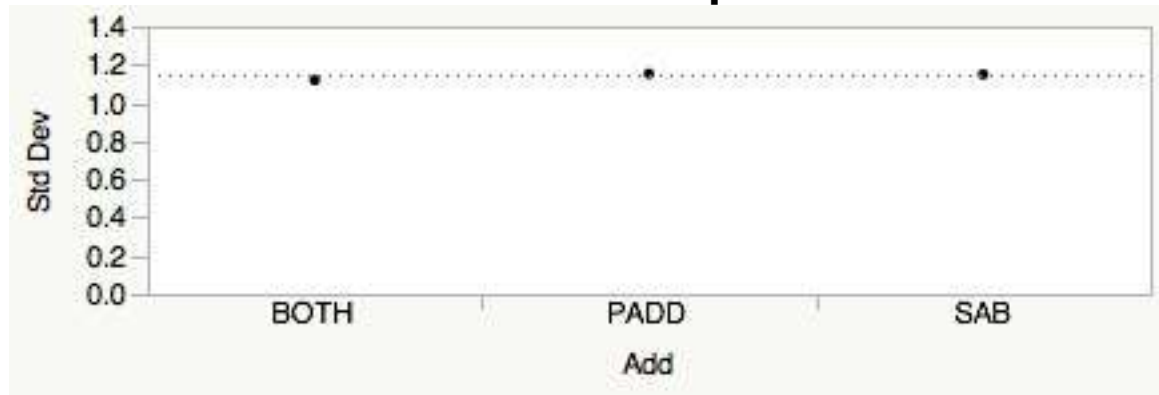
Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
BOTH	100	15451.0	15050.0	154.510	0.567
PADD	100	12854.5	15050.0	128.545	-3.109
SAB	100	16844.5	15050.0	168.445	2.541

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
10.9689	2	0.0042*

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
BOTH	100	1.118547	0.8968400	0.8940000
PADD	100	1.152731	0.9220000	0.9220000
SAB	100	1.149264	0.9172000	0.8840000

Test	F Ratio	DFNum	DFDen	Prob > F
O'Brien[.5]	0.0480	2	297	0.9531
Brown-Forsythe	0.0722	2	297	0.9304
Levene	0.0388	2	297	0.9620
Bartlett	0.0538	2	.	0.9476

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
4.6919	2	197.96	0.0102*

Means Comparisons

Comparisons for all pairs using Tukey-Kramer
HSD

Confidence Quantile

q*	Alpha
2.35560	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

	SAB	BOTH	PADD
SAB	-0.37986	-0.21786	0.11014
BOTH	-0.21786	-0.37986	-0.05186
PADD	0.11014	-0.05186	-0.37986

Positive values show pairs of means that are significantly different.

Connecting Letters Report

Level	Mean
SAB A	5.6200000
BOTH A B	5.4580000
PADD B	5.1300000

Levels not connected by same letter are significantly different.

Ordered Differences Report

Level	- Level	Difference	Std Err Dif	Lower CL	Upper CL	p-Value
SAB	PADD	0.4900000	0.1612605	0.110135	0.8698649	0.0073*
BOTH	PADD	0.3280000	0.1612605	-0.051865	0.7078649	0.1059
SAB	BOTH	0.1620000	0.1612605	-0.217865	0.5418649	0.5745



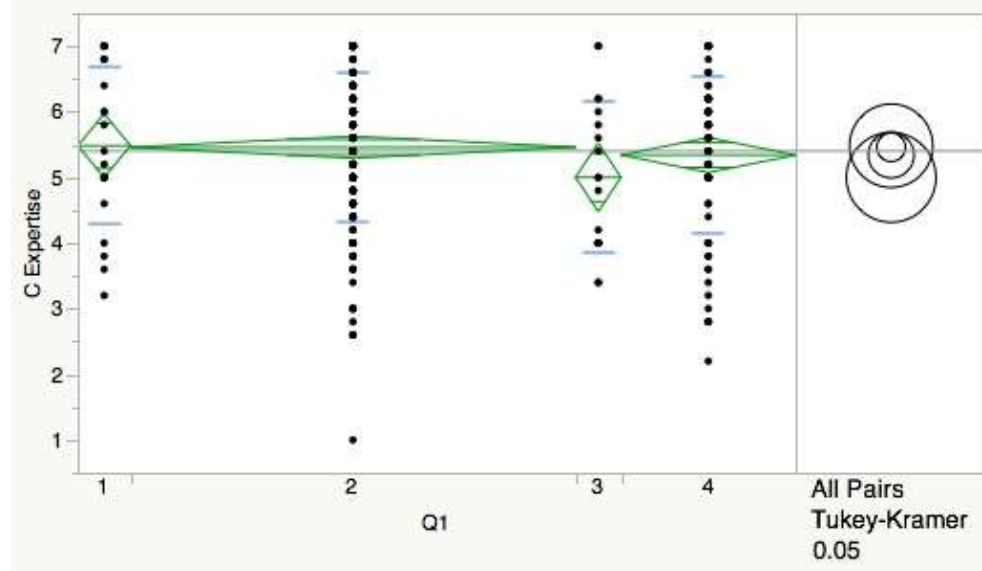
Nonparametric Comparisons For Each Pair Using

Wilcoxon Method

q* Alpha
1.95996 0.05

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower CL	Upper CL
SAB	PADD	26.4100	8.160199	3.23644	0.0012*	0.600000	0.200000	0.8000000
SAB	BOTH	9.4600	8.150041	1.16073	0.2458	0.200000	0.000000	0.6000000
PADD	BOTH	-17.4800	8.162415	-2.14152	0.0322*	-0.400000	-0.600000	0.0000000

Oneway Analysis of C Expertise By Q1



Oneway Anova Summary of Fit

Rsquare 0.010287
Adj Rsquare 0.000256
Root Mean Square Error 1.154511
Mean of Response 5.402667
Observations (or Sum Wgts) 300

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Q1	3	4.10088	1.36696	1.0256	0.3816
Error	296	394.53698	1.33290		
C. Total	299	398.63787			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
1	22	5.48182	0.24614	4.9974	5.9662
2	186	5.45914	0.08465	5.2925	5.6257
3	19	5.00000	0.26486	4.4787	5.5213
4	73	5.33973	0.13513	5.0738	5.6057

Std Error uses a pooled estimate of error variance

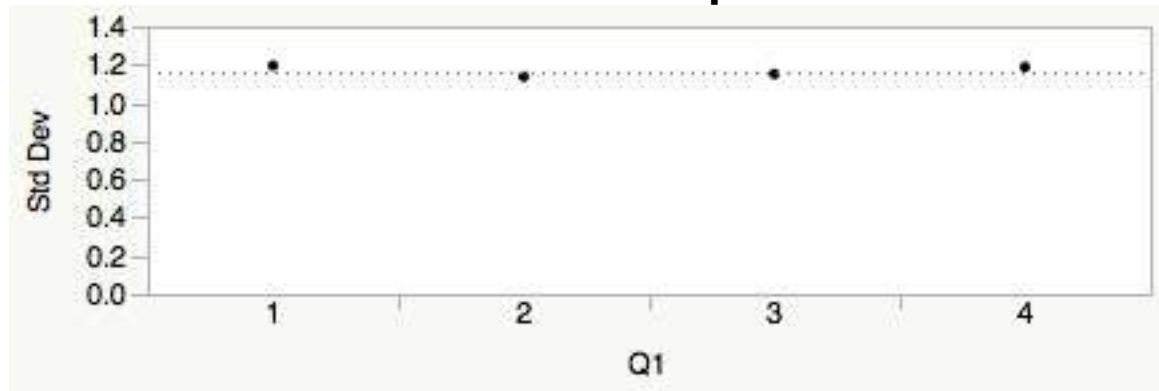
Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
1	22	3393.50	3311.00	154.250	0.210
2	186	28752.5	27993.0	154.583	1.044
3	19	2248.50	2859.50	118.342	-1.674
4	73	10755.5	10986.5	147.336	-0.359

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
3.1819	3	0.3644

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
1	22	1.194685	0.9983471	0.9909091
2	186	1.137160	0.9213551	0.9107527
3	19	1.150845	0.9684211	0.9684211
4	73	1.187287	0.9312817	0.9123288

Test	F Ratio	DFNum	DFDen	Prob > F
O'Brien[.5]	0.0783	3	296	0.9717
Brown-Forsythe	0.1157	3	296	0.9509
Levene	0.1057	3	296	0.9567
Bartlett	0.0821	3	.	0.9698

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
1.0022	3	50.513	0.3995

Means Comparisons

Comparisons for all pairs using Tukey-Kramer HSD

Confidence Quantile

q*	Alpha
2.58371	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

	1	2	4	3
1	-0.89939	-0.64984	-0.58340	-0.45239
2	-0.64984	-0.30931	-0.29256	-0.25929
4	-0.58340	-0.29256	-0.49374	-0.42852
3	-0.45239	-0.25929	-0.42852	-0.96779

Positive values show pairs of means that are significantly different.

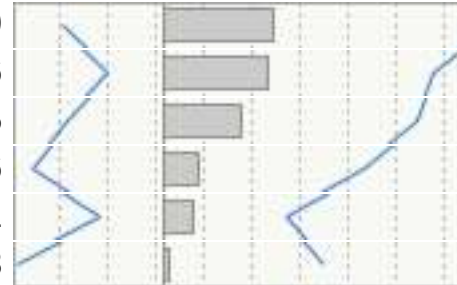
Connecting Letters Report

Level	Mean
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Level		Mean
1	A	5.4818182
2	A	5.4591398
4	A	5.3397260
3	A	5.0000000

Levels not connected by same letter are significantly different.

Level	- Level	Difference	Std Err Dif	Lower CL	Upper CL	p-Value
3	4	0.4818182	0.3615778	-0.452395	1.416031	0.5429
3	2	0.4591398	0.2780620	-0.259292	1.177572	0.3516
3	1	0.3397260	0.2973402	-0.428515	1.107967	0.6635
4	2	0.1420922	0.2807935	-0.583397	0.867582	0.9576
4	1	0.1194138	0.1594520	-0.292564	0.531392	0.8771
2	1	0.0226784	0.2602926	-0.649843	0.695199	0.9998



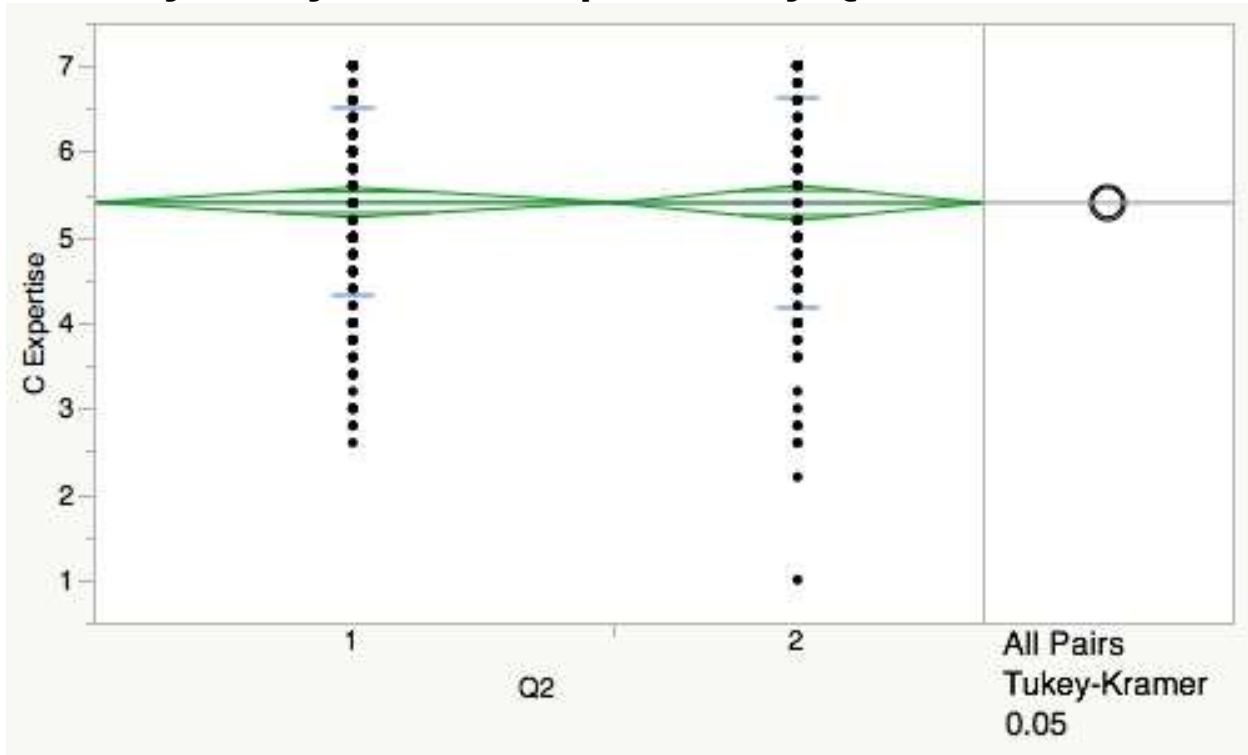
Ordered Differences Report

Nonparametric Comparisons For Each Pair Using Wilcoxon Method

q* Alpha
1.95996 0.05

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower CL	Upper CL
4	3	8.4239	6.85380	1.22909	0.2190	0.400000	-0.20000	1.000000
2	1	-0.3304	13.51812	-0.02444	0.9805	0.000000	-0.60000	0.600000
4	1	-1.7450	6.67773	-0.26132	0.7938	0.000000	-0.80000	0.400000
3	1	-4.4139	3.72959	-1.18347	0.2366	-0.600000	-1.20000	0.200000
4	2	-6.2566	10.31261	-0.60669	0.5441	0.000000	-0.40000	0.200000
3	2	-25.3785	14.23789	-1.78246	0.0747	-0.600000	-1.00000	0.000000

Oneway Analysis of C Expertise By Q2



Oneway Anova Summary of Fit

Rsquare	9.786e-6
Adj Rsquare	-0.00335
Root Mean Square Error	1.156589
Mean of Response	5.402667
Observations (or Sum Wgts)	300

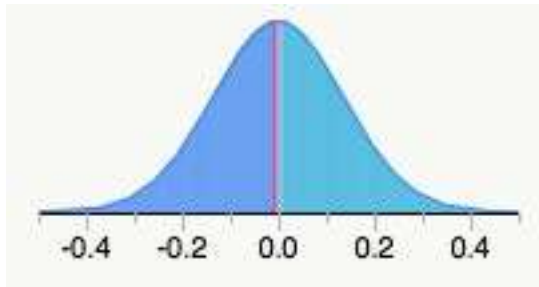
t Test

2-1

Assuming equal variances

Difference	-0.00731	t Ratio	-0.054
Std Err Dif	0.13545	DF	298
Upper CL Dif	0.25924	Prob > t	0.9570

Lower CL Dif	-0.27387	Prob > t	0.5215
Confidence	0.95	Prob < t	0.4785



Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Q2	1	0.00390	0.00390	0.0029	0.9570
Error	298	398.63397	1.33770		
C. Total	299	398.63787			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
1	175	5.40571	0.08743	5.2337	5.5778
2	125	5.39840	0.10345	5.1948	5.6020

Std Error uses a pooled estimate of error variance

Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
1	175	26216.0	26337.5	149.806	-0.164
2	125	18934.0	18812.5	151.472	0.164

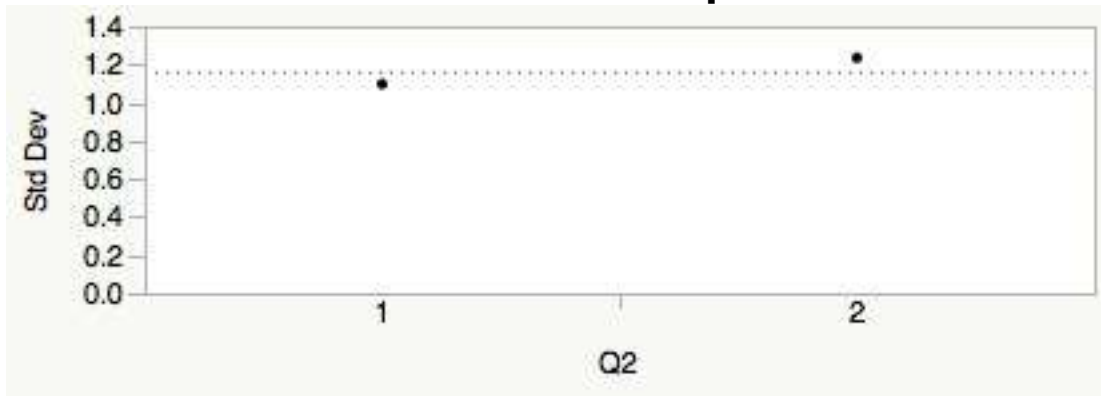
2-Sample Test, Normal Approximation

S	Z	Prob> Z
18934	0.16388	0.8698

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
0.0271	1	0.8693

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
1	175	1.097212	0.890122	0.8845714
2	125	1.235104	1.000115	0.9920000

