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Assessing Durban Car Guards' Happiness Using The Short Form Oxford Happiness Questionnaire

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Abstract

Car guarding remains a means of earning a living in South Africa's informal sector. With low earnings and harsh working environments, the assumption may be that car guards have low levels of fulfilment and life satisfaction, (which

is referred to as subjective well-being) (SWB) and are consequently unhappy. Yet studies have shown that people who live in poverty such as informal waste pickers and car guards, may have higher than expected levels of life satisfaction. This study investigates the possible determinants of SWB, in terms of self-reported happiness. The Short Form Oxford Happiness Questionnaire (OHQ-SF) was administered to 45 car guards in Durban in 2019. A quantile regression used secondary data about these same car guards' livelihood characteristics to examine the possible determinants of SWB. Findings indicate that four variables were statistically significant (at a 10% level), namely age, age squared, level of education, and race. The age variable exhibited the expected quadratic behaviour, reaching a minimum point of 40.08, and then increased. Happiness was greater on average for car guards with only a primary school level of education (including incomplete secondary education) than complete secondary school or higher education levels. Although studies show that individuals with higher education may be happier, socio-economic situations may make individuals less happy possibly due to the realisation that higher-educated car guards have not reached their potential. Car guards who were religious had higher levels of happiness, with Christians slightly happier, yet due to the small number of respondents, these findings may be skewed. No statistically significant evidence suggests happiness is related solely to earnings.

Keywords: *Car guards, Durban, Happiness, Informal sector, Livelihood, Socio-economics, South Africa, Subjective well-being.*

1. Introduction

In South Africa, 209 000 motor vehicles were stolen in 2023 (StatsSA, 2023). Vehicles are not only smuggled out of the country but are also stolen for spare parts. Rall (2024) reported that two people were arrested after stolen car parts worth over R1 million were recovered after a raid of a Durban North house. This scenario is becoming prevalent.

Lallupersad and Govender (2024) reported that due to shopping malls being a popular attraction for many people, including the appeal of convenient accessibility and parking, there is a need to provide higher levels and standards of security, to protect customers, visitors, and retailers. Singh (2020) noted that shopping malls could be easy targets for criminal activities such as armed robberies, not only within the mall but also in the parking lots, especially where poor security measures were in place. Van Maanenberg (1995) concluded in the 1990s that better security measures at shopping malls (including car guards) could deter or delay criminal opportunities. Steyn, Coetzee, and Klopper (2015) and

Foster and Chasomeris (2017), among many other authors, agree that car guards provide a much-needed service by reducing potential car break-ins or theft, for a small donation from motorists at malls and other sites, where vehicles are parked. Yet for the small earnings, car guards are continuously exposed to potential crime, abuse, and danger from criminals, motorists, security personnel, and even shop management and staff.

Another continuous concern noted in the literature and a sore point for most car guards' is the daily bay fees collected by car guard agents who regulate the car guards. The fees are paid daily for the right to guard cars in a predetermined demarcated area (Steyn, 2018; Foster,Chasomeri, & Blaauw, 2021). Although a few parking areas where car guards are found are not regulated by car guarding agencies, most are, and car guards pay daily bay fees. Another obstacle for car guards is where motorists pay to park at ticketed pay-to-park sites, most motorists may thus be reluctant to pay a car guard on top of the parking fee. It is often individuals with few economic options and migrants who are compelled to work at these less economically viable pay-to-park sites.

In addition to the aforementioned, it could thus be inferred that the majority of car guards experience a low level of subjective well-being and are dissatisfied, given the prevailing circumstances of low employment rates, inadequate service delivery, and safety concerns, among other factors. The assumptions may further be that the rich may be happier than the poor, yet this may only apply to a single point in time, as psychological well-being is, by definition, similar over the lifespan of both the rich and the poor (Easterlin, 2005; Kieny, Flores, Ingenhaag, & Maurer, 2022).

Subjective well-being (SWB) (as self-reported happiness) has received much attention over the past few years, especially in the field of economic studies (Blanchflower & Oswald, 2004), with Easterlin's 1974 paper often viewed as a seminal source (MacKerron, 2012). To date, and to the best of the authors' knowledge, there are no studies relating to car guards' happiness levels in Durban. Due to limited research on this aspect of car guarding, this study aims to contribute towards a better understanding of the SWB of Durban's informal car guards. SWB studies have shown that age, gender, level of education, income, marital status, relationships with others, and migration status (Mulcahy & Kollamparambil, 2016) affect our positive emotions and, therefore, our happiness levels (Oishi & Kesebir, 2015). Additionally, there is a complex

relationship between religion and SWB due to hope-related beliefs (Nell & Rothmann, 2018).

This article, therefore, aims to explore the subjective well-being and happiness of car guards, utilising the Short Form Oxford Happiness Questionnaire (OHQ- SF), which was created from the existing Oxford Happiness Questionnaire (OHQ), with items of similar wording (Hills & Argyle, 2002). The OHQ consists of 29 items, while the OHQ-SF is a compact unidimensional eight-item six-point Likert scale that is shorter, thus easier to administer, and can be applied to a wide range of circumstances. Further, the correlation between the short form and the long form is highly significant. Individual variables such as happiness, life satisfaction, personality, and self-esteem, among others, in both the OHQ and OHQ-SF have high correlation and validity (Hills & Argyle, 2002; Cruise, Lewis, & Guckin, 2006). The correlation among OHQ and OHQ-SF results in past studies was r (168) = 0.93 ($p < 0.001$), thus indicating the validity of the measurement (Hadinezhad & Zaree, 2009).

The OHQ-SF was administered to 45 car guards in Durban between June and August 2019. The article further investigates the possible determinants of the SWB of informal car guards at both free-to-park and ticketed parking sites in Durban. These aspects are individually discussed in the literature review.

2. Happiness and Subjective Well-being

Subjective well-being (SWB) is closely related to happiness. *The World Database of Happiness* defines happiness as the overall degree of life satisfaction an individual may experience (Veenhoven, 2010). From an economic view, happiness simply results from our welfare (Sacks, Stevenson, & Wolfers, 2012). Specifically, happiness is associated with earning an income and sustaining a level of welfare. From a psychological view, happiness can be defined as a combination of positive emotions, which results in subjective well-being (Diener, 2000; Easterlin, 2004). SWB can further be defined as our cognitive skills and our perception of satisfaction and fulfilment (Diener, 2009). Diener, Oishi, and Lucas (2003) further stated that SWB can be defined as a scientific analysis of how we evaluate our lives. Although all these terms are closely related, Bauer (1976) possibly phrased it best, stating that happiness is the main goal pursued in children and ultimately the main goal of human existence. Defined differently, the field of Positive Psychology defines happiness and well-being as a balance between the life standards one has

chosen, and one lives (Compton & Hoffman; 2019). The major determinants of SWB are discussed below.