Test	F Ratio	DFNum	DFDen	p-Value
O'Brien[.5]	2.0019	1	298	0.1582
Brown-Forsythe	1.6676	1	298	0.1976
Levene	1.9480	1	298	0.1638
Bartlett	2.0446	1	.	0.1527
F Test 2-sided	1.2671	124	174	0.1501

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
0.0028	1	247.22	0.9578

t Test
0.0529

Means Comparisons

Comparisons for all pairs using Tukey-Kramer HSD

Confidence Quantile

q*	Alpha
1.96796	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

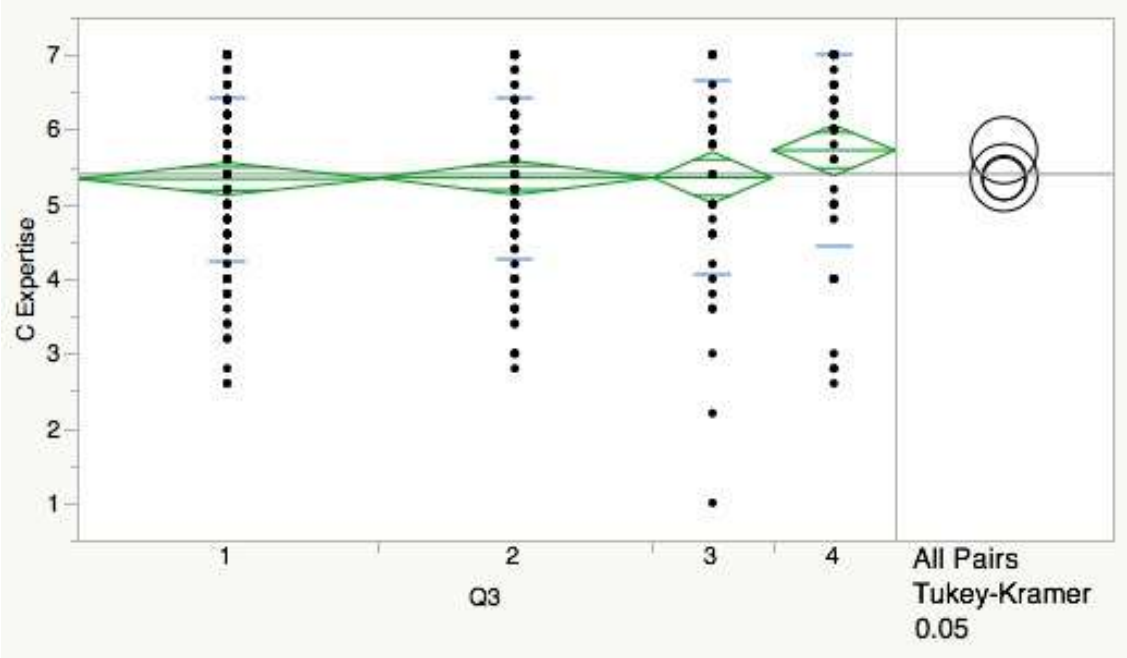
	1	2
1	-0.24333	-0.25924
2	-0.25924	-0.28791

Positive values show pairs of means that are significantly different.

Nonparametric Comparisons For Each Pair Using Wilcoxon Method

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower CL	Upper CL
2	1	1.659429	10.12616	0.1638754	0.8698	0	-0.200000	0.2000000

Oneway Analysis of C Expertise By Q3



Oneway Anova Summary of Fit

Rsquare	0.013409
Adj Rsquare	0.00341
Root Mean Square Error	1.152689
Mean of Response	5.402667
Observations (or Sum Wgts)	300

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Q3	3	5.34526	1.78175	1.3410	0.2612
Error	296	393.29261	1.32869		
C. Total	299	398.63787			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
1	110	5.33818	0.10990	5.1219	5.5545
2	101	5.35248	0.11470	5.1268	5.5782
3	44	5.35455	0.17377	5.0126	5.6965
4	45	5.72000	0.17183	5.3818	6.0582

Std Error uses a pooled estimate of error variance

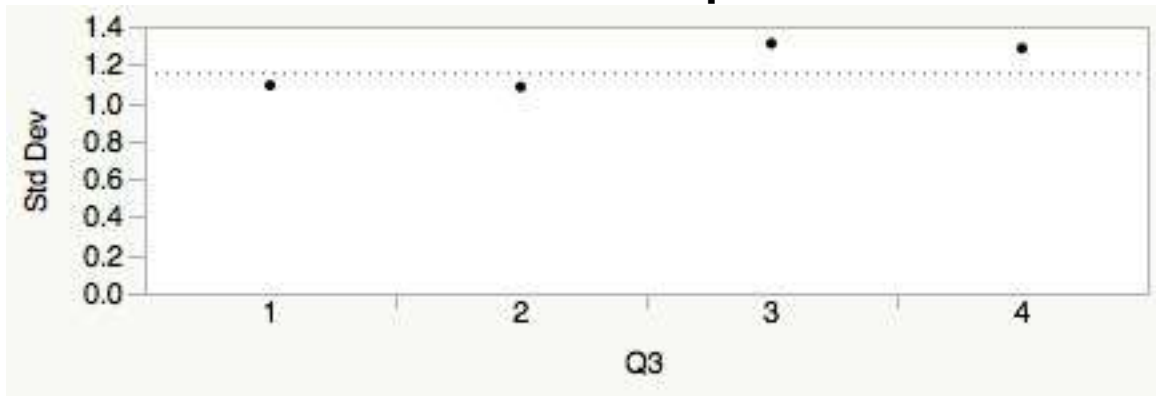
Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
1	110	15787.5	16555.0	143.523	-1.063
2	101	14567.0	15200.5	144.228	-0.894
3	44	6633.00	6622.00	150.750	0.020
4	45	8162.50	6772.50	181.389	2.598

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
6.9905	3	0.0722

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
1	110	1.090659	0.892893	0.8872727
2	101	1.082275	0.875718	0.8752475
3	44	1.310327	1.001240	0.9545455
4	45	1.285160	1.027556	0.9555556

Test	F Ratio	DFNum	DFDen	Prob > F
O'Brien[.5]	1.3156	3	296	0.2694
Brown-Forsythe	0.2121	3	296	0.8880
Levene	0.7855	3	296	0.5028
Bartlett	1.3469	3	.	0.2571

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
1.1102	3	115.38	0.3480

Means Comparisons

Comparisons for all pairs using Tukey-Kramer
HSD

Confidence Quantile

q*	Alpha
2.58371	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

	4	3	2	1
4	-0.62786	-0.26597	-0.16626	-0.14519
3	-0.26597	-0.63496	-0.53589	-0.51488
2	-0.16626	-0.53589	-0.41909	-0.39614
1	-0.14519	-0.51488	-0.39614	-0.40158

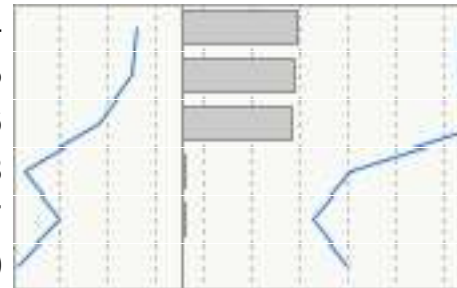
Positive values show pairs of means that are significantly different.

Connecting Letters Report

Level	Mean
4 A	5.7200000
3 A	5.3545455
2 A	5.3524752
1 A	5.3381818

Levels not connected by same letter are significantly different.

Level	- Level	Difference	Std Err Dif	Lower CL	Upper CL	p-Value
1	2	0.3818182	0.2039742	-0.145192	0.9088287	0.2424
1	3	0.3675248	0.2065958	-0.166259	0.9013087	0.2855
1	4	0.3654545	0.2443849	-0.265966	0.9968747	0.4416
2	3	0.0163636	0.2056126	-0.514880	0.5476072	0.9998
2	4	0.0142934	0.1588533	-0.396138	0.4247245	0.9997
3	4	0.0020702	0.2082136	-0.535894	0.5400340	1.0000



Ordered Differences Report

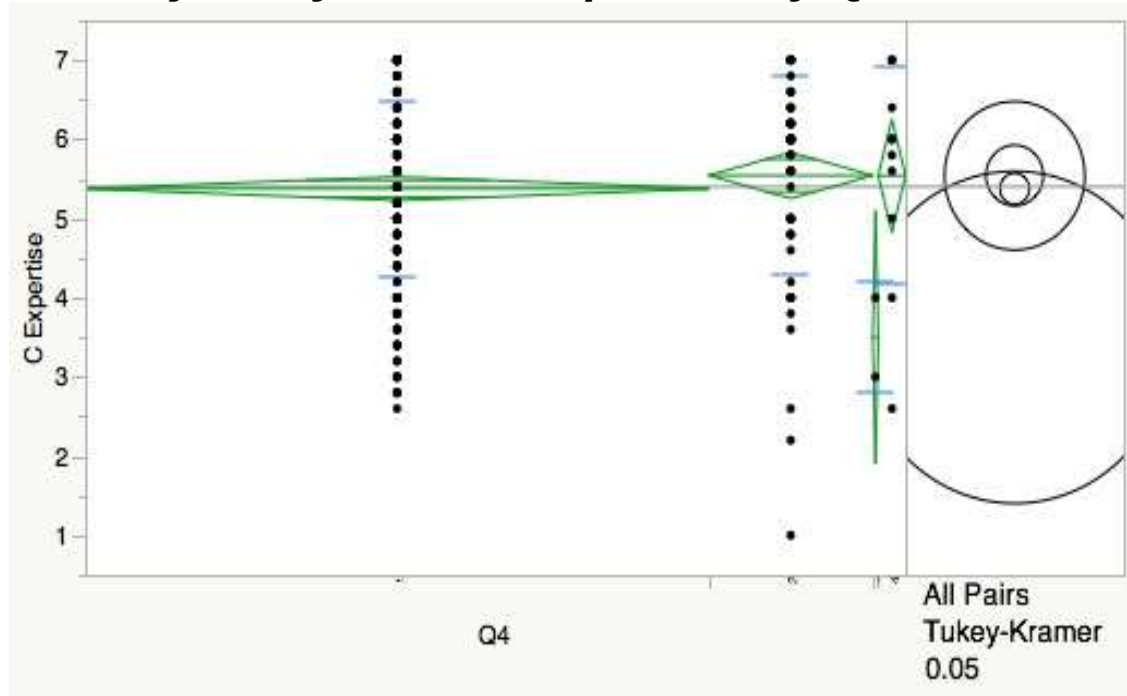
Nonparametric Comparisons For Each Pair Using Wilcoxon Method

q* Alpha
1.95996 0.05

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower CL	Upper CL
4	1	19.60202	7.919352	2.475205	0.0133*	0.6000000	0.000000	1.000000

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges- Lehmann	Lower CL	Upper CL
4	2	17.45897	7.551498	2.311987	0.0208*	0.6000000	0.000000	1.000000
4	3	9.84394	5.437349	1.810430	0.0702	0.4000000	0.000000	1.000000
3	1	3.97727	7.928229	0.501660	0.6159	0.0000000	-0.200000	0.400000
3	2	3.40965	7.558907	0.451078	0.6519	0.0000000	-0.200000	0.600000
2	1	0.28488	8.393240	0.033941	0.9729	0.0000000	-0.400000	0.200000

Oneway Analysis of C Expertise By Q4



Oneway Anova Summary of Fit

Rsquare	0.022011
Adj Rsquare	0.012099
Root Mean Square Error	1.147652
Mean of Response	5.402667
Observations (or Sum Wgts)	300

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Q4	3	8.77443	2.92481	2.2206	0.0858
Error	296	389.86344	1.31711		
C. Total	299	398.63787			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
1	228	5.37632	0.07601	5.2267	5.5259
2	60	5.54333	0.14816	5.2518	5.8349
3	2	3.50000	0.81151	1.9029	5.0971
4	10	5.54000	0.36292	4.8258	6.2542

Std Error uses a pooled estimate of error variance

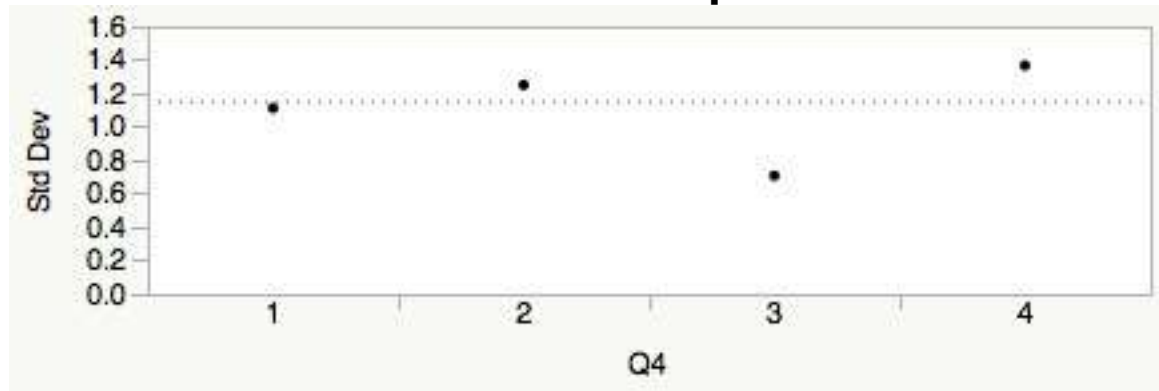
Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
1	228	33479.5	34314.0	146.840	-1.304
2	60	9951.00	9030.00	165.850	1.537
3	2	53.500	301.000	26.750	-2.027
4	10	1666.00	1505.00	166.600	0.597

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
6.7424	3	0.0806

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
1	228	1.111399	0.907802	0.9061404
2	60	1.249863	0.953667	0.8900000
3	2	0.707107	0.500000	0.5000000
4	10	1.366423	1.004000	0.9400000

Test	F Ratio	DFNum	DFDen	Prob > F
O'Brien[.5]	0.9861	2	295	0.3743
Brown-Forsythe	0.2162	3	296	0.8851
Levene	0.3774	3	296	0.7694
Bartlett	0.6912	3	.	0.5573

Warning: Small sample sizes. Use Caution.

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
3.9556	3	4.6129	0.0939

Means Comparisons

Comparisons for all pairs using Tukey-Kramer HSD

Confidence Quantile

q*	Alpha
2.58371	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

	2	4	1	3
2	-0.5414	-1.0095	-0.2632	-0.0880
4	-1.0095	-1.3261	-0.7943	-0.2568
1	-0.2632	-0.7943	-0.2777	-0.2296
3	-0.0880	-0.2568	-0.2296	-2.9652

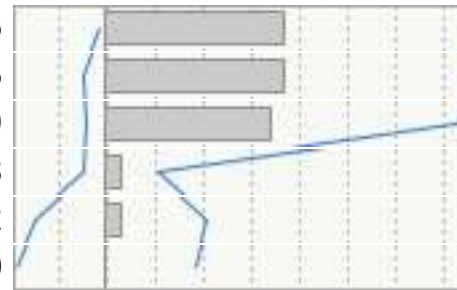
Positive values show pairs of means that are significantly different.

Connecting Letters Report

Level		Mean
2	A	5.5433333
4	A	5.5400000
1	A	5.3763158
3	A	3.5000000

Levels not connected by same letter are significantly different.

- Level	Difference	Std Err Dif	Lower CL	Upper CL	p-Value
3	2.043333	0.8249272	-0.08804	4.174707	0.0656
3	2.040000	0.8889678	-0.25684	4.336836	0.1015
3	1.876316	0.8150643	-0.22958	3.982207	0.0999
1	0.167018	0.1665189	-0.26322	0.597254	0.7478
1	0.163684	0.3707929	-0.79434	1.121706	0.9712
4	0.003333	0.3919979	-1.00948	1.016143	1.0000



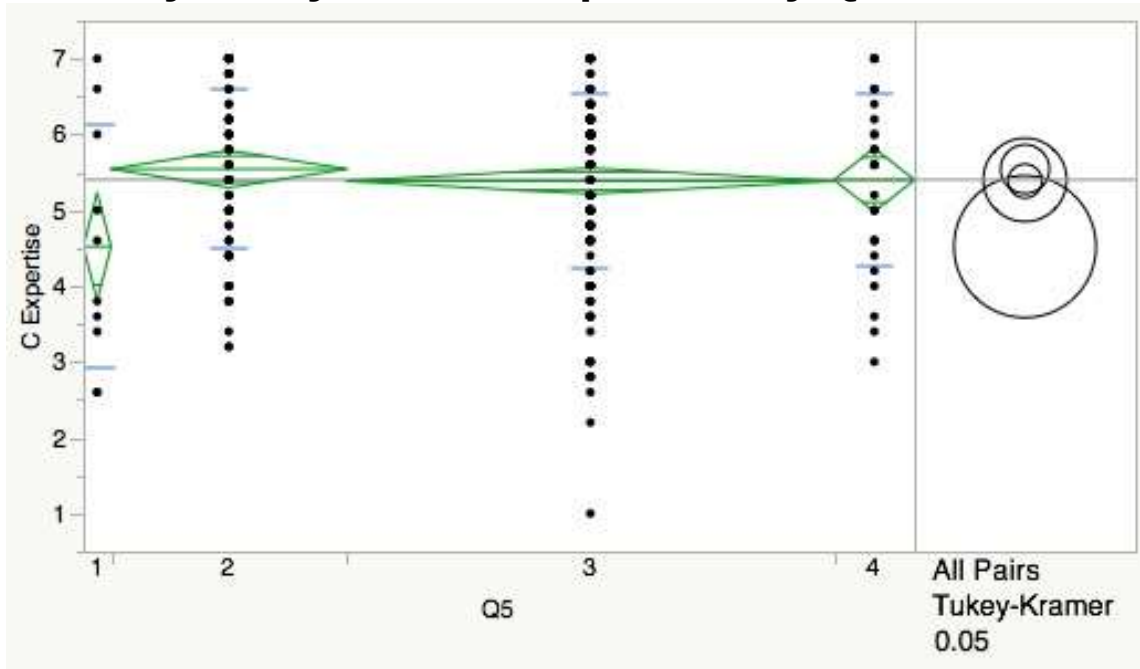
Ordered Differences Report

Nonparametric Comparisons For Each Pair Using Wilcoxon Method

q* Alpha
1.95996 0.05

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower CL	Upper CL
2	1	18.3579	12.04581	1.52401	0.1275	0.20000	0.00000	0.600000
4	1	15.8145	22.17810	0.71307	0.4758	0.20000	-0.60000	1.000000
4	3	4.2000	2.77816	1.51179	0.1306	2.20000	.	.
4	2	0.1167	6.90919	0.01689	0.9865	0.00000	-0.80000	0.800000
3	2	-25.5750	12.89947	-1.98264	0.0474*	-2.20000	-3.60000	0.000000
3	1	-95.5811	47.12390	-2.02829	0.0425*	-2.00000	-3.40000	0.000000

Oneway Analysis of C Expertise By Q5



Oneway Anova Summary of Fit

Rsquare 0.02391
 Adj Rsquare 0.014017
 Root Mean Square Error 1.146538
 Mean of Response 5.402667
 Observations (or Sum Wgts) 300

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Q5	3	9.53133	3.17711	2.4169	0.0665
Error	296	389.10653	1.31455		
C. Total	299	398.63787			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
1	10	4.52000	0.36257	3.8065	5.2335
2	85	5.54353	0.12436	5.2988	5.7883

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
3	176	5.38523	0.08642	5.2151	5.5553
4	29	5.40000	0.21291	4.9810	5.8190

Std Error uses a pooled estimate of error variance

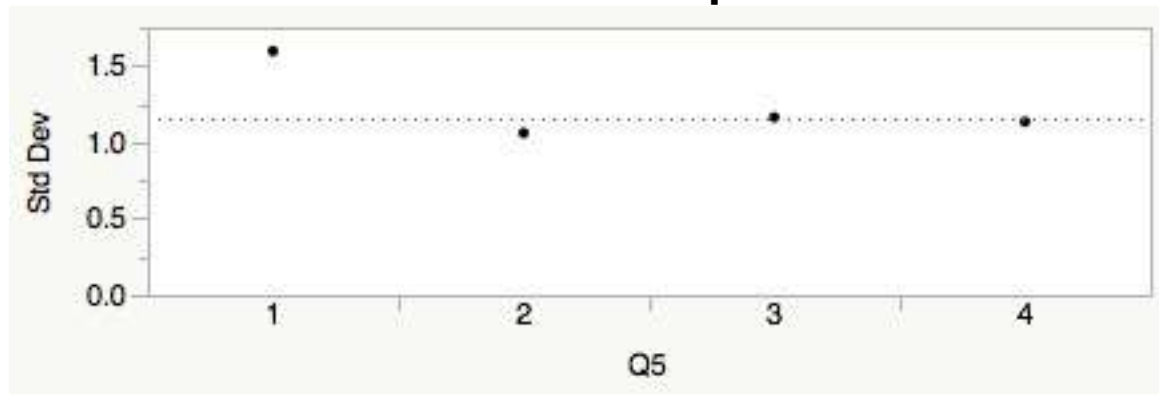
Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
1	10	978.000	1505.00	97.800	-1.958
2	85	13456.5	12792.5	158.312	0.983
3	176	26426.5	26488.0	150.151	-0.083
4	29	4289.00	4364.50	147.897	-0.169

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
4.4374	3	0.2179

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
1	10	1.594992	1.320000	1.320000
2	85	1.059026	0.881993	0.880000
3	176	1.161481	0.925542	0.914773
4	29	1.132633	0.937931	0.917241

Test	F Ratio	DFNum	DFDen	Prob > F
O'Brien[.5]	1.7023	3	296	0.1666
Brown-Forsythe	1.1863	3	296	0.3151
Levene	1.3130	3	296	0.2703

Test	F Ratio	DFNum	DFDen	Prob > F
Bartlett	1.1618	3	.	0.3227

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
1.4463	3	34.959	0.2460

Means Comparisons

Comparisons for all pairs using Tukey-Kramer HSD

Confidence Quantile

q*	Alpha
2.58371	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

	2	4	3	1
2	-0.4544	-0.4935	-0.2330	0.0332
4	-0.4935	-0.7779	-0.5789	-0.2063
3	-0.2330	-0.5789	-0.3158	-0.0978
1	0.0332	-0.2063	-0.0978	-1.3248

Positive values show pairs of means that are significantly different.

Connecting Letters Report

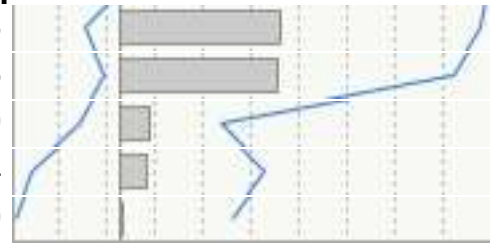
Level	Mean
2 A	5.5435294
4 A B	5.4000000
3 A B	5.3852273
1 B	4.5200000

Levels not connected by same letter are significantly different.

Ordered Differences Report

- Level	Difference	Std Err Dif	Lower CL	Upper CL	p-Value
1.023529	0.3833017	0.033188	2.013870	0.0397*	

- Level	Difference	Std Err Dif	Lower CL	Upper CL	p-Value
0.880000	0.4204571	-0.206340	1.966340	0.1578	
0.865227	0.3727250	-0.097787	1.828241	0.0955	
0.158302	0.1514408	-0.232977	0.549581	0.7229	
0.143529	0.2465655	-0.493525	0.780584	0.9374	
0.014773	0.2297788	-0.578909	0.608455	0.9999	

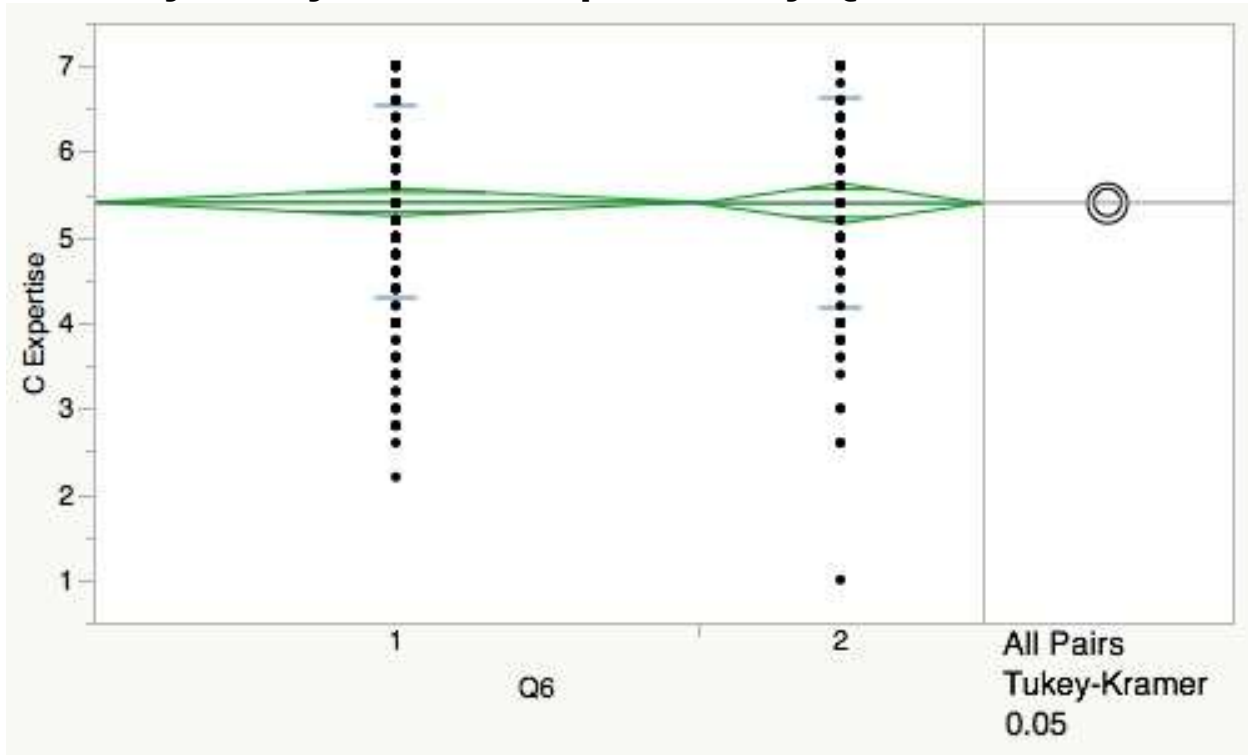


Nonparametric Comparisons For Each Pair Using Wilcoxon Method

q* Alpha
1.95996 0.05

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower
3	1	32.2858	17.43459	1.85182	0.0641	1.00000	0.0000
2	1	19.1676	9.18689	2.08641	0.0369*	1.20000	0.0000
4	1	6.5224	4.16874	1.56460	0.1177	1.00000	-0.2000
4	3	-1.8074	11.84525	-0.15258	0.8787	0.00000	-0.4000
4	2	-3.6304	7.08486	-0.51242	0.6084	-0.20000	-0.6000
3	2	-7.1967	9.93655	-0.72426	0.4689	0.00000	-0.4000

Oneway Analysis of C Expertise By Q6



Oneway Anova Summary of Fit

Rsquare	2.816e-5
Adj Rsquare	-0.00333
Root Mean Square Error	1.156578
Mean of Response	5.402667
Observations (or Sum Wgts)	300

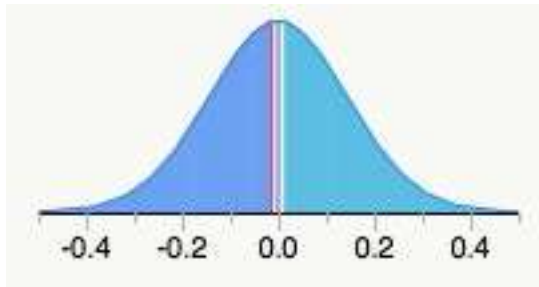
t Test

2-1

Assuming equal variances

Difference	-0.01311	t Ratio	-0.0916
Std Err Dif	0.14315	DF	298
Upper CL Dif	0.26860	Prob > t	0.9271

Lower CL Dif	-0.29482	Prob > t	0.5365
Confidence	0.95	Prob < t	0.4635



Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Q6	1	0.01122	0.01122	0.0084	0.9271
Error	298	398.62664	1.33767		
C. Total	299	398.63787			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
1	204	5.40686	0.08098	5.2475	5.5662
2	96	5.39375	0.11804	5.1614	5.6261

Std Error uses a pooled estimate of error variance

Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
1	204	30516.5	30702.0	149.591	-0.265
2	96	14633.5	14448.0	152.432	0.265

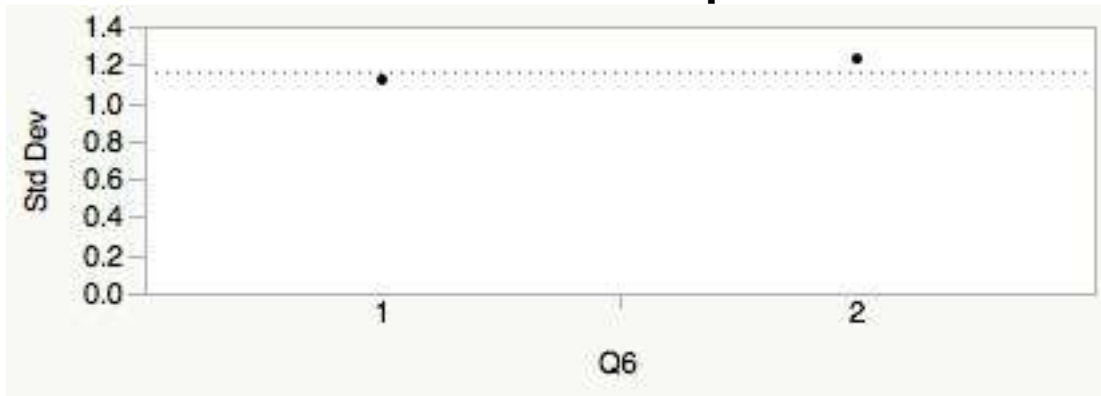
2-Sample Test, Normal Approximation

S	Z	Prob> Z
14633.5	0.26480	0.7912

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
0.0705	1	0.7906

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
1	204	1.120587	0.9087562	0.9068627
2	96	1.229960	0.9949219	0.9770833

Test	F Ratio	DFNum	DFDen	p-Value
O'Brien[.5]	1.1415	1	298	0.2862
Brown-Forsythe	0.6357	1	298	0.4259
Levene	1.0689	1	298	0.3020
Bartlett	1.1421	1	.	0.2852
F Test 2-sided	1.2047	95	203	0.2756

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
0.0078	1	171.47	0.9295

t Test
0.0886

Means Comparisons

Comparisons for all pairs using Tukey-Kramer HSD

Confidence Quantile

q*	Alpha
1.96796	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

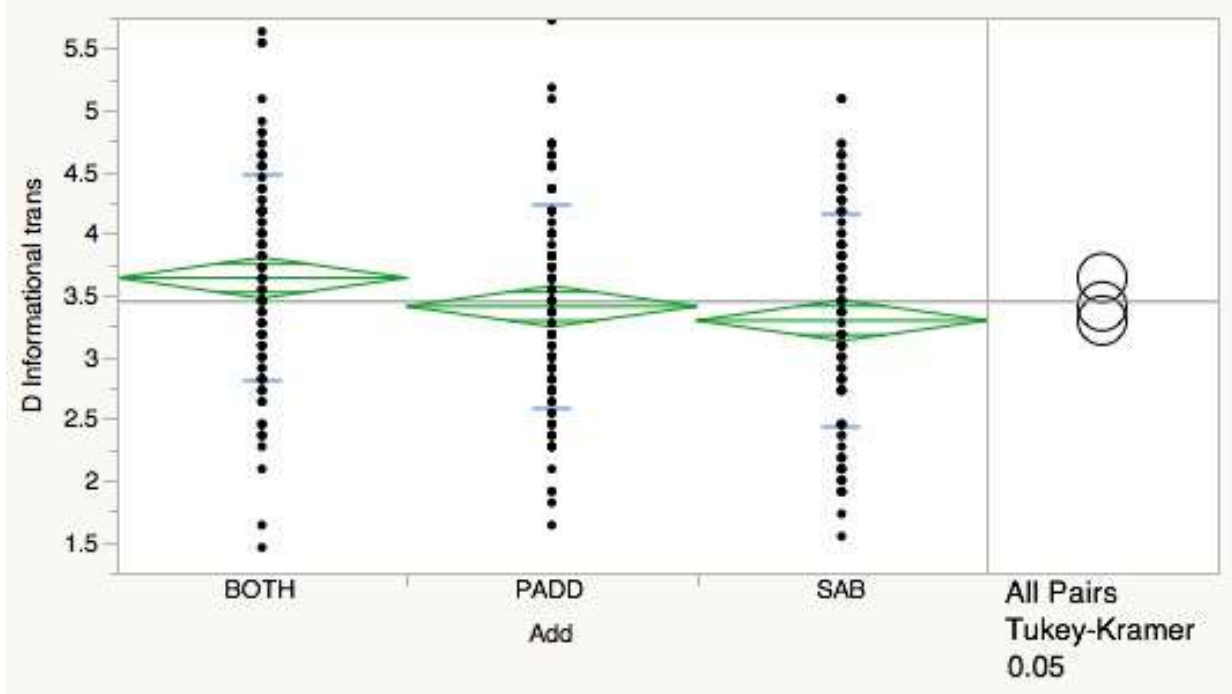
	1	2
1	-0.22537	-0.26860
2	-0.26860	-0.32853

Positive values show pairs of means that are significantly different.