2.1 Age as a determinant of SWB

Frey and Stutzer (2003) noted that older individuals who may be more mature may be happier, as they can better control their own decisions and actions. In terms of car guards, this may not be true; conversely, as informal workers get older, they may realise that they may never find formal full-time employment again. Younger informal workers may still believe they can find better work opportunities and may, therefore, have higher levels of SWB (Van Wyk, Blaauw, Pretorius, Schenck, & Freeman, 2020). Therefore, individuals' happiness level is based on their level of maturity and outlook on life. As discussed below, it is also related to the individual's race and gender.

2.2 Race and gender as determinants of SWB

In South Africa, historically, the black majority, especially black women, may well have been less satisfied with their lives, and this remains a reality for many (Møller, 2007; Mahadea & Rawat, 2008). Despite the many socio-economic gains, factors such as limited economic growth and low job creation continue to affect the majority of South Africans (Møller, 2000). South Africa's new democracy and freedom cannot satisfy most people's basic needs, resulting in limited freedom (Inglehart, Foa, Peterson, & Welzel, 2008). This would consequently result in reduced happiness for most South Africans, especially informal workers.

2.3 Education and skill levels as determinants of SWB

Møller and Schlemmer (1989) as well as Raghupathi and Raghupathi (2020) noted that education is an important indicator of an individual's perceived quality of life and consequently SWB. Literacy and skill levels, therefore, directly affect an individual's level of happiness (Weech-Maldonado, Miller, & Lord, 2017). Hinks and Gruen (2007) concluded that individuals with some form of tertiary education are happier than individuals with no education. Therefore, individuals who have studied further or have higher skills are usually happier. Botha (2014) noted that for each additional year of education achieved, there is an improvement in the level of life satisfaction. Higher education usually

provides better job opportunities, leading to greater SWB (Diener, Sandvik, Seidlidtz, & Diener, 1993). Yet, with the current economic downturn and life's misfortunes, educated individuals may find no alternate options but to become informal workers and may thus experience lower levels of SWB.

2.4 Income as a determinant of SWB

Cummins (2000) noted that an individual's income is also closely correlated with their SWB. Due to high unemployment levels, this relationship is more distinct in developing countries than in developed countries. Therefore, there is evidence that SWB is negatively impacted by extended periods of unemployment (Diener & Chan, 2011).

Car guards earn minimal wages in general and pay daily bay fees. Further, due to high rent, they usually share their living space with other individuals or families (Foster & Chasomeris, 2017). Overcrowding and the struggles to earn enough money each day leave many informal workers vulnerable, with heightened levels of stress and low emotional well-being (Nkomo, 2019). Generally, wealthier people are happier (Sacks et al., 2012), while poorer people suffer from more stress because of their financial uncertainty and issues such as finding or retaining employment (Diener, Inglehart, & Tay, 2012). Additionally, due to unemployment, individuals may experience unstable positions within the family and social environment and suffer more from loneliness and isolation (Azizi, Mohamadian, Ghajarieah, & Direkvand-Moghadam, 2017).

The increased unhappiness associated with unequal income distribution may align with Easterlin's theory of absolute versus relative incomes (Easterlin, McVey, Switek, Sawangfa, & Zweig, 2010). The theory suggests that people base their life evaluations not only on their current income but also on their economic position in society compared to others. Luttmer (2004) further noted a negative relationship between one's neighbours' incomes and living standards and one's life satisfaction. Therefore, car guards who cannot afford the same standard of accommodation as their co-workers, families, or friends due to lower earnings could be less satisfied with life. Happiness is, therefore, strongly affected by our potential status in society (Ebrahim, Botha, & Snowball, 2013). Diener et al. (1993) concluded that one's relative income is based on one's expectations and this can change, and therefore, car guards may be content with low income and low living standards as it is like their peers.

Hirschman (1973) suggested an alternate view in that if we perceive that others are more successful than us, it may well mean that our opportunity may still be coming. Therefore, even though car guarding offers little opportunity for promotion and self-development, there is a sense of camaraderie and hope among car guards, as noted by Foster and Chasomeris (2017) and among informal workers such as day labourers (Blaauw et al., 2018). This may be based on the belief that better opportunities may be coming.

2.5 Relations with friends and family as a determinant of SWB

In addition to camaraderie among individuals, Wittmer (2020) argued that providing something special for those we care for and sharing in the joys of family are important aspects of meaning-making and well-being. White (2017) found that well-being is materialistic, subjective, and situational. Thus, access to material resources alone does not determine well-being but is also based on the relational perceptions of individuals.

Therefore, social participation and strong relationships with others are important dynamics. For example, the car guards interviewed at a mall in Hatfield, Pretoria, formed an informal social-ethnic group for companionship and to protect one another's livelihoods (Nkhatau, 2017). Blaauw, Botha, and Schenck (2018) found that not all participants in a study of SWB among waste pickers on landfill sites in the Free State suffered from low levels of (self-reported) well-being. The respondents in their study registered a mean score of seven on a 10-point scale, indicating relatively high levels of subjective well-being (SWB). The study did not establish whether living with family increased the SWB of waste pickers. Mogilner, Whillans, and Norton (2018) found that individuals who offer support to others may receive tangible benefits in return in the future. Helping your friends today means they can help you tomorrow. Earnings and social connections consequently have a common link; for example, people rely more on the social support of friends and family when deprived of money (Bianchi & Vohs, 2016). In another example, during stressful times, when car guards are harassed or find their work situation very stressful, the perceived social support from others reduces their stress response (Hooker, Campos, Zoccola, & Dickerson, 2017).

2.6 Culture, migration, and religion as determinant of SWB

Schyns (1998) found that a country's culture plays a significant role in the level of happiness of its citizens. Studies by Yuan, Chan, Marcoulides, and Bentler (2016) and Arunachalam (2019) found that a person's emotions and moods are influenced by their culture and can affect not only the degree but also an individual's impression of happiness. Therefore, individuals with higher degrees of individuality, within a specific culture, will not only comprehend but also experience well-being to a different degree (Kitayama, Markus, & Kurokawa, 2000). It must be noted that even though happiness is universal, due to cultural differences, there may be differences in the measuring scales; for example, in some English versions, item 8 has been removed from the OHQ-SF (Cruise, Lewis, & Guckin, 2006). Therefore, well-being differs among countries (Azizi et al., 2017). No item was removed from this study because the car guards represent many different cultures.