Nonparametric Comparisons For Each Pair Using Wilcoxon Method

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges- Lehmann	q*	Lower CL	Upper CL
							1.95996		
2	1	2.833946	10.70208	0.2648034	0.7912	0		-0.200000	0.4000000

Oneway Analysis of D Informational trans By Add



Oneway Anova Summary of Fit

Rsquare 0.028788
 Adj Rsquare 0.022248
 Root Mean Square Error 0.838706
 Mean of Response 3.447879
 Observations (or Sum Wgts) 300

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Add	2	6.19262	3.09631	4.4017	0.0131*
Error	297	208.91802	0.70343		
C. Total	299	215.11063			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
BOTH	100	3.64000	0.08387	3.4749	3.8051

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
PADD	100	3.40909	0.08387	3.2440	3.5741
SAB	100	3.29455	0.08387	3.1295	3.4596

Std Error uses a pooled estimate of error variance

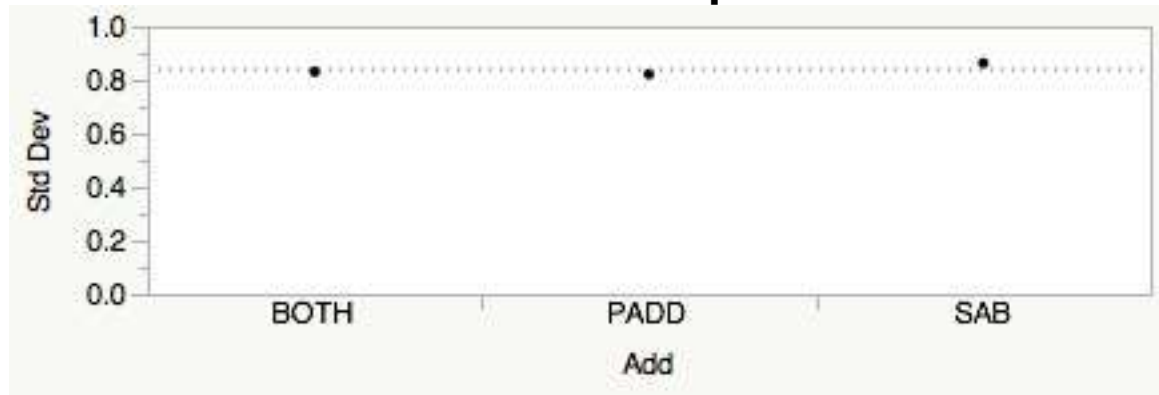
Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
BOTH	100	16972.5	15050.0	169.725	2.715
PADD	100	14524.0	15050.0	145.240	-0.742
SAB	100	13653.5	15050.0	136.535	-1.972

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
7.8815	2	0.0194*

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
BOTH	100	0.8305785	0.6674909	0.6672727
PADD	100	0.8217451	0.6636364	0.6636364
SAB	100	0.8632250	0.7218182	0.7218182

Test	F Ratio	DFNum	DFDen	Prob > F
O'Brien[.5]	0.1754	2	297	0.8392
Brown-Forsythe	0.4619	2	297	0.6306
Levene	0.4609	2	297	0.6312
Bartlett	0.1333	2	.	0.8752

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
4.3468	2	197.91	0.0142*

Means Comparisons

Comparisons for all pairs using Tukey-Kramer
HSD

Confidence Quantile

q*	Alpha
2.35560	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

	BOTH	PADD	SAB
BOTH	-0.27940	-0.04849	0.06605
PADD	-0.04849	-0.27940	-0.16485
SAB	0.06605	-0.16485	-0.27940

Positive values show pairs of means that are significantly different.

Connecting Letters Report

Level	Mean
BOTH A	3.6400000
PADD A B	3.4090909
SAB B	3.2945455

Levels not connected by same letter are significantly different.

Ordered Differences Report

Level	- Level	Difference	Std Err Dif	Lower CL	Upper CL	p-Value
BOTH	SAB	0.3454545	0.1186109	0.066055	0.6248542	0.0107*
BOTH	PADD	0.2309091	0.1186109	-0.048491	0.5103087	0.1275
PADD	SAB	0.1145455	0.1186109	-0.164854	0.3939451	0.5991



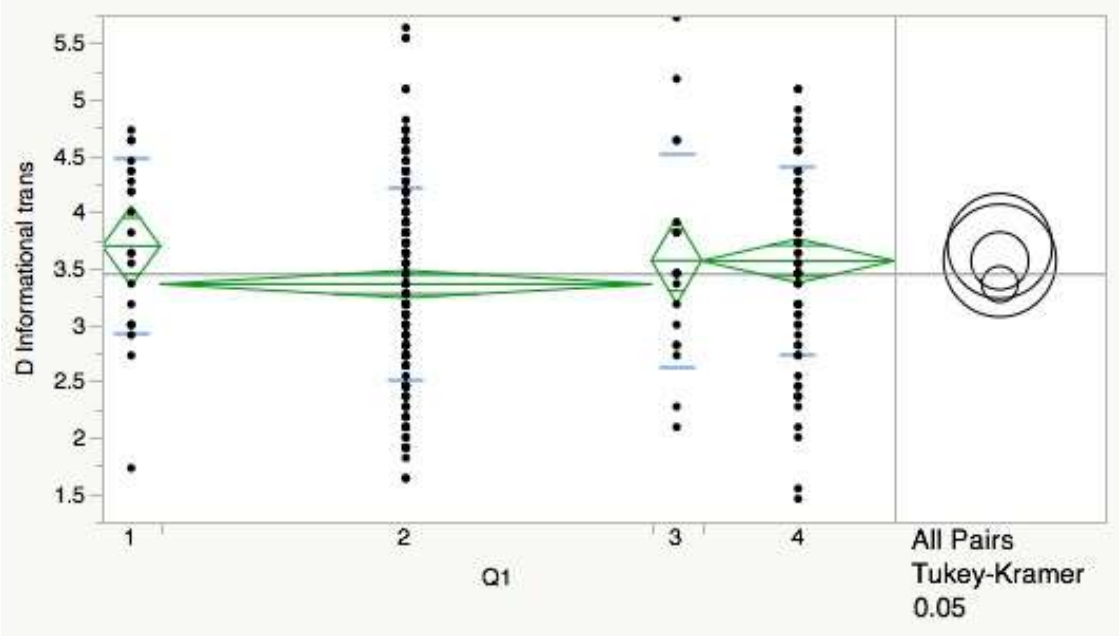
Nonparametric Comparisons For Each Pair Using

Wilcoxon Method

q* Alpha
1.95996 0.05

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower CL	Upper CL
SAB	PADD	-6.1900	8.179712	-0.75675	0.4492	-0.090909	-0.363636	0.181818
PADD	BOTH	-16.7100	8.179030	-2.04303	0.0410*	-0.272727	-0.454545	0.000000
SAB	BOTH	-21.7200	8.179740	-2.65534	0.0079*	-0.363636	-0.636364	-0.090909

Oneway Analysis of D Informational trans By Q1



Oneway Anova
Summary of Fit

Rsquare	0.019299
Adj Rsquare	0.00936
Root Mean Square Error	0.844216
Mean of Response	3.447879
Observations (or Sum Wgts)	300

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Q1	3	4.15144	1.38381	1.9416	0.1229
Error	296	210.95919	0.71270		
C. Total	299	215.11063			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
1	22	3.69835	0.17999	3.3441	4.0526
2	186	3.35924	0.06190	3.2374	3.4811
3	19	3.56938	0.19368	3.1882	3.9505
4	73	3.56663	0.09881	3.3722	3.7611

Std Error uses a pooled estimate of error variance

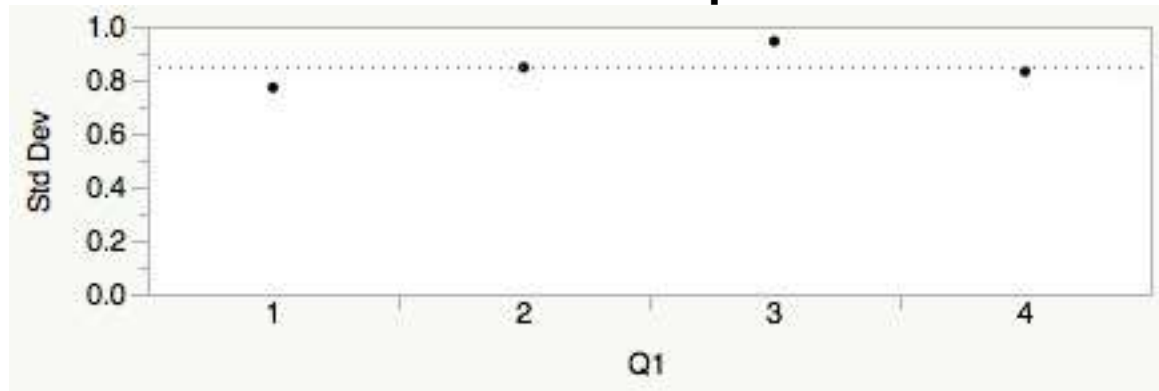
Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
1	22	3951.50	3311.00	179.614	1.635
2	186	26191.0	27993.0	140.812	-2.472
3	19	2966.50	2859.50	156.132	0.291
4	73	12041.0	10986.5	164.945	1.636

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
6.9117	3	0.0748

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
1	22	0.7715863	0.6322314	0.6322314
2	186	0.8466139	0.6964809	0.6964809
3	19	0.9441921	0.7096449	0.6794258
4	73	0.8317506	0.6640509	0.6637609

Test	F Ratio	DFNum	DFDen	Prob > F
O'Brien[.5]	0.3672	3	296	0.7768
Brown-Forsythe	0.1622	3	296	0.9217
Levene	0.1818	3	296	0.9087
Bartlett	0.2768	3	.	0.8422

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
1.9993	3	50.81	0.1258

Means Comparisons

Comparisons for all pairs using Tukey-Kramer HSD

Confidence Quantile

q*	Alpha
2.58371	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

	1	3	4	2
1	-0.65766	-0.55416	-0.39878	-0.15266
3	-0.55416	-0.70768	-0.55901	-0.31520
4	-0.39878	-0.55901	-0.36104	-0.09386
2	-0.15266	-0.31520	-0.09386	-0.22618

Positive values show pairs of means that are significantly different.

Connecting Letters Report

Level	Mean
-------	------

Level		Mean
1	A	3.6983471
3	A	3.5693780
4	A	3.5666252
2	A	3.3592375

Levels not connected by same letter are significantly different.

Ordered Differences Report

Level	- Level	Difference	Std Err Dif	Lower CL	Upper CL	p-Value
1	2	0.3391096	0.1903344	-0.152660	0.8308787	0.2842
3	2	0.2101405	0.2033279	-0.315200	0.7354811	0.7299
4	2	0.2073876	0.1165965	-0.093864	0.5086392	0.2857
1	4	0.1317220	0.2053253	-0.398779	0.6622232	0.9184
1	3	0.1289691	0.2643974	-0.554157	0.8120957	0.9618
3	4	0.0027528	0.2174248	-0.559010	0.5645157	1.0000

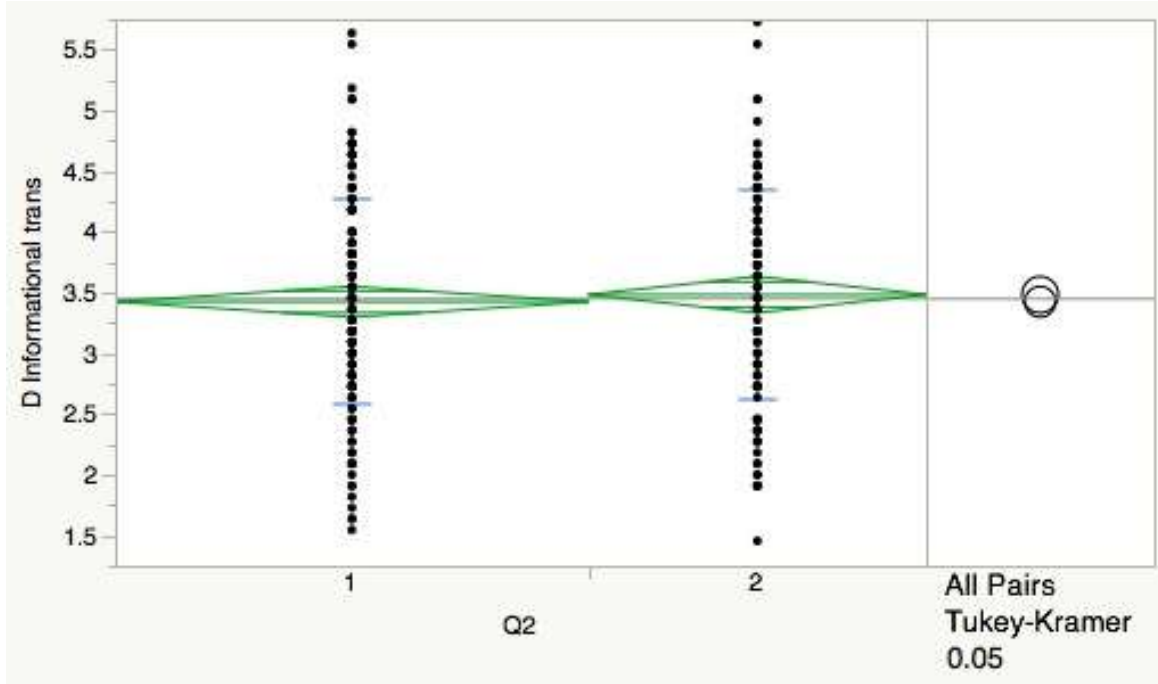


Nonparametric Comparisons For Each Pair Using Wilcoxon Method

q* Alpha
1.95996 0.05

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower CL	Upper CL
4	2	20.6963	10.33949	2.00168	0.0453*	0.272727	0.000000	0.4545455
3	2	10.8765	14.27834	0.76175	0.4462	0.181818	-0.272727	0.6363636
4	3	3.2170	6.86737	0.46845	0.6395	0.090909	-0.363636	0.5454545
3	1	-3.0897	3.74501	-0.82502	0.4094	-0.181818	-0.818182	0.3636364
4	1	-4.7027	6.69836	-0.70206	0.4826	-0.181818	-0.545455	0.2727273
2	1	-26.8387	13.56116	-1.97909	0.0478*	-0.363636	-0.727273	0.0000000

Oneway Analysis of D Informational trans By Q2



Oneway Anova Summary of Fit

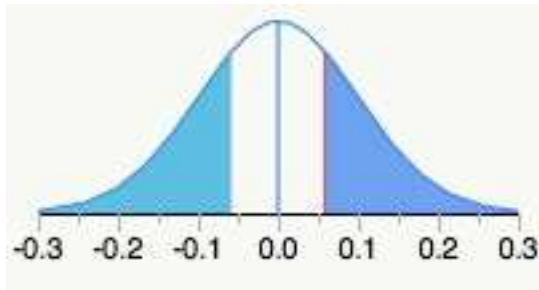
Rsquare	0.001172
Adj Rsquare	-0.00218
Root Mean Square Error	0.849118
Mean of Response	3.447879
Observations (or Sum Wgts)	300

t Test

2-1

Assuming equal variances

Difference	0.05881	t Ratio	0.591372
Std Err Dif	0.09944	DF	298
Upper CL Dif	0.25450	Prob > t	0.5547
Lower CL Dif	-0.13689	Prob > t	0.2774
Confidence	0.95	Prob < t	0.7226



Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Q2	1	0.25215	0.252150	0.3497	0.5547
Error	298	214.85848	0.721002		
C. Total	299	215.11063			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
1	175	3.42338	0.06419	3.2971	3.5497
2	125	3.48218	0.07595	3.3327	3.6316

Std Error uses a pooled estimate of error variance

Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
1	175	25780.5	26337.5	147.317	-0.752
2	125	19369.5	18812.5	154.956	0.752

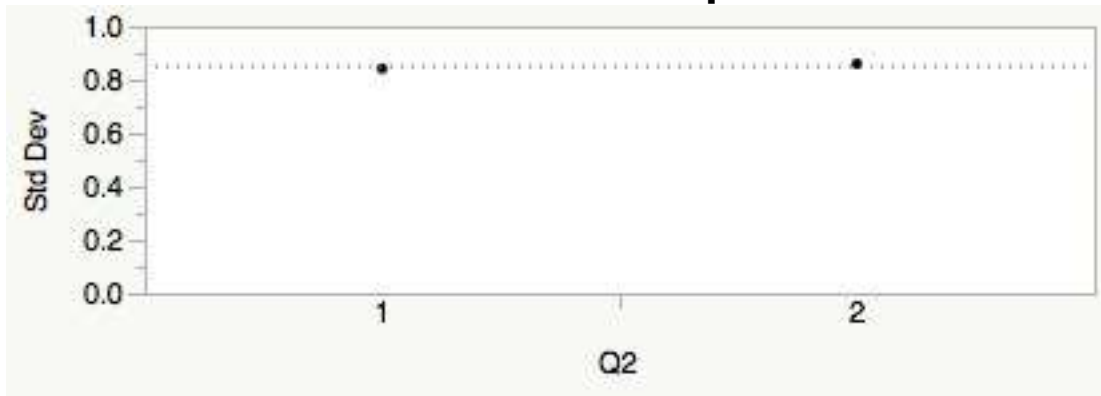
2-Sample Test, Normal Approximation

S	Z	Prob> Z
19369.5	0.75178	0.4522

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
0.5662	1	0.4518

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
1	175	0.8415740	0.6789462	0.6779221
2	125	0.8595926	0.7053615	0.7018182

Test	F Ratio	DFNum	DFDen	p-Value
O'Brien[.5]	0.0837	1	298	0.7726
Brown-Forsythe	0.1677	1	298	0.6825
Levene	0.2106	1	298	0.6466
Bartlett	0.0649	1	.	0.7989
F Test 2-sided	1.0433	124	174	0.7917

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
0.3473	1	263.8	0.5562

t Test
0.5893

Means Comparisons

Comparisons for all pairs using Tukey-Kramer HSD

Confidence Quantile

q*	Alpha
1.96796	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

	2	1
2	-0.21137	-0.13689
1	-0.13689	-0.17864

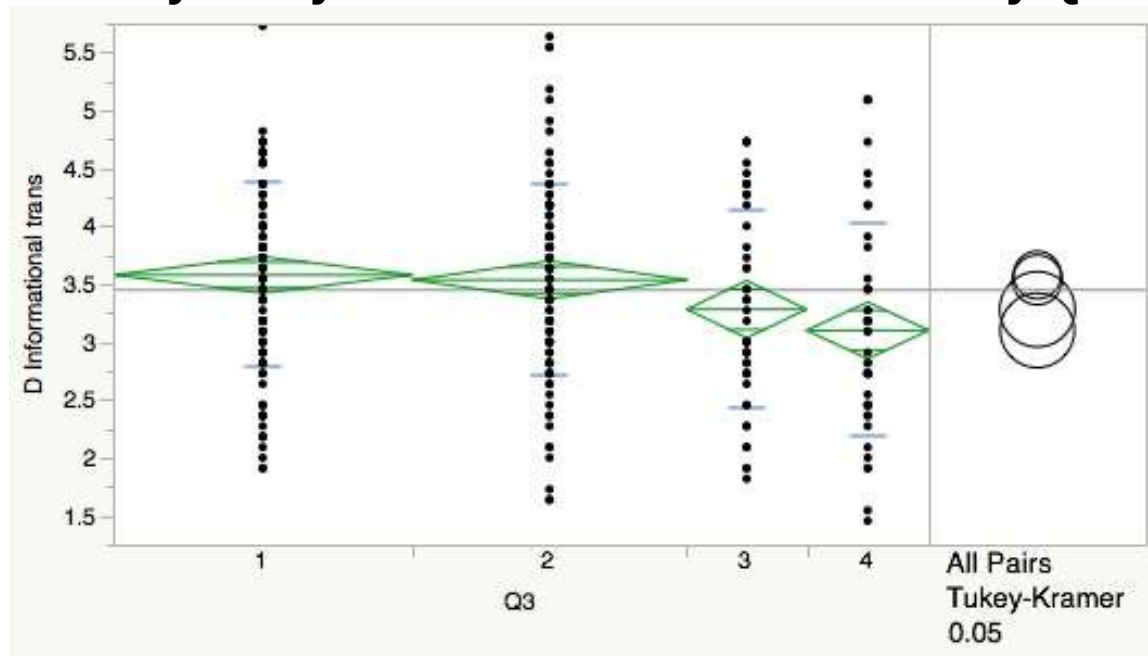
Positive values show pairs of means that are significantly different.

Nonparametric Comparisons For Each Pair Using Wilcoxon Method

q*	Alpha
1.95996	0.05

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower
2	1	7.632000	10.15192	0.7517789	0.4522	0.0909091	-0.0909

Oneway Analysis of D Informational trans By Q3



Oneway Anova Summary of Fit

Rsquare	0.043313
Adj Rsquare	0.033617
Root Mean Square Error	0.833816
Mean of Response	3.447879
Observations (or Sum Wgts)	300

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Q3	3	9.31702	3.10567	4.4670	0.0044*
Error	296	205.79362	0.69525		
C. Total	299	215.11063			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
1	110	3.57769	0.07950	3.4212	3.7341
2	101	3.53465	0.08297	3.3714	3.6979
3	44	3.28099	0.12570	3.0336	3.5284
4	45	3.09899	0.12430	2.8544	3.3436

Std Error uses a pooled estimate of error variance

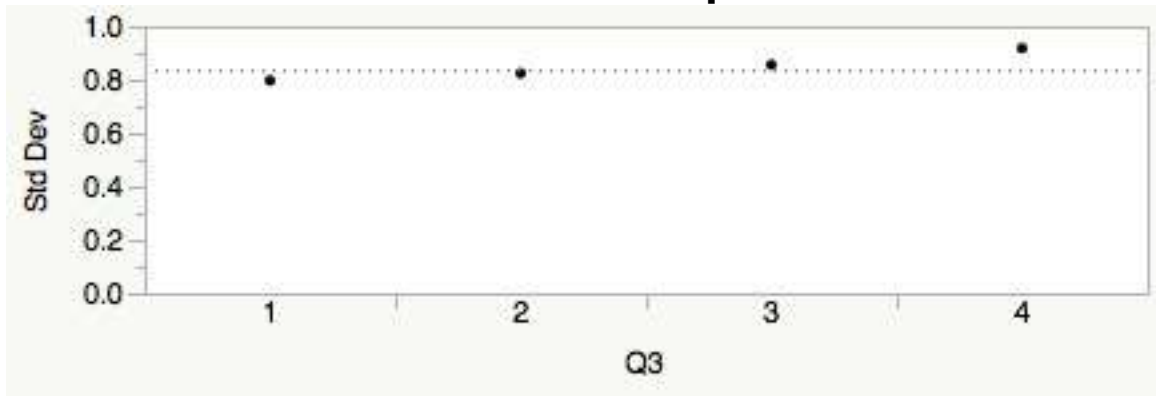
Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
1	110	18157.0	16555.0	165.064	2.213
2	101	16028.5	15200.5	158.698	1.166
3	44	5876.00	6622.00	133.545	-1.403
4	45	5088.50	6772.50	113.078	-3.140

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
14.0768	3	0.0028*

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
1	110	0.7970666	0.6498272	0.6487603
2	101	0.8241487	0.6413988	0.6408641
3	44	0.8561359	0.7197596	0.7148760
4	45	0.9183050	0.7160494	0.7111111

Test	F Ratio	DFNum	DFDen	Prob > F
O'Brien[.5]	0.5838	3	296	0.6261
Brown-Forsythe	0.3785	3	296	0.7686
Levene	0.4518	3	296	0.7162
Bartlett	0.4612	3	.	0.7094

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
3.9882	3	117.81	0.0096*

Means Comparisons

Comparisons for all pairs using Tukey-Kramer
HSD

Confidence Quantile

q*	Alpha
2.58371	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

	1	2	3	4
1	-0.29049	-0.25386	-0.08759	0.09747
2	-0.25386	-0.30316	-0.13548	0.04954
3	-0.08759	-0.13548	-0.45931	-0.27475
4	0.09747	0.04954	-0.27475	-0.45417

Positive values show pairs of means that are significantly different.

Connecting Letters Report

Level		Mean
1	A	3.5776860
2	A	3.5346535
3	A B	3.2809917
4	B	3.0989899

Levels not connected by same letter are significantly different.

Ordered Differences Report

Level	- Level	Difference	Std Err Dif	Lower CL	Upper CL	p-Value
1	4	0.4786961	0.1475480	0.097475	0.8599175	0.0071*
2	4	0.4356636	0.1494444	0.049542	0.8217847	0.0199*
1	3	0.2966942	0.1487331	-0.087589	0.6809778	0.1922
2	3	0.2536617	0.1506146	-0.135483	0.6428064	0.3339
3	4	0.1820018	0.1767797	-0.274746	0.6387497	0.7323
1	2	0.0430325	0.1149091	-0.253859	0.3399244	0.9821



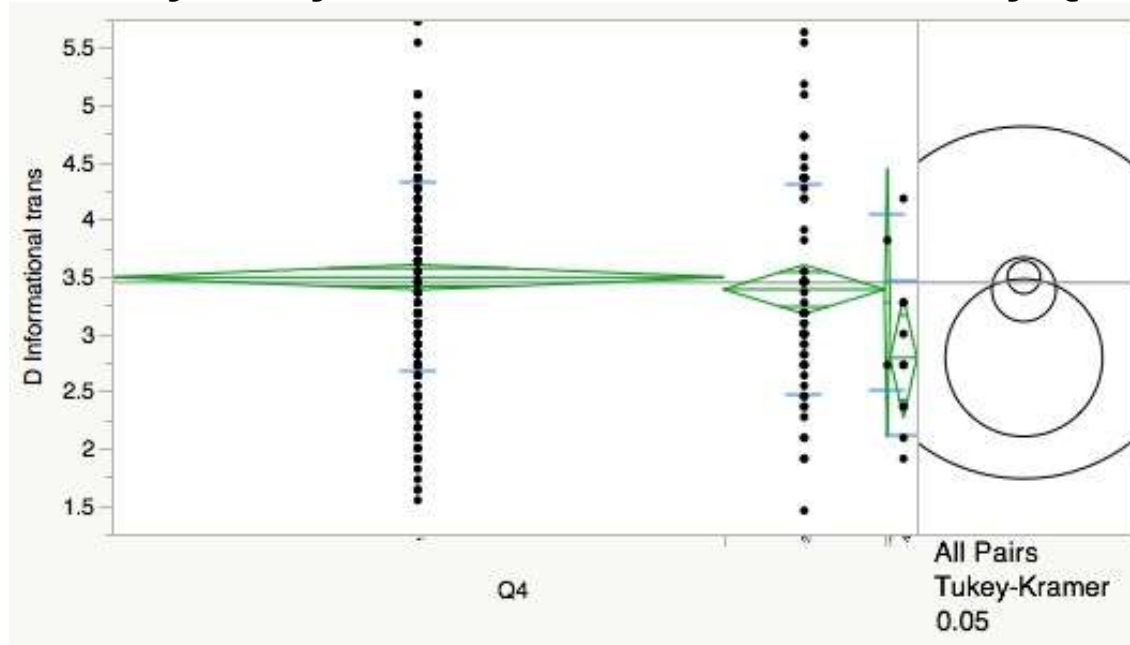
Nonparametric Comparisons For Each Pair Using Wilcoxon Method

q* Alpha
1.95996 0.05

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower CL	Upper CL
2	1	-5.1278	8.407413	-0.60992	0.5419	-0.090909	-0.272727	0.181818
4	3	-5.9333	5.470993	-1.08451	0.2781	-0.181818	-0.545455	0.181818

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower CL	Upper CL
3	2	-12.1703	7.581049	-1.60536	0.1084	-0.272727	-0.636364	0.090909
3	1	-16.0523	7.949225	-2.01935	0.0435*	-0.363636	-0.636364	0.000000
4	2	-23.2733	7.573433	-3.07301	0.0021*	-0.545455	-0.818182	-0.181818
4	1	-25.8646	7.936651	-3.25889	0.0011*	-0.545455	-0.909091	-0.272727

Oneway Analysis of D Informational trans By Q4



Oneway Anova Summary of Fit

Rsquare	0.02361
Adj Rsquare	0.013715
Root Mean Square Error	0.842358
Mean of Response	3.447879
Observations (or Sum Wgts)	300

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
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Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Q4	3	5.07884	1.69295	2.3859	0.0693
Error	296	210.03179	0.70957		
C. Total	299	215.11063			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
1	228	3.49402	0.05579	3.3842	3.6038
2	60	3.38788	0.10875	3.1739	3.6019
3	2	3.27273	0.59564	2.1005	4.4449
4	10	2.79091	0.26638	2.2667	3.3151

Std Error uses a pooled estimate of error variance

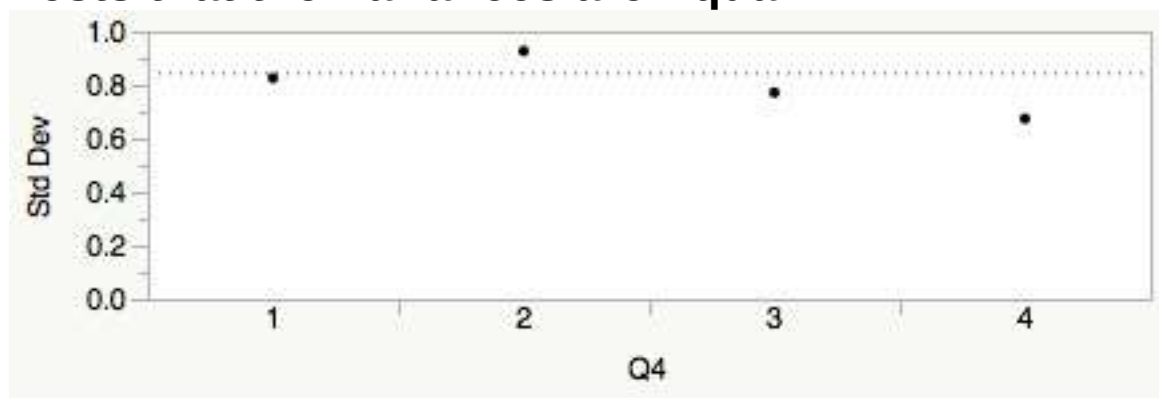
Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
1	228	35627.0	34314.0	156.259	2.047
2	60	8458.50	9030.00	140.975	-0.951
3	2	259.500	301.000	129.750	-0.336
4	10	805.000	1505.00	80.500	-2.595

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
8.3655	3	0.0390*

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
1	228	0.8255578	0.6736548	0.6718501
2	60	0.9264697	0.7296970	0.7181818
3	2	0.7713892	0.5454545	0.5454545
4	10	0.6735867	0.5127273	0.5000000

Test	F Ratio	DFNum	DFDen	Prob > F
O'Brien[.5]	1.2957	2	295	0.2753
Brown-Forsythe	0.5872	3	296	0.6238
Levene	0.6535	3	296	0.5813
Bartlett	0.6267	3	.	0.5977

Warning: Small sample sizes. Use Caution.