Mulcahy and Kollamparambil (2016) found that migration from rural to urban environments usually has a negative impact on an individual's subjective well-being due to unfulfilled expectations that most migrants experience. Further, due to multiple local ethnicities and the past legacy of apartheid, South Africa has historically reported that the African black population has lower levels of reported well-being relative to other groups, with all other factors being equal (Kingdon & Knight, 2006; Møller, 2007). South Africa has received an estimated 1.02 million migrants between 2016 and 2021 alone (StatsSA, 2020). Many migrant car guards come to South Africa to escape war in their home countries, such as the Democratic Republic of the Congo (DRC), and this may explain why migrants may seem happier than local car guards.

Religion, faith, and spiritual practices are important sources of meaning-making and, therefore, shape an individual's experiences of well-being (Wittmer, 2020). Social interaction and participation in informal and formal situations contribute towards happiness. Religious activities and attending religious places of formal social participation provide unity and a feeling closer to God. This contributes to a level of security, calmness, and comfort that may increase one's happiness levels (Bayrami, Hashemi, Alaie, & Abdollahi Adli Ansar, 2011). Spirituality is closely intertwined with our daily lives and assists us in dealing with the stresses of life (Valkonen & Wallenius-Korkalo, 2016). Therefore, people may use religion and the belief in a greater power to assimilate stressful

events, cope with, and even come to terms with critical life events (Kamthan, Sharma, Bansal, Pant, Saxena, Chansoria, & Shukla, 2019). Authors such as Foster and Chasomeris (2017) noted that many car guards are religious and attend church or religious gatherings.

Nell and Rothmann (2018) revealed a complex relationship between religion and SWB due to hope related to belief. Hope is a large component of salvation-based religions such as Christianity and is found to be closely associated with mental well-being (Lucette, Ironson, Pargament, & Krause, 2016). It allows a believer to not only commence with, but also to continue a chosen path. This is of great value when individuals encounter obstacles in achieving their long-term goals, which may lead to higher life satisfaction and lower adverse effects such as depression (Nell & Rothmann, 2018). Closely related to hope is optimism; Polit and Beck (2008) noted that there is a moderate to strong correlation between optimism and happiness.

3 Methodology

A quantitative research questionnaire, namely the OHQ-SF, was used to determine the happiness levels of 45 car guards in Durban, KwaZulu-Natal. The OHQ-SF, developed by Hills and Argyle in 2001, measures personal happiness using a six-point Likert scale of eight items, with the 3rd, 7th, and 8th question reversed in scoring (due to negative questioning). The OHQ-SF eight items each range from 1 = strongly disagree to 6 = strongly agree, scoring from 8 to 48, where higher scores indicate higher happiness levels. The total score is obtained through the sum of the eight items.

The SF-OHQ contains no reference to time but measures global aspects of happiness that reflect longer periods. Four subjective well-being and happiness factors are examined in the Short Form Oxford Happiness Index and presented in Table 1 below.

Table 1: *Factors covered in the eight Short Form Oxford Happiness Questionnaire*

Factors	Description	Items
Factor 1	Life satisfaction	1
Factor 2	Joy	2,3,8
Factor 3	Self-esteem	4,7
Factor 4	Calm	5,6

Adapted from: Hills & Argyle (2002).

Cummins (2000) argued that, as there is no gold standard to evaluate subjective well-being, interpreting results from different studies is difficult. Single-item happiness and life satisfaction questions are often interchanged. Graham (2012) found that small variations in the wording of questions may influence how respondents interpret and answer questions. For example, the strength between happiness and the current political or economic conditions depends heavily on the wording. Moreover, the respondents may reflect on their personal life or the world in general when responding. Measuring well-being across different cultures also raises concerns, as well-being may differ between different places, and happiness may not have the same level of importance in all cultures (Diener et al., 2012).

Non-probability sampling is widely regarded as an acceptable methodology when surveying difficult-to-reach populations (Bacher, Lemcke, Quatember, & Schmich, 2019), such as car guards. The National Research Council (2013:69-70) stated, "There is a trade-off between maximising coverage of hard-to-reach populations and realising the statistical advantages offered by probability sampling."

Even with small sample sizes, the selectivity of the sample, and a single test period, the OHQ-SF short form appears to be temporarily stable, and therefore, the measures are reliable (Hills & Argyle, 2002) and consistent (Furham & Brewin, 1990). The total happiness score, which is the sum of all the individual item scores, was utilised as the dependent variable (Medvedev, Siegert, Mohammed, Shepherd, Landhuis, & Krageloh, 2017).

The data were computed using IBM SPSS v29 software and additional analytical testing tools to determine the frequency and standard deviation, among others.

3.1 An explanation of the variables used in the quantile regression model

Table 2 lists the variables used in the quantile regression model. Dummy variables were included for the education variable, defined as '0' to indicate a person with primary school or less and '1' to indicate secondary and higher education levels. In addition, the Religion variable was reduced to a binary variable, where 0 indicates 'No religion' and 1 indicates 'Religion.'

Table 2: *A list of explanatory variables used in the quantile regression model*

Earnings (per day)	ZAR income per day.
Age (years)	Age of car guards
Age SQ	Age squared
Months' car guards	Number of Months working as a car guard
Days' work per week	Number of days worked per week
Savings per month	The average ZAR savings per month
Rent per day	ZAR rent paid per day
Bay fees per day	ZAR bay fees paid to agents per day
CG Pay	Dummy variable.1 if the car guard pays daily bay fees (free as a base group)
Motorists pay	Dummy variable. 1 if motorists pay to park (free as the base group)
Gender	Dummy variable. 1 if the respondent is female (male as the base group)
Race	Dummy variable. 1 if the respondent is white (African as the base group)
Education	Dummy variable. 1 if the respondent has secondary education or more (primary education or less is the base group
Nationality	Dummy variable. 1 if the respondent is non-South African (South African is the base group)
Religion	Dummy variable. 1 if the respondent is religious (non-religious is the base group)

Source: *Data collected by the authors*

Results

The determinants of SWB were used in the explanatory variables (Table 2), and the respondents' happiness levels were summarised in Table 3. In Table 4, the findings were based on the linear regression model (Koenker, 2005), using stepwise selection based on Akaike's information criterion (AIC). Table 5 uses quantile regression, which is a more robust alternative to linear regression. Table 6 further presents the data analysed by Mcnemar's test P-value to determine the model's balanced accuracy.
Table 3 summarises the findings of 45 car guards' characteristics and the average happiness percentage based on the SF-OHQ. Frequency included the number of respondents who answered the question, which was then presented as a percentage. The average happiness value is the average sum of the eight happiness questions with a maximum value of 48, while the average happiness is the percentage of the average happiness value.