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
2.7199	3	4.5598	0.1642

Means Comparisons

Comparisons for all pairs using Tukey-Kramer
HSD

Confidence Quantile

q*	Alpha
2.58371	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

	1	2	3	4
1	-0.2038	-0.2096	-1.3244	-0.0001
2	-0.2096	-0.3974	-1.4492	-0.1464
3	-1.3244	-1.4492	-2.1764	-1.2040
4	-0.0001	-0.1464	-1.2040	-0.9733

Positive values show pairs of means that are significantly different.

Connecting Letters Report

Level		Mean
1	A	3.4940191
2	A	3.3878788
3	A	3.2727273
4	A	2.7909091

Levels not connected by same letter are significantly different.

Ordered Differences Report

Level	- Level	Difference	Std Err Dif	Lower CL	Upper CL	p-Value
1	4	0.7031100	0.2721559	-6.22e-5	1.406282	0.0500
2	4	0.5969697	0.2877200	-0.14642	1.340355	0.1638
3	4	0.4818182	0.6524876	-1.20402	2.167658	0.8815
1	3	0.2212919	0.5982437	-1.32440	1.766981	0.9827
2	3	0.1151515	0.6054829	-1.44924	1.679545	0.9976
1	2	0.1061404	0.1222221	-0.20965	0.421927	0.8212

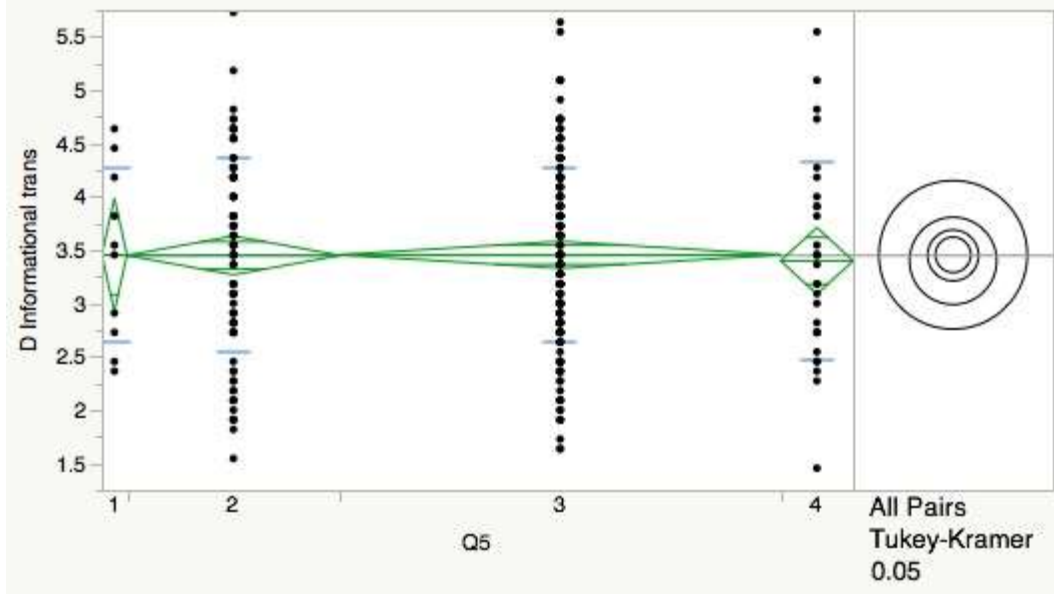


Nonparametric Comparisons For Each Pair Using Wilcoxon Method

q* Alpha
1.95996 0.05

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower CL	Upper CL
3	2	-1.8083	12.94584	-0.13968	0.8889	-0.090909	-1.72727	1.36364
4	3	-2.1000	2.76340	-0.75993	0.4473	-0.545455	.	.
4	2	-14.3500	6.94008	-2.06770	0.0387*	-0.545455	-1.09091	0.00000
2	1	-14.7053	12.07574	-1.21775	0.2233	-0.181818	-0.45455	0.09091
3	1	-20.6798	47.22268	-0.43792	0.6614	-0.181818	-1.54545	1.09091
4	1	-59.7088	22.22922	-2.68605	0.0072*	-0.727273	-1.27273	-0.18182

Oneway Analysis of D Informational trans By Q5



Oneway Anova Summary of Fit

Rsquare 0.000379
 Adj Rsquare -0.00975
 Root Mean Square Error 0.85232
 Mean of Response 3.447879
 Observations (or Sum Wgts) 300

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Q5	3	0.08148	0.027159	0.0374	0.9903
Error	296	215.02916	0.726450		
C. Total	299	215.11063			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
1	10	3.45455	0.26953	2.9241	3.9850
2	85	3.44920	0.09245	3.2673	3.6311
3	176	3.45506	0.06425	3.3286	3.5815
4	29	3.39812	0.15827	3.0866	3.7096

Std Error uses a pooled estimate of error variance

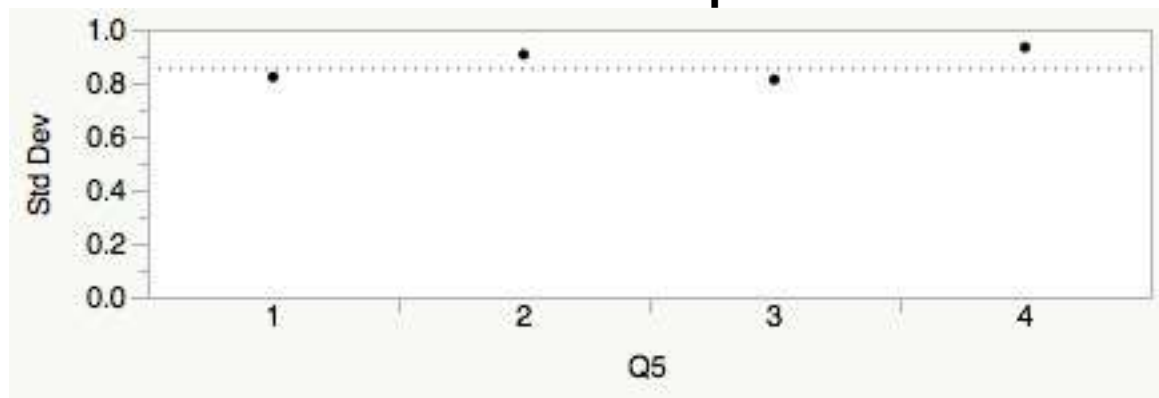
Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
1	10	1510.50	1505.00	151.050	0.019
2	85	12917.5	12792.5	151.971	0.184
3	176	26592.5	26488.0	151.094	0.141
4	29	4129.50	4364.50	142.397	-0.529

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
0.2865	3	0.9625

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
1	10	0.8221006	0.6727273	0.6727273
2	85	0.9062024	0.7440075	0.7422460
3	176	0.8126797	0.6596485	0.6596074
4	29	0.9332548	0.7315966	0.7304075

Test	F Ratio	DFNum	DFDen	Prob > F
O'Brien[.5]	0.8636	3	296	0.4603
Brown-Forsythe	0.6057	3	296	0.6118
Levene	0.6402	3	296	0.5897
Bartlett	0.6353	3	.	0.5922

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
0.0310	3	35.429	0.9925

Means Comparisons

Comparisons for all pairs using Tukey-Kramer HSD

Confidence Quantile

q*	Alpha
2.58371	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

	3	1	2	4
3	-0.23475	-0.71537	-0.28501	-0.38439
1	-0.71537	-0.98483	-0.73086	-0.75114
2	-0.28501	-0.73086	-0.33779	-0.42250
4	-0.38439	-0.75114	-0.42250	-0.57831

Positive values show pairs of means that are significantly different.

Connecting Letters Report

Level	Mean
3 A	3.4550620
1 A	3.4545455
2 A	3.4491979
4 A	3.3981191

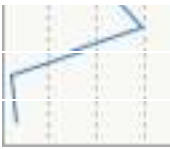
Levels not connected by same letter are significantly different.

Ordered Differences Report

Level	- Level	Difference	Std Err Dif	Lower CL	Upper CL	p-Value
3	4	0.0569429	0.1708144	-0.384392	0.4982779	0.9872
1	4	0.0564263	0.3125620	-0.751144	0.8639962	0.9979
2	4	0.0510787	0.1832934	-0.422498	0.5246559	0.9924



Level	- Level	Difference	Std Err Dif	Lower CL	Upper CL	p-Value
3	2	0.0058641	0.1125790	-0.285007	0.2967357	0.9999
1	2	0.0053476	0.2849411	-0.730858	0.7415533	1.0000
3	1	0.0005165	0.2770786	-0.715375	0.7164076	1.0000

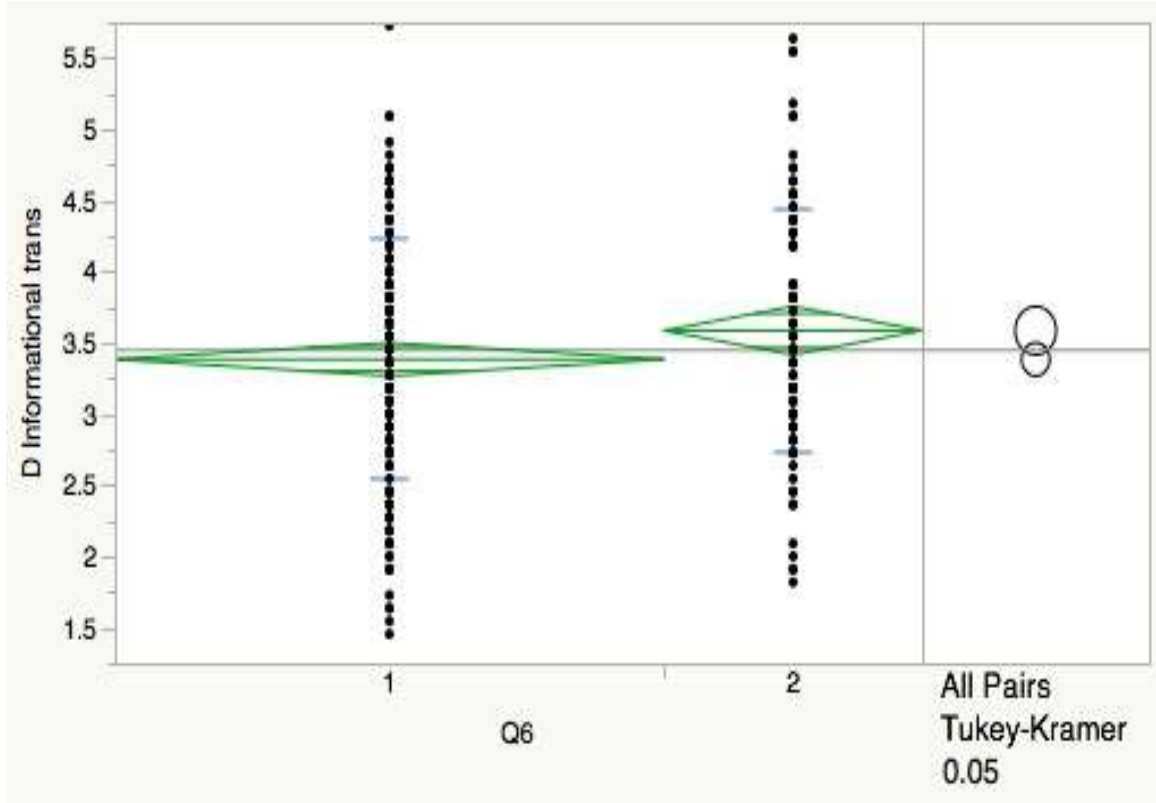


Nonparametric Comparisons For Each Pair Using Wilcoxon Method

q^*
1.95996

Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower CL	Upper CL
3	1	0.10568	17.48935	0.006043	0.9952	0.000000	-0.545455	0.5454545
2	1	0.00000	9.20764	0.000000	1.0000	0.000000	-0.636364	0.6363636
4	1	-0.87414	4.17489	-0.209380	0.8342	-0.090909	-0.818182	0.6363636
3	2	-0.95956	9.96431	-0.096300	0.9233	0.000000	-0.272727	0.1818182
4	2	-3.19108	7.10234	-0.449299	0.6532	-0.090909	-0.545455	0.3636364
4	3	-6.34600	11.88022	-0.534165	0.5932	-0.090909	-0.454545	0.2727273

Oneway Analysis of D Informational trans By Q6



Oneway Anova Summary of Fit

Rsquare	0.012381
Adj Rsquare	0.009067
Root Mean Square Error	0.84434
Mean of Response	3.447879
Observations (or Sum Wgts)	300

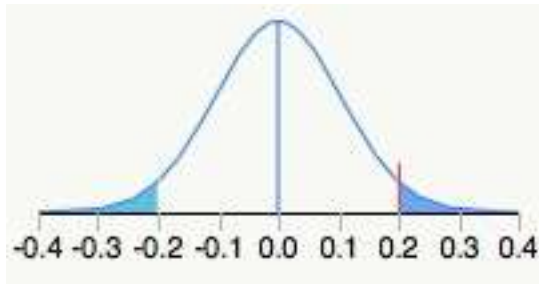
t Test

2-1

Assuming equal variances

Difference	0.20198	t Ratio	1.932802
Std Err Dif	0.10450	DF	298

Upper CL Dif	0.40764	Prob > t	0.0542
Lower CL Dif	-0.00367	Prob > t	0.0271*
Confidence	0.95	Prob < t	0.9729



Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Q6	1	2.66324	2.66324	3.7357	0.0542
Error	298	212.44740	0.71291		
C. Total	299	215.11063			

Means for Oneway Anova

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
1	204	3.38324	0.05912	3.2669	3.4996
2	96	3.58523	0.08618	3.4156	3.7548

Std Error uses a pooled estimate of error variance

Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
1	204	29571.0	30702.0	144.956	-1.614
2	96	15579.0	14448.0	162.281	1.614

2-Sample Test, Normal Approximation

S	Z	Prob> Z
15579	1.61406	0.1065

1-way Test, ChiSquare Approximation

ChiSquare	DF	Prob>ChiSq
2.6075	1	0.1064

Tests that the Variances are Equal



Level	Count	Std Dev	MeanAbsDif to Mean	MeanAbsDif to Median
1	204	0.8388083	0.6897697	0.6862745
2	96	0.8560419	0.7051373	0.7007576

Test	F Ratio	DFNum	DFDen	p-Value
O'Brien[.5]	0.0733	1	298	0.7868
Brown-Forsythe	0.0568	1	298	0.8119
Levene	0.0679	1	298	0.7946
Bartlett	0.0536	1	.	0.8170
F Test 2-sided	1.0415	95	203	0.8004

Welch's Test

Welch Anova testing Means Equal, allowing Std Devs Not Equal

F Ratio	DFNum	DFDen	Prob > F
3.6812	1	182.78	0.0566

t Test
1.9187

Means Comparisons

Comparisons for all pairs using Tukey-Kramer HSD

Confidence Quantile

q*	Alpha
1.96796	0.05

LSD Threshold Matrix

Abs(Dif)-HSD

	2	1
2	-0.23984	-0.00367
1	-0.00367	-0.16453

Positive values show pairs of means that are significantly different.

Nonparametric Comparisons For Each Pair Using Wilcoxon Method

								q*	
								1.95996	
Level	- Level	Score Mean Difference	Std Err Dif	Z	p-Value	Hodges-Lehmann	Lower CL	Upper CL	
2	1	17.31771	10.72930	1.614057	0.1065	0.1818182	0	0.3636364	

Appendix H:SAS reports

The SAS System

The FREQ Procedure

Q1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	22	7.33	22	7.33
2	186	62.00	208	69.33
3	19	6.33	227	75.67
4	73	24.33	300	100.00

Q2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	175	58.33	175	58.33
2	125	41.67	300	100.00

Q3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	110	36.67	110	36.67
2	101	33.67	211	70.33
3	44	14.67	255	85.00
4	45	15.00	300	100.00

Q4	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	228	76.00	228	76.00
2	60	20.00	288	96.00

Q4	Frequency	Percent	Cumulative Frequency	Cumulative Percent
3	2	0.67	290	96.67
4	10	3.33	300	100.00

Q5	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	10	3.33	10	3.33
2	85	28.33	95	31.67
3	176	58.67	271	90.33
4	29	9.67	300	100.00

Q6	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	204	68.00	204	68.00
2	96	32.00	300	100.00

Level of involvement by NGO

The FREQ Procedure

Frequency Percent Row Pct Col Pct	Table of NGO by scale				
	NGO	scale			
		High involvement	Low involvement	Medium involvement	Total
	Both	31 10.33 31.00	8 2.67 8.00	61 20.33 61.00	100 33.33

	30.10	30.77	35.67	
PADD	27	10	63	100
	9.00	3.33	21.00	33.33
	27.00	10.00	63.00	
	26.21	38.46	36.84	
SAB	45	8	47	100
	15.00	2.67	15.67	33.33
	45.00	8.00	47.00	
	43.69	30.77	27.49	
Total	103	26	171	300
	34.33	8.67	57.00	100.00

Statistics for Table of NGO by scale

Statistic	DF	Value	Prob
Chi-Square	4	8.1782	0.0853
Likelihood Ratio Chi-Square	4	8.0946	0.0882
Mantel-Haenszel Chi-Square	1	4.5326	0.0333
Phi Coefficient		0.1651	
Contingency Coefficient		0.1629	
Cramer's V		0.1167	

Sample Size = 300

Demographic variables by levels

The FREQ Procedure

Frequency Percent Row Pct Col Pct	Table of Q1 by scale				
	Q1	scale			
		High involvement	Low involvement	Medium involvement	Total
1		7	0	15	22
		2.33	0.00	5.00	7.33
		31.82	0.00	68.18	
		6.80	0.00	8.77	
2		78	16	92	186
		26.00	5.33	30.67	62.00
		41.94	8.60	49.46	
		75.73	61.54	53.80	
3		2	3	14	19
		0.67	1.00	4.67	6.33
		10.53	15.79	73.68	
		1.94	11.54	8.19	
4		16	7	50	73
		5.33	2.33	16.67	24.33
		21.92	9.59	68.49	
		15.53	26.92	29.24	

Total	103	26	171	300
	34.33	8.67	57.00	100.00

Statistics for Table of Q1 by scale

Statistic	DF	Value	Prob
Chi-Square	6	17.6331	0.0072
Likelihood Ratio Chi-Square	6	20.6545	0.0021
Mantel-Haenszel Chi-Square	1	6.8420	0.0089
Phi Coefficient		0.2424	
Contingency Coefficient		0.2356	
Cramer's V		0.1714	

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of Q2 by scale				
	Q2	scale			
		High involvement	Low involvement	Medium involvement	Total
1		59	14	102	175
		19.67	4.67	34.00	58.33
		33.71	8.00	58.29	
		57.28	53.85	59.65	
2		44	12	69	125
		14.67	4.00	23.00	41.67
		35.20	9.60	55.20	
		42.72	46.15	40.35	

Total	103	26	171	300
	34.33	8.67	57.00	100.00

Statistics for Table of Q2 by scale

Statistic	DF	Value	Prob
Chi-Square	2	0.3841	0.8253
Likelihood Ratio Chi-Square	2	0.3825	0.8259
Mantel-Haenszel Chi-Square	1	0.1762	0.6747
Phi Coefficient		0.0358	
Contingency Coefficient		0.0358	
Cramer's V		0.0358	

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of Q3 by scale				
	Q3	scale			
		High involvement	Low involvement	Medium involvement	Total
1		30	12	68	110
		10.00	4.00	22.67	36.67
		27.27	10.91	61.82	
		29.13	46.15	39.77	
2		35	7	59	101
		11.67	2.33	19.67	33.67
		34.65	6.93	58.42	
		33.98	26.92	34.50	

3	14	3	27	44
	4.67	1.00	9.00	14.67
	31.82	6.82	61.36	
	13.59	11.54	15.79	
4	24	4	17	45
	8.00	1.33	5.67	15.00
	53.33	8.89	37.78	
	23.30	15.38	9.94	
Total	103	26	171	300
	34.33	8.67	57.00	100.00

Statistics for Table of Q3 by scale

Statistic	DF	Value	Prob
Chi-Square	6	11.1259	0.0846
Likelihood Ratio Chi-Square	6	10.9329	0.0905
Mantel-Haenszel Chi-Square	1	6.8765	0.0087
Phi Coefficient		0.1926	
Contingency Coefficient		0.1891	
Cramer's V		0.1362	

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of Q4 by scale			
	Q4	scale		
		High involvement	Low involvement	Medium involvement
				Total

1	76	19	133	228
	25.33	6.33	44.33	76.00
	33.33	8.33	58.33	
	73.79	73.08	77.78	
2	24	6	30	60
	8.00	2.00	10.00	20.00
	40.00	10.00	50.00	
	23.30	23.08	17.54	
3	0	1	1	2
	0.00	0.33	0.33	0.67
	0.00	50.00	50.00	
	0.00	3.85	0.58	
4	3	0	7	10
	1.00	0.00	2.33	3.33
	30.00	0.00	70.00	
	2.91	0.00	4.09	
Total	103	26	171	300
	34.33	8.67	57.00	100.00

Statistics for Table of Q4 by scale

Statistic	DF	Value	Prob
Chi-Square	6	7.2311	0.3000
Likelihood Ratio Chi-Square	6	6.6651	0.3529

Statistic	DF	Value	Prob
Mantel-Haenszel Chi-Square	1	0.0154	0.9014
Phi Coefficient		0.1553	
Contingency Coefficient		0.1534	
Cramer's V		0.1098	
WARNING: 42% of the cells have expected counts less than 5. Chi-Square may not be a valid test.			

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of Q5 by scale				
	Q5	scale			
		High involvement	Low involvement	Medium involvement	Total
1		1	2	7	10
		0.33	0.67	2.33	3.33
		10.00	20.00	70.00	
		0.97	7.69	4.09	
2		26	6	53	85
		8.67	2.00	17.67	28.33
		30.59	7.06	62.35	
		25.24	23.08	30.99	
3		65	18	93	176
		21.67	6.00	31.00	58.67
		36.93	10.23	52.84	
		63.11	69.23	54.39	

4	11	0	18	29
	3.67	0.00	6.00	9.67
	37.93	0.00	62.07	
	10.68	0.00	10.53	
Total	103	26	171	300
	34.33	8.67	57.00	100.00

Statistics for Table of Q5 by scale

Statistic	DF	Value	Prob
Chi-Square	6	8.6594	0.1937
Likelihood Ratio Chi-Square	6	11.4121	0.0764
Mantel-Haenszel Chi-Square	1	1.8729	0.1711
Phi Coefficient		0.1699	
Contingency Coefficient		0.1675	
Cramer's V		0.1201	
WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.			

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of Q6 by scale				
	Q6	scale			
		High involvement	Low involvement	Medium involvement	Total
1		72	19	113	204
		24.00	6.33	37.67	68.00

	35.29 69.90	9.31 73.08	55.39 66.08	
2	31 10.33 32.29 30.10	7 2.33 7.29 26.92	58 19.33 60.42 33.92	96 32.00
Total	103 34.33	26 8.67	171 57.00	300 100.00

Statistics for Table of Q6 by scale

Statistic	DF	Value	Prob
Chi-Square	2	0.7685	0.6810
Likelihood Ratio Chi-Square	2	0.7771	0.6780
Mantel-Haenszel Chi-Square	1	0.4863	0.4856
Phi Coefficient		0.0506	
Contingency Coefficient		0.0505	
Cramer's V		0.0506	

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of Q1 by scaleexp				
	Q1	scaleexp			
		High expertise	Low expertise	Medium expertise	Total
	1	10	1	11	22

	3.33 45.45 6.45	0.33 4.55 5.00	3.67 50.00 8.80	7.33
2	100 33.33 53.76 64.52	10 3.33 5.38 50.00	76 25.33 40.86 60.80	186 62.00
3	7 2.33 36.84 4.52	2 0.67 10.53 10.00	10 3.33 52.63 8.00	19 6.33
4	38 12.67 52.05 24.52	7 2.33 9.59 35.00	28 9.33 38.36 22.40	73 24.33
Total	155 51.67	20 6.67	125 41.67	300 100.00

Statistics for Table of Q1 by scaleexp

Statistic	DF	Value	Prob
Chi-Square	6	4.2416	0.6440
Likelihood Ratio Chi-Square	6	4.1530	0.6560
Mantel-Haenszel Chi-Square	1	0.0558	0.8133

Statistic	DF	Value	Prob
Phi Coefficient		0.1189	
Contingency Coefficient		0.1181	
Cramer's V		0.0841	
WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.			

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of Q2 by scaleexp				
	Q2	scaleexp			
		High expertise	Low expertise	Medium expertise	Total
1		90	12	73	175
		30.00	4.00	24.33	58.33
		51.43	6.86	41.71	
		58.06	60.00	58.40	
2		65	8	52	125
		21.67	2.67	17.33	41.67
		52.00	6.40	41.60	
		41.94	40.00	41.60	
Total		155	20	125	300
		51.67	6.67	41.67	100.00

Statistics for Table of Q2 by scaleexp

Statistic	DF	Value	Prob
-----------	----	-------	------

Statistic	DF	Value	Prob
Chi-Square	2	0.0277	0.9862
Likelihood Ratio Chi-Square	2	0.0278	0.9862
Mantel-Haenszel Chi-Square	1	0.0037	0.9515
Phi Coefficient		0.0096	
Contingency Coefficient		0.0096	
Cramer's V		0.0096	

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of Q3 by scaleexp				
	Q3	scaleexp			
		High expertise	Low expertise	Medium expertise	Total
1		54	7	49	110
		18.00	2.33	16.33	36.67
		49.09	6.36	44.55	
		34.84	35.00	39.20	
2		46	6	49	101
		15.33	2.00	16.33	33.67
		45.54	5.94	48.51	
		29.68	30.00	39.20	
3		24	3	17	44
		8.00	1.00	5.67	14.67
		54.55	6.82	38.64	

	15.48	15.00	13.60	
4	31	4	10	45
	10.33	1.33	3.33	15.00
	68.89	8.89	22.22	
	20.00	20.00	8.00	
Total	155	20	125	300
	51.67	6.67	41.67	100.00

Statistics for Table of Q3 by scaleexp

Statistic	DF	Value	Prob
Chi-Square	6	9.4936	0.1477
Likelihood Ratio Chi-Square	6	10.0343	0.1232
Mantel-Haenszel Chi-Square	1	5.6252	0.0177
Phi Coefficient		0.1779	
Contingency Coefficient		0.1751	
Cramer's V		0.1258	

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of Q4 by scaleexp				
	Q4	scaleexp			
		High expertise	Low expertise	Medium expertise	Total
	1	109	15	104	228
	36.33	5.00	34.67	76.00	

	47.81 70.32	6.58 75.00	45.61 83.20	
2	39 13.00 65.00 25.16	3 1.00 5.00 15.00	18 6.00 30.00 14.40	60 20.00
3	0 0.00 0.00 0.00	1 0.33 50.00 5.00	1 0.33 50.00 0.80	2 0.67
4	7 2.33 70.00 4.52	1 0.33 10.00 5.00	2 0.67 20.00 1.60	10 3.33
Total	155 51.67	20 6.67	125 41.67	300 100.00

Statistics for Table of Q4 by scaleexp

Statistic	DF	Value	Prob
Chi-Square	6	14.4310	0.0252
Likelihood Ratio Chi-Square	6	12.3796	0.0540
Mantel-Haenszel Chi-Square	1	5.0816	0.0242
Phi Coefficient		0.2193	

Statistic	DF	Value	Prob
Contingency Coefficient		0.2142	
Cramer's V		0.1551	
WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.			

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of Q5 by scaleexp				
	Q5	scaleexp			
		High expertise	Low expertise	Medium expertise	Total
1		3	3	4	10
		1.00	1.00	1.33	3.33
		30.00	30.00	40.00	
		1.94	15.00	3.20	
2		44	3	38	85
		14.67	1.00	12.67	28.33
		51.76	3.53	44.71	
		28.39	15.00	30.40	
3		92	12	72	176
		30.67	4.00	24.00	58.67
		52.27	6.82	40.91	
		59.35	60.00	57.60	
4		16	2	11	29

	5.33	0.67	3.67	9.67
	55.17	6.90	37.93	
	10.32	10.00	8.80	
Total	155	20	125	300
	51.67	6.67	41.67	100.00

Statistics for Table of Q5 by scaleexp

Statistic	DF	Value	Prob
Chi-Square	6	10.7367	0.0969
Likelihood Ratio Chi-Square	6	7.3505	0.2896
Mantel-Haenszel Chi-Square	1	0.5925	0.4415
Phi Coefficient		0.1892	
Contingency Coefficient		0.1859	
Cramer's V		0.1338	
WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.			

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of Q6 by scaleexp				
	Q6	scaleexp			
		High expertise	Low expertise	Medium expertise	Total
	1	103	14	87	204
		34.33	4.67	29.00	68.00
		50.49	6.86	42.65	

	66.45	70.00	69.60	
2	52	6	38	96
	17.33	2.00	12.67	32.00
	54.17	6.25	39.58	
	33.55	30.00	30.40	
Total	155	20	125	300
	51.67	6.67	41.67	100.00

Statistics for Table of Q6 by scaleexp

Statistic	DF	Value	Prob
Chi-Square	2	0.3546	0.8375
Likelihood Ratio Chi-Square	2	0.3550	0.8374
Mantel-Haenszel Chi-Square	1	0.3201	0.5715
Phi Coefficient		0.0344	
Contingency Coefficient		0.0344	
Cramer's V		0.0344	

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of Q1 by scaleW				
	Q1	scaleW			
		High trustworthiness	Low trustworthiness	Medium trustworthiness	Total
	1	15	0	7	22
		5.00	0.00	2.33	7.33

	68.18 10.14	0.00 0.00	31.82 5.34	
2	88 29.33 47.31 59.46	14 4.67 7.53 66.67	84 28.00 45.16 64.12	186 62.00
3	9 3.00 47.37 6.08	2 0.67 10.53 9.52	8 2.67 42.11 6.11	19 6.33
4	36 12.00 49.32 24.32	5 1.67 6.85 23.81	32 10.67 43.84 24.43	73 24.33
Total	148 49.33	21 7.00	131 43.67	300 100.00

Statistics for Table of Q1 by scaleW

Statistic	DF	Value	Prob
Chi-Square	6	4.5204	0.6066
Likelihood Ratio Chi-Square	6	5.9185	0.4324
Mantel-Haenszel Chi-Square	1	0.2049	0.6508

Statistic	DF	Value	Prob
Phi Coefficient		0.1228	
Contingency Coefficient		0.1218	
Cramer's V		0.0868	

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of Q2 by scaleW			
	Q2	scaleW		
		High trustworthine SS	Low trustworthine SS	Medium trustworthine SS
				Total
1		93	9	73
		31.00	3.00	24.33
		53.14	5.14	41.71
		62.84	42.86	55.73
2		55	12	58
		18.33	4.00	19.33
		44.00	9.60	46.40
		37.16	57.14	44.27
Total		148	21	131
		49.33	7.00	43.67
				300
				100.00

Statistics for Table of Q2 by scaleW

Statistic	DF	Value	Prob
Chi-Square	2	3.6715	0.1595

Statistic	DF	Value	Prob
Likelihood Ratio Chi-Square	2	3.6459	0.1615
Mantel-Haenszel Chi-Square	1	1.4995	0.2207
Phi Coefficient		0.1106	
Contingency Coefficient		0.1100	
Cramer's V		0.1106	

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of Q3 by scaleW				
	Q3	scaleW			
		High trustworthiness	Low trustworthiness	Medium trustworthiness	Total
1		54	5	51	110
		18.00	1.67	17.00	36.67
		49.09	4.55	46.36	
		36.49	23.81	38.93	
2		50	8	43	101
		16.67	2.67	14.33	33.67
		49.50	7.92	42.57	
		33.78	38.10	32.82	
3		18	3	23	44
		6.00	1.00	7.67	14.67
		40.91	6.82	52.27	
		12.16	14.29	17.56	

4	26	5	14	45
	8.67	1.67	4.67	15.00
	57.78	11.11	31.11	
	17.57	23.81	10.69	
Total	148	21	131	300
	49.33	7.00	43.67	100.00

Statistics for Table of Q3 by scaleW

Statistic	DF	Value	Prob
Chi-Square	6	6.0247	0.4204
Likelihood Ratio Chi-Square	6	6.1289	0.4089
Mantel-Haenszel Chi-Square	1	0.6941	0.4048
Phi Coefficient		0.1417	
Contingency Coefficient		0.1403	
Cramer's V		0.1002	

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of Q4 by scaleW				
	Q4	scaleW			
		High trustworthiness	Low trustworthiness	Medium trustworthiness	Total
	1	114 38.00	16 5.33	98 32.67	228 76.00

	50.00 77.03	7.02 76.19	42.98 74.81	
2	30 10.00 50.00 20.27	4 1.33 6.67 19.05	26 8.67 43.33 19.85	60 20.00
3	0 0.00 0.00 0.00	1 0.33 50.00 4.76	1 0.33 50.00 0.76	2 0.67
4	4 1.33 40.00 2.70	0 0.00 0.00 0.00	6 2.00 60.00 4.58	10 3.33
Total	148 49.33	21 7.00	131 43.67	300 100.00

Statistics for Table of Q4 by scaleW

Statistic	DF	Value	Prob
Chi-Square	6	7.8370	0.2503
Likelihood Ratio Chi-Square	6	6.4002	0.3799
Mantel-Haenszel Chi-Square	1	0.7277	0.3936

Statistic	DF	Value	Prob
Phi Coefficient		0.1616	
Contingency Coefficient		0.1596	
Cramer's V		0.1143	
WARNING: 58% of the cells have expected counts less than 5. Chi-Square may not be a valid test.			