Table 3: *Summary of respondents' happiness levels*

	Variables	Frequency (respondens out of 45)	Percentage of respondents (out of 45)	Average happiness sum (out of 48)	Average happiness percentage (out of 48)
Age	20-25	2	4.44%	34	70.8%
	26-30	9	20.00%	33.7	70.2%
	31-35	8	17.78%	30.1	62.7%
	36-40	7	15.56%	30.7	64.0%
	41-45	4	8.89%	29	60.4%
	46-50	4	8.89%	34.3	71.5%
	51-55	9	20.00%	35.7	74.4%
	56-60	0	0.00%	0	0.0%
	61-65	2	4.44%	40.5	84.4%
Religion	Religion	41	66.6%	32.8	68.3%
	No religion	4	9%	34.3	71.5%
Gender	Male	40	88.89%	33.5	69.8%
	Female	5	11.11%	28.4	59.2%
Education	primary school or less	7	15.56%	35.3	73.5%
	High school or higher	38	84.44%	32.5	67.7%
Ethic group	Black (African)	15	33.30%	32.3	67.3%
	Black (South African)	16	35.60%	31.4	65.4%
	White	14	31.10%	35.3	73.5%
Nationality	South African	30	66.7%	33.2	67.3%
	Foreigners	15	33.3%	32.3	69.2%
Marital status	Single	21	46.67%	34.3	71.5%
	partner	24	53.33%	31.8	66.3%
No of Children	None	11	24.44%	34.5	71.9%
	1 child	16	35.56%	32.6	67.9%
	2 children	11	24.44%	29.5	61.5%
	3 children	3	6.67%	39	81.3%

	4 or more	4	8.89%	34.7	72.3%
Pay fees per day (motorists do not pay)	none	18	40.00%	34	70.8%
	ZAR 1-R10	3	6.67%	36	75.0%
	ZAR 11-20	0	0.00%	0	0.0%
	ZAR 21-30	6	13.33%	33.7	70.2%
	ZAR 31-40	13	28.89%	30	62.5%
	ZAR 41-50	5	11.11%	33.8	70.4%
Pay fees per day (motorists pay	ZAR 1-10	1	6.67%	30	62.5%
	ZAR 11-20	0	0.00%	0	0.0%
	ZAR 21-30	5	33.33%	32.8	68.3%
	ZAR 31-40	9	60.00%	30.7	64.0%
Daily average income	ZAR1-50	2	4.44%	31.5	65.6%
	ZAR 51-100	19	42.22%	29.9	62.3%
	ZAR 101-150	18	40.00%	35.7	74.4%
	ZAR 151-200	6	13.33%	34.5	71.9%
Best monthly savings	ZAR 0	26	57.78%	32.7	68.1%
	ZAR 1-500	10	22.22%	33	68.8%
	ZAR 501-1000	6	13.33%	34.5	71.9%
	ZAR 1001-2000	3	6.67%	32	66.7%

Source: *Data collected by the authors*

Table 3 shows that individuals around 40 years of age are least happy (37.89 was calculated as the minimum happiness age per Table 4 below). This is consistent with the findings of Gerdtham and Johannesson (1997) regarding minimum happiness ages.

Of the 45 car guards interviewed in Durban, 16 respondents were black South Africans, 15 were black foreigners and 14 were white South Africans. Of these, 38 (84%) of the respondents had secondary or higher levels of education. This consisted of 13 (87%) of the 15 foreigners having secondary or higher levels of education, 12 (75%) of the 16 black South Africans interviewed had secondary or higher levels of education,

and 13 (93%) of the 14 white car guards had higher levels of education. Furthermore, the results confirmed that car guards with higher education levels are unhappier in general than individuals with lower levels of education. This may be due to these individuals being more aware of their lost opportunity of finding better employment, as previously discussed. However, the literature reveals that education may contribute to subjective well-being (SWB) even when controlling for other factors (Nikolaev, 2018). Other studies have also suggested that education *per se* does not affect or may even undermine an individual's happiness, especially when considering objective socio-economic outcomes (Helliwell, 2003; Ngoo, Tey, & Tan, 2015). This may be due to car guards being aware of their low earnings, and the hardship of earning a livelihood of car guarding.

Foreign black car guards were found to be happier than local black car guards. White car guards seem to be the most satisfied. Car guards with more than three children also had reduced happiness, which may well be related to the increased responsibility. This was also confirmed by Mahadea and Ramroop (2015) and their findings on the expense of a larger family. Regarding family and support of the 15 migrants, eight (53%) live with or have family in Durban, while of the 16 black South Africans, 15 (94%) live with or have family in Durban. Regarding the 14 white car guards, seven (50%) live with or have family in Durban. Yet, all have some friends or help one another at the sites.

Forty-one of the respondents were religious/believed in a God. While the four non-religious individuals seemed happier overall. This may be due to the small numbers; therefore, further studies are required. In addition, religion (religious and non-religious) had high levels of happiness, with Christians slightly happier. Nevertheless, due to the small number of respondents, these findings may be skewed. The findings reveal that car guards at ticketed pay-to-park sites earn less per hour and must work more hours and days a week to survive than at free-to-park beachfront sites. Moreover, the daily bay fees have a significant negative impact on earnings. The possible move to formalise car guards may be a viable means to ensure better earnings without daily bay fees having to be paid to agents.

Table 4 further analyses the data and presents the findings based on the linear regression model (Koenker, 2005), using stepwise selection based on Akaike's information criterion (AIC).

Table 4: *Linear regression model using stepwise selection*

	Estimate	Std error	t value	Pr(>|t|)
Intercept	54.67436	17.6088	3.105	0.00344
`Age. (years)`	-1.49945	0.84452	-1.776	0.08324
AGE.SQ	0.01978	0.01001	1.976	0.05486
GenderMale	4.82721	3.39763	1.421	0.16295

Source: *Data collected by the authors*

In Table 4, two predictors are significant at the 10% level (age and age squared). Squaring the age variable (age squared) allowed for a more accurate determination of the effect of age, which may have a non-linear relationship with the independent variable (namely happiness). There is, therefore, some evidence that happiness is related to car guards' ages.
The relationship between happiness and age is estimated to be a U-shaped quadratic curve that (using basic differential calculus) achieves a minimum age of 37.89. Therefore, car guards' happiness appears to decrease with age until age 38, and then increases with age thereafter. Additionally, separate calculations of the multiple R-squared (calculated as 0.1773), and the adjusted R-squared (calculated as 0.1171), confirmed this.

To check normality, a Shapiro-Wilk test was run on the residuals of the linear model, which tests the null hypothesis of normality against the alternative hypothesis of non-normality. The p-value was 0.978, meaning the rejection of the null hypothesis failed. Therefore, there is no reason to doubt the null hypothesis that the residuals (and consequently the random errors) are normally distributed (Royston, 1982).

Furthermore, Ramsey's RESET test was run to check model specification, which tests the null hypothesis in that the model is correctly specified against the alternative hypothesis. The p-value was 0.524, which again means a failure to reject the null hypothesis. There is thus no reason to doubt that the model is correctly specified (Ramsey, 1969).

Table 5 uses quantile regression, a more robust alternative to linear regression in which, rather than predicting the conditional mean response, the aim is to predict the τth conditional quantile. In the special case where $\tau = 0.5$, there is median regression.

Table 5: *Quantile regression model*

	Value	Std error	t value	Pr(>|t|)
Intercept	60.37902	18.45073	3.27245	0.00231
`Age. (years)`	-2.38123	0.84647	-2.81314	0.00781
AGE.SQ	0.0297	0.01023	2.90313	0.00619
Days.work.per.week	1.15054	1.20095	0.95802	0.34427
GenderMale	9.99122	7.24131	1.37975	0.17594
RaceNationalityBlackForeigner	4.80384	2.92959	1.63976	0.10953
RaceNationalityWhiteSouthAfrican	7.64452	4.18633	1.82607	0.07592
Education Primary complete	-4.63214	2.15382	-2.15067	0.03810

Source: *Data collected by the authors*

This model has four variables with coefficients that are statistically significant at the 10% level, namely age, age squared, race nationality white South African, and education.

Therefore, the findings of this model include 40.0870841 as the age when happiness reaches a minimum. Happiness increases the longer the car guard has been working as a car guard. Furthermore, happiness is greater on average for white South African car guards than for black South African car guards (and there is minor evidence that it is greater for black foreign car guards than black South African car guards). This may be due to their appreciation for surviving the hardship of their native countries (such as the war in the DRC) and is evident despite foreign workers being vulnerable to xenophobic attacks in South Africa, and many migrants do not have close family in Durban (Foster & Chasomeris, 2017).

Of interest is that happiness was found to be greater on average for car guards with only a primary school education (including incomplete secondary education) than for car guards with complete secondary school or higher education levels. As previously noted, although studies show that individuals with higher education may be happier, socio-economic situations may actually make them less happy (Helliwell, 2003; Ngoo, Tey, & Tan, 2015). This may be due to the realisation that higher-educated car guards are not reaping the benefits of their higher education levels. This again reinforces the need for the formalisation of car guards to allow for better work situations.

Table 6 summarises the results, using the Mcenmar's test, which determined the model accuracy as 68.45%. This means that more than

two-thirds of the observations are correctly predicted based on the predictor variables in terms of whether car guards have high or low happiness.

Table 6: *Mcnemar's test P-value*

Sensitivity	0.6190
Specificity	0.7500
Pos Pred Value	0.6842
Neg Pred Value	0.6923
Prevalence	0.4667
Detection Rate	0.2889
Detection Prevalence	0.4222
Balanced Accuracy	0.6845

Source: *Data collected by the authors*

Although studies by Diener (2009), among others, noted that income has a significant effect on SWB, this study did not find any statistical significance that happiness is related solely to earnings. Other factors, however, such as education and race, as discussed above, were found to be of significance. Wittmer (2020) noted that religion, faith, spiritual practices, social interaction, and camaraderie in both informal and formal situations also shape an individual's well-being experiences. These factors may well affect car guards' SWB. Furthermore, the small sample size and the fact that earnings may at times be low have a minimal effect on car guards' SWB.

A degree of selection bias is inevitable when using non-probability sampling. However, this study mitigated selection bias as far as possible using the following techniques. All car guards present at each site were invited to participate, and therefore, all car guards present at the site had an equal opportunity to participate. Secondly, every car guard at all sites was willing to be interviewed; therefore, there was no non-response bias whatsoever. This is significant, as non-response bias may be a serious source of selection bias even when using probability sampling (Rubin, 2020). Lastly, an anticipated limitation was the possibility of respondents misunderstanding the Likert scale questions due to language barriers. This potential limitation was mitigated for by translating the questionnaire into both French and isiZulu, and the questions were labelled from 1 to 6, as well as the inclusion of happier or sadder emoticons as per the scale.

To better assist car guards there is an urgent need to regulate better and formalise car guards. In many areas, car guards are vetted by the SAP and formalised by concerned stakeholders. This ensures car guards are assured of a higher income and are not exploited by agents that charge daily bay fees.

Lately, numerous initiatives have been aimed at providing training for car guards and offering them more stable employment. From 2012, informal Mbombela residents have been trained as safety ambassadors to guard the Central Business District (CBD), in the Ehlanzeni Municipal District (Xulu, 2019).

Similar initiatives have been implemented by Community Policing Forums (CPFs) in Kalk Bay (Kotze, 2017) and Simon's Town (McCain, 2017) and numerous other districts. The Parkhurst Project Car Guard Initiative has been a forerunner in developing an application (like Zapper) that ensures easier payment by motorists directly into car guards' accounts using their cell phones (Thorne, 2018).

Ethics clearance to conduct the study was acquired from the University of KwaZulu-Natal, and each car guard signed an informed consent form agreeing to voluntary participation, and the additional qualitative interviews being audio recorded. The standard criteria in terms of consent and confidentiality were upheld.

5. Conclusion

This study aimed to investigate the possible determinants of subjective well-being (SWB) in terms of the self-reported happiness of informal car guards at free-to-park and ticketed parking sites in Durban, KwaZulu-Natal. Using a quantile regression technique, the results have shown that, at both ticketed and free-to-park sites, four variables were statistically significant (at a 10% level) as possible determinants of SWB. These variables included age, age squared, level of education achieved, and the race of the car guards. Migrant black car guards were found to be happier than local black car guards. The age variable exhibited the expected quadratic behaviour, reaching a minimum happiness age of 40 and then increasing as car guards get older. There is no statistically significant evidence at the 5% or 10% level that happiness is related solely to earnings.

Happiness levels, on average, are also slightly greater for black foreign car guards than black South African car guards, and this may be due to their deep appreciation for the work and their safety and their

realisation of the significant contrast of the present work environment to the hardships faced in their native countries (for example the prevailing war and unrest in the DRC). Moreover, the opportunity to earn an income and make a living in South Africa may have high significance for many migrant informal car guards due to the increasingly difficult circumstances they find themselves in. This is of interest because foreigners are frequently subjected to ostracism and possible xenophobic attacks, and it is an aspect that requires further research.

The findings aim to further contribute towards a greater understanding of car guards' subjective well-being and the potential livelihoods of Durban's informal car guards, especially as measured by the Short Form Oxford Happiness Questionnaire.

Although most of the relationships mentioned above are intuitive, they are in line with what one would expect. No relationship was found between paying bay fees and happiness, as well as other variables, and this may be due to the small sample size. The well-being of informal workers is of paramount importance. With a substantial increase in the number of informal workers in South Africa, and the government's policy to improve the livelihoods of all workers, there is a need for more extensive studies on the well-being of informal workers. Future studies should focus on informal economic activities, such as the well-being of car guards, as this will improve our understanding of informal labour markets and the unique opportunities and challenges, they face in South Africa.