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of Q5 by scaleW				
	Q5	scaleW			
		High trustworthiness	Low trustworthiness	Medium trustworthiness	Total
1		5	1	4	10
		1.67	0.33	1.33	3.33
		50.00	10.00	40.00	
		3.38	4.76	3.05	
2		48	3	34	85
		16.00	1.00	11.33	28.33
		56.47	3.53	40.00	
		32.43	14.29	25.95	
3		86	12	78	176
		28.67	4.00	26.00	58.67
		48.86	6.82	44.32	
		58.11	57.14	59.54	

4	9	5	15	29
	3.00	1.67	5.00	9.67
	31.03	17.24	51.72	
	6.08	23.81	11.45	
Total	148	21	131	300
	49.33	7.00	43.67	100.00

Statistics for Table of Q5 by scaleW

Statistic	DF	Value	Prob
Chi-Square	6	9.5404	0.1454
Likelihood Ratio Chi-Square	6	8.8293	0.1834
Mantel-Haenszel Chi-Square	1	2.4984	0.1140
Phi Coefficient		0.1783	
Contingency Coefficient		0.1756	
Cramer's V		0.1261	
WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.			

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of Q6 by scaleW				
	Q6	scaleW			
		High trustworthiness	Low trustworthiness	Medium trustworthiness	Total
	1	102	13	89	204

	34.00	4.33	29.67	68.00
	50.00	6.37	43.63	
	68.92	61.90	67.94	
2	46	8	42	96
	15.33	2.67	14.00	32.00
	47.92	8.33	43.75	
	31.08	38.10	32.06	
Tot al	148	21	131	300
	49.33	7.00	43.67	100.00

Statistics for Table of Q6 by scaleW

Statistic	DF	Value	Prob
Chi-Square	2	0.4162	0.8121
Likelihood Ratio Chi-Square	2	0.4059	0.8163
Mantel-Haenszel Chi-Square	1	0.0342	0.8534
Phi Coefficient		0.0372	
Contingency Coefficient		0.0372	
Cramer's V		0.0372	

Sample Size = 300

Level of Trustworthiness by NGO

The FREQ Procedure

Frequency Percent Row Pct Col Pct	Table of NGO by scaleW				
	NGO	scaleW			
		High trustworthiness	Low trustworthiness	Medium trustworthiness	Total
		SS	SS	SS	
	Both	47	6	47	100
		15.67	2.00	15.67	33.33
		47.00	6.00	47.00	
		31.76	28.57	35.88	
	PAD D	50	4	46	100
		16.67	1.33	15.33	33.33
		50.00	4.00	46.00	
		33.78	19.05	35.11	

SAB	51	11	38	100
	17.00	3.67	12.67	33.33
	51.00	11.00	38.00	
	34.46	52.38	29.01	
Total	148	21	131	300
	49.33	7.00	43.67	100.00

Statistics for Table of NGO by scaleW

Statistic	DF	Value	Prob
Chi-Square	4	5.0045	0.2868
Likelihood Ratio Chi-Square	4	4.9339	0.2941
Mantel-Haenszel Chi-Square	1	0.9087	0.3405
Phi Coefficient		0.1292	
Contingency Coefficient		0.1281	

Statistic	DF	Value	Prob
Cramer's V		0.0913	

Sample Size = 300

Level of Expertise by NGO

The FREQ Procedure

Frequency Percent Row Pct Col Pct	Table of NGO by scaleexp			
	NGO	scaleexp		
		High expertise	Low expertise	Medium expertise
		Total		
	Both	51	7	42
		17.00	2.33	14.00
		51.00	7.00	42.00
		32.90	35.00	33.60

PADD	42	7	51	100
	14.00	2.33	17.00	33.33
	42.00	7.00	51.00	
	27.10	35.00	40.80	
SAB	62	6	32	100
	20.67	2.00	10.67	33.33
	62.00	6.00	32.00	
	40.00	30.00	25.60	
Total	155	20	125	300
	51.67	6.67	41.67	100.00

Statistics for Table of NGO by scaleexp

Statistic	DF	Value	Prob
Chi-Square	4	8.3199	0.0805

Statistic	DF	Value	Prob
Likelihood Ratio Chi-Square	4	8.3771	0.0787
Mantel-Haenszel Chi-Square	1	2.3801	0.1229
Phi Coefficient		0.1665	
Contingency Coefficient		0.1643	
Cramer's V		0.1178	

Sample Size = 300

Level of involvement and advertising effectiveness in NGO-corporate partnerships

The FREQ Procedure

Frequency Percent Row Pct Col Pct	Table of scale by SSec_D_1			
	scale	SSec_D_1		
		1	2	Total
High involvement		50	53	103
		16.67	17.67	34.33
		48.54	51.46	
		42.74	28.96	
Low involvement		8	18	26
		2.67	6.00	8.67
		30.77	69.23	
		6.84	9.84	

Medium involvement	59	112	171
	19.67	37.33	57.00
	34.50	65.50	
	50.43	61.20	
Total	117	183	300
	39.00	61.00	100.00

Statistics for Table of scale by SSec_D_1

Statistic	DF	Value	Prob
Chi-Square	2	6.1375	0.0465
Likelihood Ratio Chi-Square	2	6.0956	0.0475
Mantel-Haenszel Chi-Square	1	4.9730	0.0257
Phi Coefficient		0.1430	
Contingency Coefficient		0.1416	

Statistic	DF	Value	Prob
Cramer's V		0.1430	

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of scale by SSec_D_2			
	scale	SSec_D_2		
		1	2	Total
	High involvement	31	72	103
		10.33	24.00	34.33
		30.10	69.90	
		21.99	45.28	
	Low involvement	17	9	26
		5.67	3.00	8.67
		65.38	34.62	

	12.06	5.66	
Medium involvement	93	78	171
	31.00	26.00	57.00
	54.39	45.61	
	65.96	49.06	
Total	141	159	300
	47.00	53.00	100.00

Statistics for Table of scale by SSec_D_2

Statistic	DF	Value	Prob
Chi-Square	2	19.0864	<.0001
Likelihood Ratio Chi-Square	2	19.5200	<.0001
Mantel-Haenszel Chi-Square	1	13.9627	0.0002
Phi Coefficient		0.2522	

Statistic	DF	Value	Prob
Contingency Coefficient		0.2446	
Cramer's V		0.2522	

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of scale by SSec_D_3			
	scale	SSec_D_3		
		1	2	Total
	High involvement	45 15.00 43.69 26.16	58 19.33 56.31 45.31	103 34.33
	Low involvement	16 5.33	10 3.33	26 8.67

	61.54	38.46	
	9.30	7.81	
Medium involvement	111	60	171
	37.00	20.00	57.00
	64.91	35.09	
	64.53	46.88	
Total	172	128	300
	57.33	42.67	100.00

Statistics for Table of scale by SSec_D_3

Statistic	DF	Value	Prob
Chi-Square	2	12.0416	0.0024
Likelihood Ratio Chi-Square	2	12.0101	0.0025
Mantel-Haenszel Chi-Square	1	11.4975	0.0007

Statistic	DF	Value	Prob
Phi Coefficient		0.2003	
Contingency Coefficient		0.1964	
Cramer's V		0.2003	

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of scale by SSec_D_4			
	scale	SSec_D_4		
		1	2	Total
	High involvement	88 29.33 85.44 39.29	15 5.00 14.56 19.74	103 34.33
	Low involvement	11	15	26

	3.67	5.00	8.67
	42.31	57.69	
	4.91	19.74	
Medium involvement	125	46	171
	41.67	15.33	57.00
	73.10	26.90	
	55.80	60.53	
Total	224	76	300
	74.67	25.33	100.00

Statistics for Table of scale by SSec_D_4

Statistic	DF	Value	Prob
Chi-Square	2	20.9312	<.0001
Likelihood Ratio Chi-Square	2	19.5179	<.0001

Statistic	DF	Value	Prob
Mantel-Haenszel Chi-Square	1	3.8655	0.0493
Phi Coefficient		0.2641	
Contingency Coefficient		0.2554	
Cramer's V		0.2641	

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of scale by SSec_D_5			
	scale	SSec_D_5		
		1	2	Total
	High involvement	81	22	103
		27.00	7.33	34.33
		78.64	21.36	
		39.51	23.16	

Low involvement	9	17	26
	3.00	5.67	8.67
	34.62	65.38	
	4.39	17.89	
Medium involvement	115	56	171
	38.33	18.67	57.00
	67.25	32.75	
	56.10	58.95	
Total	205	95	300
	68.33	31.67	100.00

Statistics for Table of scale by SSec_D_5

Statistic	DF	Value	Prob
Chi-Square	2	18.8099	<.0001

Statistic	DF	Value	Prob
Likelihood Ratio Chi-Square	2	17.9344	0.0001
Mantel-Haenszel Chi-Square	1	2.7683	0.0961
Phi Coefficient		0.2504	
Contingency Coefficient		0.2429	
Cramer's V		0.2504	

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of scale by SSec_D_6			
	scale	SSec_D_6		
		1	2	Total
	High involvement	78 26.00 75.73	25 8.33 24.27	103 34.33

	43.82	20.49	
Low involvement	10	16	26
	3.33	5.33	8.67
	38.46	61.54	
	5.62	13.11	
Medium involvement	90	81	171
	30.00	27.00	57.00
	52.63	47.37	
	50.56	66.39	
Total	178	122	300
	59.33	40.67	100.00

Statistics for Table of scale by SSec_D_6

Statistic	DF	Value	Prob

Statistic	DF	Value	Prob
Chi-Square	2	19.3511	<.0001
Likelihood Ratio Chi-Square	2	19.9807	<.0001
Mantel-Haenszel Chi-Square	1	12.8354	0.0003
Phi Coefficient		0.2540	
Contingency Coefficient		0.2462	
Cramer's V		0.2540	

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of scale by SSec_D_7			
	scale	SSec_D_7		
		1	2	Total
	High involvement	87 29.00	16 5.33	103 34.33

	84.47	15.53	
	35.37	29.63	
Low involvement	22	4	26
	7.33	1.33	8.67
	84.62	15.38	
	8.94	7.41	
Medium involvement	137	34	171
	45.67	11.33	57.00
	80.12	19.88	
	55.69	62.96	
Total	246	54	300
	82.00	18.00	100.00

Statistics for Table of scale by SSec_D_7

Statistic	DF	Value	Prob
Chi-Square	2	0.9557	0.6201
Likelihood Ratio Chi-Square	2	0.9663	0.6168
Mantel-Haenszel Chi-Square	1	0.8664	0.3520
Phi Coefficient		0.0564	
Contingency Coefficient		0.0564	
Cramer's V		0.0564	

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of scale by SSec_D_8			
	scale	SSec_D_8		
		1	2	Total
	High involvement	65 21.67	38 12.67	103 34.33

	63.11	36.89	
	40.88	26.95	
Low involvement	8	18	26
	2.67	6.00	8.67
	30.77	69.23	
	5.03	12.77	
Medium involvement	86	85	171
	28.67	28.33	57.00
	50.29	49.71	
	54.09	60.28	
Total	159	141	300
	53.00	47.00	100.00

Statistics for Table of scale by SSec_D_8

Statistic	DF	Value	Prob
Chi-Square	2	9.8853	0.0071
Likelihood Ratio Chi-Square	2	10.0333	0.0066
Mantel-Haenszel Chi-Square	1	3.5000	0.0614
Phi Coefficient		0.1815	
Contingency Coefficient		0.1786	
Cramer's V		0.1815	

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of scale by SSec_D_9			
	scale	SSec_D_9		
		1	2	Total
	High involvement	69 23.00	34 11.33	103 34.33

	66.99	33.01	
	41.07	25.76	
Low involvement	17	9	26
	5.67	3.00	8.67
	65.38	34.62	
	10.12	6.82	
Medium involvement	82	89	171
	27.33	29.67	57.00
	47.95	52.05	
	48.81	67.42	
Total	168	132	300
	56.00	44.00	100.00

Statistics for Table of scale by SSec_D_9

Statistic	DF	Value	Prob
Chi-Square	2	10.4721	0.0053
Likelihood Ratio Chi-Square	2	10.5915	0.0050
Mantel-Haenszel Chi-Square	1	9.8392	0.0017
Phi Coefficient		0.1868	
Contingency Coefficient		0.1837	
Cramer's V		0.1868	

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of scale by SSec_D_10			
	scale	SSec_D_10		
		1	2	Total
	High involvement	53 17.67	50 16.67	103 34.33

	51.46	48.54	
	39.55	30.12	
Low involvement	12	14	26
	4.00	4.67	8.67
	46.15	53.85	
	8.96	8.43	
Medium involvement	69	102	171
	23.00	34.00	57.00
	40.35	59.65	
	51.49	61.45	
Total	134	166	300
	44.67	55.33	100.00

Statistics for Table of scale by SSec_D_10

Statistic	DF	Value	Prob
Chi-Square	2	3.2331	0.1986
Likelihood Ratio Chi-Square	2	3.2301	0.1989
Mantel-Haenszel Chi-Square	1	3.2217	0.0727
Phi Coefficient		0.1038	
Contingency Coefficient		0.1033	
Cramer's V		0.1038	

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of scale by SSec_D_11			
	scale	SSec_D_11		
		1	2	Total
	High involvement	62 20.67	41 13.67	103 34.33

	60.19	39.81	
	41.06	27.52	
Low involvement	7	19	26
	2.33	6.33	8.67
	26.92	73.08	
	4.64	12.75	
Medium involvement	82	89	171
	27.33	29.67	57.00
	47.95	52.05	
	54.30	59.73	
Total	151	149	300
	50.33	49.67	100.00

Statistics for Table of scale by SSec_D_11

Statistic	DF	Value	Prob
Chi-Square	2	10.0937	0.0064
Likelihood Ratio Chi-Square	2	10.3391	0.0057
Mantel-Haenszel Chi-Square	1	3.1205	0.0773
Phi Coefficient		0.1834	
Contingency Coefficient		0.1804	
Cramer's V		0.1834	

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of scale by SSec_D_12			
	scale	SSec_D_12		
		1	2	Total
	High involvement	73 24.33	30 10.00	103 34.33

	70.87	29.13	
	39.46	26.09	
Low involvement	9	17	26
	3.00	5.67	8.67
	34.62	65.38	
	4.86	14.78	
Medium involvement	103	68	171
	34.33	22.67	57.00
	60.23	39.77	
	55.68	59.13	
Total	185	115	300
	61.67	38.33	100.00

Statistics for Table of scale by SSec_D_12

Statistic	DF	Value	Prob
Chi-Square	2	11.8908	0.0026
Likelihood Ratio Chi-Square	2	11.7447	0.0028
Mantel-Haenszel Chi-Square	1	2.3219	0.1276
Phi Coefficient		0.1991	
Contingency Coefficient		0.1953	
Cramer's V		0.1991	

Sample Size = 300

Frequency Percent Row Pct Col Pct	Table of scale by SSec_D_13			
	scale	SSec_D_13		
		1	2	Total
	High involvement	84 28.00	19 6.33	103 34.33

	81.55	18.45	
	41.38	19.59	
Low involvement	10	16	26
	3.33	5.33	8.67
	38.46	61.54	
	4.93	16.49	
Medium involvement	109	62	171
	36.33	20.67	57.00
	63.74	36.26	
	53.69	63.92	
Total	203	97	300
	67.67	32.33	100.00

Statistics for Table of scale by SSec_D_13

Statistic	DF	Value	Prob
Chi-Square	2	20.4179	<.0001
Likelihood Ratio Chi-Square	2	20.5087	<.0001
Mantel-Haenszel Chi-Square	1	7.7787	0.0053
Phi Coefficient		0.2609	
Contingency Coefficient		0.2524	
Cramer's V		0.2609	

Sample Size = 300