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7 Competing interests

No potential conflict of interest. The authors declare that they have no financial or personal relationship(s) that may have inappropriately influenced them in writing this article.

8 Author contributions

The main author, Dr John Foster, compiled the qualitative questions and administered the Short Form Oxford Happiness questionnaire to the respondents. The interviews, data collection, and writing of the first draft were completed by the main author. Both Professor Mihalis Chasomeris and Professor Derick Blaauw supervised the research and provided invaluable recommendations in the conceptualisation, methodology, analyses, and completion of the article.

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10 Data availability

The data is available on request.

11 Declaration of conflicting interests

No potential conflict of interest.

12 Appendix: Oxford Happiness Questionnaire Short Form (OHQ-SF)

(Developed by Hills and Argyle (2001)

Instructions

Below are a number of statements about happiness. Please indicate how much you agree or disagree with each by entering a number alongside it according to the following code:
1 = strongly disagree
2 = moderately disagree
3 = slightly disagree

4 = slightly agree
5 = moderately agree
6 = strongly agree

You will need to read the statements carefully because some are phrased positively and others negatively. Don't take too long over individual questions; there are no 'right' or 'wrong' answers and no trick questions. The first answer that comes into your head is probably the right one for you. If you find some of the questions difficult, please give the answers that are true for you in general or for most of the time.

1. I don't feel particularly pleased with the way I am (–)
2. I feel that life is very rewarding
3. I am well satisfied about everything in my life
4. I don't think I look attractive (–)
5. I find beauty in some things
6. I can fit in everything I want to
7. I feel fully mentally alert
8. I do not have particularly happy memories of the past (–)

Items marked (–) should be scored in reverse.
The sum of the item scores is an overall measure of happiness, with high scores indicating greater happiness. Scores can range from 8 to 48.

13 References

Arunachalam T (2019) An investigation on the factor structure of Hindi version of Oxford happiness questionnaire (OHQ). *Universitas Psychologica* 18(1): 1–11.

Azizi M, Mohamadian F, Ghajarieah M and Direkvand-Moghadam A (2017) The effect of individual factors, socioeconomic and socio participation on individual happiness: A cross-sectional study. *Journal of Clinical and Diagnostic Research* (6): VC01-VC04.

Bacher J, Lemcke J, Quatember A and Schmich P (2019) Probability and Nonprobability Sampling: Representative Surveys of hard-to-reach and hard-to-ask populations. Current surveys between the poles of theory and practice. *Survey Insights: Methods from the Field*. Available at: https://surveyinsights.org/?p=12070 DOI:10.13094/SMIF 2019 000 18 (Accessed: 20 July 2022).

Bauer DH (1976) An exploratory study of development changes in children's' fears: *Children's Psychiatry* 17(1): 69-74.

Bayrami M, Hashemi T, Alaie P and Abdollahi Adli Ansar V (2011) Demographic factors, relying on the Islamic religion and family functioning in prediction of students' happiness in Tabriz University of Medical Sciences, Iran, *Journal of Research in Behavioural Sciences* 9(117): 33-43. Available at: https://www.sid.ir/en/journal/ViewPaper.aspx?id=213169 (Accessed: 12 July 2020).

Bianchi EC and Vohs KD (2016) Social class and social worlds: Income predicts the frequency and nature of social contact. *Social Psychological and Personality Science* 7: 479-486.

Blaauw PF, Botha I and Schenck C (2018) 'The subjective well-being of day labourers in South Africa: The role of income and geographical location', *South African Journal of Economic and Management Sciences* 21(1): a2087.

Blanchflower DG and Oswald AJ (2004) Well-being over time in Britain and the USA. *Journal of Public Economics* 88: 1359–1386. Available at: https://doi.org/10.1016/S0047- 2727(02) 1359-1386. (Accessed: 1 May 2021).

Botha F (2014) 'Life satisfaction and education in South Africa: Investigating the role of attainment and the likelihood of education as a positional good'. *Social Indicators Research* 118(2): 555–578. Available at: https://link.springer.com/article/10.1007/s11205-013-0452-2 (Accessed: 11 February 2021).

Compton WC and Hoffman E (2019) *Positive psychology*: The science of happiness and flourishing. Sage Publications.

Cruise SM, Lewis CA and Guckin CM (2006) Internal consistency, reliability, and temporal stability of the Oxford happiness questionnaire short-form: Test-retest data over two weeks. *Social Behavioural and Personality International Journal* 34(2):123–6.

Cummins RA (2000) Personal income and subjective well-being: a review. Journal of Happiness Studies 1: 133158 Available at: https://doi.org/10.1023/A:1010079728426. (Accessed: 1 March 2021).

Diener E (2000) Subjective well-being: The science of happiness and a proposal for a national index. American Psychologist 55(1) P:34–43. Available at: https://doi.org/10.1037/0003-066X.55.1.34 (Accessed: 7 July 2021).

Diener E (2009)'Subjective well-being', in E. Diener (ed.).*The science of well-being*: 11–58. Springer, Dordrecht.

Diener E and Chan MY (2011) 'Happy people live longer: Subjective well-being contributes to health and longevity', *Applied Psychology: Health and Wellbeing* 3(1): 143. Available at: https://doi.org/10.1111/j.1758-0854.2010.01045.x (Accessed: 7 July 2015).

Diener E, Inglehart R and Tay L (2012) Theory and validity of life satisfaction scales. *Social Indicators Research* 112(3): 497-527.

Diener E, Oishi S and Lucas RE (2003) Personality, culture, and subjective well-being: emotional and cognitive evaluations of life. *Annual Reviews* 54(1): 403 425. Available at: https://doi.org/10.1146/annurev.psych.54.101601.145056 (Accessed: 11 May 2015).

Diener E, Sandvik E, Seidlidtz L and Diener, M (1993) The relationship between income and subjective well-being: relative or absolute? *Social Indicator Research* 28:195-223.

Easterlin RA (2004) The economics of happiness. *Daedalus* 133(2) 26–33. Available at: https://www.jstor.org/stable/20027910?seq=1#metadata_info_tab_contents Accessed: 11 October 2016).

Easterlin RA (2005) "Diminishing Marginal Utility of Income?" Caveat Emptor. *Social Indicator Research* 70(3): 243-55.

Easterlin RA, McVey L, Switek M, Sawangfa, O and Zweig, J (2010) "The happiness -income Paradox Revisited" Proceedings of the *National Academy of Sciences of the United States of America* 107(52): 2463-2468.

Ebrahim A, Botha F and Snowball JD (2013) Determinants of life satisfaction among race groups in South Africa. *Development Southern Africa* 30(2): 168-185.

Foster JRW and Chasomeris M (2017) Examining car guarding as a livelihood in the informal sector. *Local Economy*. 1-14. Available at: http://journals.sagepub.com/eprint/DQrXvg35BeuCrQ9feQ2y/full. (Accessed: 11 June 2018).

Foster JRW, Chasomeris M and Blaauw D (2021) Re-visiting car guarding as a livelihood in the informal sector. *Development Southern Africa*. Available at: https://doi.org/10.1080/0376835X.2021.1891862 (Accessed: 11 May 2021).

Frey BS and Stutzer A (2003) Testing theories of happiness, In Bruni, L. & Porta, P (Eds). *Economics and Happiness, Framing the Analysis*. Oxford: Oxford University Press: 116-146.

Furnham A and Brewin CR (1990) Personality and happiness. Personality and Individual Differences. (11): 1093–1096 (Accessed: 11 May 2021).

Gerdtham U and Johannesson M (1997) The relationship between happiness, health, and socio-economic factors: results based on Swedish micro data. Working paper series in *Economics and Finance* No. 207. Department of Economics, Stockholm School of Economics. Stockholm, Sweden.

Graham CL (2012) The pursuit of happiness: *An economy of well-being*. Washington, DC: Brookings Institution Press: 1- 164.

Hadinezhad H and Zaree F (2009) Reliability, validity, and normalization of the Oxford Happiness Questionnaire. *Psychological Research, 12*(1-2): 62–77.

Helliwell JF (2003) How's life? combining individual and national variables to explain subjective wellbeing. *Economic Modelling* 20(2): 331–360.

Hills P and Argyle M (2001) Emotional stability as a major dimension of happiness. *Personality and Individual Differences* 31: 1357-1364.

Hills P and Argyle M (2002) The Oxford Happiness Questionnaire: A compact scale for the measurement of psychological well-being. *Personality and Individual Differences* 33: 1073-1082.

Hinks D and Gruen C (2007) What is the Structure of South African Happiness Equations? Evidence from Quality of Life Surveys. *Social Indicators Research*. (82): 311-336. DOI 10.1007/s11205-006-9036-8.

Hirschman AO (1973) "The changing tolerance for income inequality in the course of economic development": *Quarterly Journal of Economics* (87): 544-566.

Hooker ED, Campos B, Zoccola PM and Dickerson SS (2017) Subjective socioeconomic status matters less when perceived social support is high: A study of Cortisol responses to stress. *Social Psychological and Personality Science*. Advance online publication Available at: https://journals.sagepub.com/doi/abs/10.1177/1948550617732387. (Accessed: 15 May 2021).

Inglehart R, Foa R, Peterson C and Welzel C (2008) Development, freedom, and rising happiness: A global perspective (1981-2007). *Perspective on Psychological Scie*nce 3(4): 265-285.

Kamthan S, Sharma S, Bansal R, Pant B, Saxena, P, Chansoria S and Shukl A (2019) Happiness among second year MBBS students and its correlation using Oxford Happiness Questionnaire, *Journal of Oral Biology and Craniofacial Research* 9(2): 190-192.

Kieny C, Flores G, Ingenhaag M and Maurer J (2022) Healthy, Wealthy, Wise, and Happy? Assessing Age Differences in Evaluative and

Emotional Well-Being among Mature Adults from Five Low- and Middle-Income Countries. *Social Indicators Research* 160: 1019–1050.

Kingdon GG and Knight J (2006) How flexible are wages in response to local unemployment in South Africa? *Industrial and Labour Relations Review: 59*(3): 471-495.

Kitayama S, Markus HR and Kurokawa M (2000) Culture, emotion, and well-being: Good feelings in Japan and the United States. *Cognitive Emotions Journal*: 14(1):93–124.

Koenker R (2005) *Quantile regression. Econometric society monographs*. Cambrid ge: Cambridge University Press. Available at: https://www.cambridg e.org/core/books/quantile regression/C18AE7BCF3EC43C169373 90D44A328B1 (Accessed: 9 August 2021).

Kotze K (2017) Image make-over for car guards. *False Bay Echo*. Available at: www.falsebayecho.co.za/news/image-make-over-for-car-guards-745110.3 (Accessed: 11 August 2024).

Lallupersad N and Govender, D (2024) Criminality at Shopping Malls: A South African Perspective. *Insight on Africa*, *0*(0). https://doi.org/10.1 177/09750878231221167

Lucette A, Ironson G, Pargament KI, and Krause N (2016) Spirituality and religiousness are associated with fewer depressive symptoms in individual conditions. *Psychosomatics* 57(5): 505-513.

Luttmer EF (2004) Neighbours as negatives: Relative earnings and well-being. *National Bureau of Economic Research.* 10667.

MacKerron G (2012) Happiness economics from 35 000 feet. *Journal of Economic Surveys* 26(4): 705735. Available at: https://econpapers.repe c.org/scripts/showcites.pf?h=repec:bla:jecsur:v:26:y:2012:i:4:p:70 5-735 (Accessed: 2 May 2021).

Mahadea D and Ramroop S (2015) 'Influences on happiness and subjective well-being of entrepreneurs and labour: Kwazulu-Natal case study'. *South African Journal of Economic and Management Sciences* 18(2): 245–259.

Mahadea D and Rawat T (2008) Income, growth, and happiness: An exploratory study. *South African Journal of Economics* 76 (2): 276-290.

McCain N (2017) Homeless set up as car guards. *People's Post*. Available at: https://www.news24.com/SouthAfrica/Local/Peoples Postlhomeles s-set-up-as-car-guards-20170626 (Accessed: 15 August 2024).

Medvedev ON, Siegert RJ, Mohammed AD, Shepherd DA, Landhuis E and Krageloh U (2017) The Oxford Happiness Questionnaire: The

Transformation from an Ordinal to an Interval Measure Using Rasch Analysis. *Journal of Happiness Studies* 18: 1425-1443.

Mogilner C, Whillans A and Norton MI (2018) Time, money, and subject ive well-being. In Diener E, Oishi S and Tay L. (Eds). Handbook of well-being. Salt Lake City. UT. 1-16.

Møller V (2000) Happiness trends under democracy: where will the new South Africa set-level come to rest? *Journal of Happiness Studi*es 21(1): 33-53.

Møller V (2007) Satisfied and dissatisfied South Africans: Results from the general household survey in international comparison. *Social Indicators Research* 81: 389-415.

Møller V and Schlemmer L (1989) 'South African quality of life: A research note', *Social Indicators Research* 21(3): 279–291. Available at: https://doi.org/10.1007/BF00303787 (Accessed: 21 November 2015).

Mulcahy K and Kollamparambil U (2016) 'The impact of rural-urban migration on subjective well-being in South Africa'. *Journal of Development Studies* 52(9): 1357-1371.

National Research Council (2013) *Nonresponse in Social Science Surveys: A Research Agenda.* Tourangeau R and Plewes TJ (Ed) Panel on a Research Agenda for the Future of Social Science Data Collection, Committee on National Statistics. Division of Behavioural and Social Sciences and Education. Washington, DC: The National Academies Press.

Nell W and Rothmann S (2018) Hope, Religiosity and Subjective well-being, *Journal of Psychology in Africa* 28(4): 253-260.

Ngoo YT, Tey NP and Tan EC (2015) Determinants of life satisfaction in Asia. *Social Indicators Research* 124(1): 141–156.

Nkhatau NE (2017) Car guarding as a survival and livelihood strategy: A comparative study of study of the negotiation of working space in Hillcrest and Hatfield. (Unpublished dissertation) Department of Sociology. University of Pretoria.

Nikolaev B (2018) Does higher education increase hedonic and eudaimo nic happiness? *Journal of Happiness Studies* (19): 483–504.

Nkomo TS (2019) Exploring Congolese refugees and asylum seekers' survival strategies in South Africa: Implication for social work practice. *Journal of Human Behavior in the Social Environment* 29(4): 499-518.

Oishi S and Kesebir S (2015) "Income Inequality Explains Why Econom ics Growth Does Not Always Translate to an Increase in Happiness. " *Psychological Science* 26(10).

Polit DF and Beck CT (2008) Developing and testing self-report scales. In: *Nursing research: generating and assessing evidence for nursing practice*. 8th ed. Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins.

Raghupathi V and Raghupathi W (2020) The influence of education on health: an empirical assessment of OECD countries for the period 19952015. *Arch Public Health* 78(20) Available at https://doi.org/10.1 186/s13690-020-00402-5 (Accessed: 1 August 2024).

Rall (2024) https://www.iol.co.za/news/crime and courts/police recover -r12-million-stolen-car-parts-at-durban-north-home-98d8f805-fec1- 4fb8-8440-e6b407e22800 (Accessed: 1 August 2024).

Ramsey JB (1969) Tests for Specification Errors in Classical Linear Least-Squares Regression Analysis. *Journal of the Royal Statistical Society* Series B (31): 350–371.

Royston P (1982) An extension of Shapiro and Wilk's WW test for norm ality to large samples. *Applied Statistics* (31): 115 124. DOI:10.2307/23 47973.

Rubin A (2020) Program Evaluation: Pragmatic Methods for Social Work and Human Service Agencies. New York: Cambridge University Press.

Sacks D, Stevenson B and Wolfers J (2012) "Subjective Well-Being, Income, Economic Development and Growth". In the pursuit of Happiness: Well-being and the role of Government. London: *Institute of Economic Affairs*. London. 59-97.

Schyns P (1998) "Cross national Difference in Happiness: Economic and Cultural Factors Explored" *Social Indicator Research* 43(2): 3-26.

Singh Y (2020) Shopping Mall Security Measures. *LinkedIn*. Available at: http://www.linkedin.com/pulse/shopping-mall-security-measures- yudesh-singh (Accessed: 8 August 2024).

Statistics South Africa (2020) Victims of Crime Survey 2019. *Statistical Release P0341*. Pretoria, South Africa. Available at: http://www.statss a.gov.za/publications/P0341/P03412019.pdf. (Accessed: 8 February 2020). Statistics South Africa (2023) Victims of Crime Survey P0341.

GOVERNANCE, PUBLIC SAFETY, AND JUSTICE SURVEY GPSJS 2022/23. Pretoria, South Africa. Pretoria, South Africa. Chrome extension://efaidnbmnnnibpcajpcglclefindmkaj/https://

www.statssa.gov.za/publications/P0341/P03412023.pdf (Accessed: 25 August 2023).

Steyn F, Coetzee A and Klopper H (2015) A survey of car guards in Tshwane implications for private security policy and practice. *SA Crime Quarterly* (52): 15–24.

Steyn F (2018) Fleeing to exploitation. The case of immigrants who work as car guards. *Tydskrif vir Geesteswetenskappe* 58(4): Available at: https://www.researchgate.net/publication/330365723_Fleeing_to_exploitation_The_case_of_immigrants_who_work_as_car_guards(Accessed: 12 August 2019).

Thorne R (2018) *Parkhurst Village Project car guard initiative 2018*. Available at: www.parkhurstvillage.com/projects/car-guard-initiative/ (Accessed: 20 August 2024).

Valkonen S and Wallenius-Karkalo S (2016) Practising postcolonial intersectionality: Gender, religion, and indigeneity in Sami social work. *International Social Work* 59(5): 614-626.

Van Maanenber D (1995) 'External Services and Equipment'. *Effective Retail Security: Protecting the Bottom Line: A Practical Guide to Retail Loss Prevention and Security Techniques and Procedures*. Port Melbourne: Butterworth-Heinemann Publishers

van Wyk AM, Blaauw PF, Pretorius A, Schenck R and Freeman R. (2020) 'Investigating the subjective well-being of the informally employed: A case study of day labourers in Windhoek and Pretoria'. *Acta Commercii* 20(1): a825 Available at: https://actacommercii.co.za/index.php/acta/article/view/825/1412 (Accessed: 1 September 2021).

Veenhoven R (2010) Greater happiness for a greater number: is that possible and desirable? *Journal of Happiness Studies* 11: 605–29.

Weech-Maldonado R, Miller MJ and Lord JC (2017) The Relationships among Socio-Demographics, Perceived Health, and Happiness. Applied Research in Quality of Life 12(2): 289-302.

White SC (2017) Happiness, the common good, and volunteer work. In Rosa, H. & Henning, C. (Eds). *The Good Life beyond Growth: New Perspectives*: 165–176. *Routledge*. Available at: https://doi.org/10.4324/9781315542126.[Accessed: (Accessed : 11May 2018)

Wittmer J (2020) ''We live and we do this work'': Women waste pickers' experiences of well-being in Ahmedabad, India. *World Development*. Available at: https://doi.org/10.1016/j.worlddev.2020.105253. (Accessed: 21 January 2020).

Yuan KH, Chan W, Marcoulides GA and Bentler PM (2016) Assessing structural equation models by equivalence testing with adjusted fit indexes. *Structure Equation Modelling*. 23(3): 319–321.

Xulu, H (2019) Guardians of the chariots: Regulation of the car guarding sector in South Africa: *Research & Development Unit* MARCH 2019 Available at: www.psira.co.za (Accessed: 10 August 2024).