



AA RESEARCH

2019 South African

Third annual 'Entry-Level'
Vehicle Safety Report



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1. Introduction

1.1 Background to the study

In 2017, the Automobile Association of South Africa (AASA) published its second annual 'Entry-Level' Vehicle Safety Report, following the original report published in 2016. These reports highlight the limited but important vehicle safety features on 'entry-level vehicles' available in South Africa during 2016 and 2017 respectively. The current socio-economic outlook remains negative reflecting the same, if not a heavier burden to South African consumers in 2019 than in previous years. For this reason, the 'entry-level vehicle' market remains one of the most competitive, as motorists seek more affordable driving options, with lower prices, sometimes attained at the expense of safety features.

A disconnect between price and safety was highlighted in both 2016 and 2017's entry-level safety reports. It is therefore positive to report that a handful of the extremely unsafe cars reported on in 2017 are no longer on the market, and the number of cars with improved safety features is increasing. Being cognisant of inflation rates and the weakening rand, as well as its direct impact on import costs, the third iteration of this report increased the entry-level vehicle cost threshold from R160 000 to R180 000.

It is critical to note that the primary methodology utilised to gather information for this project was desktop research. Vehicle safety data was acquired from the latest brochures available online, and telephonically confirmed with manufacturer/importer product managers and or dealer sales staff.

The resultant safety scores do not in any way consider the structural engineering safety aspect of the sample of vehicles. True and accurate safety ratings can only be concluded through a scientifically managed crash test, such as those conducted by Global NCAP for the #SaferCarsforAfrica campaign.

Global NCAP's #SaferCarsforAfrica initiative released results in 2017, 2018, and 2019. In the 2018 test, one of the vehicles tested, the Nissan NP300 Hardbody scored zero points and zero stars for adult occupant safety, this despite having two airbags, and an Anti-Lock Braking System. Without crash testing, the vehicle, with these safety features, would likely have scored fairly well in this report.

1.2 Purpose of study

Motor vehicle crashes resulted in 12 921 lives in 2018¹, and have an annual impact on the South African economy of approximately R142 billion, which equates to 3.4% of South Africa's Gross Domestic Product². A key element to reducing this carnage is the implementation of a "Safe-Systems" approach to road safety, a key component of which is to ensure that we have safe vehicles on our roads.

Motor vehicles available in South Africa are not equal when viewed in terms of the quality and features on offer, especially when considering the number of basic safety features available in 'affordable' motor vehicles. How then does a buyer maximise their budget in terms of safety, or rather get the most safety for the money spent? This report seeks to identify and compare the standards of safety equipment present in motor vehicles on the South African market for under R180 000 (entry-level).

1.3 Scope of research

Objectives of this report:

- Identify the basic safety features available in motor vehicles retailing under R180 000 in South Africa;
- Identify prominent safety features in these motor vehicles;
- Provide readers with a method that allows for the comparison of safety features found in these vehicles;
- Highlight the vehicles with the most, and least, safety features in relation to their retail pricing.

1.4 Overview of Report

The report addresses the fundamentals of a vehicle's safety features. These are divided into 'Active' and 'Passive' safety features. The importance of each of these safety features is explained, followed by the methodology used in addressing their significance. In turn, this allows for the allocation of notional 'safety' points for the motor vehicles under investigation. Once this is achieved, the reader can gain a clearer understanding of how entry-level vehicles on the South African market rate in terms of both safety and affordability.

It is hoped, and anticipated, that with the adoption of scientific vehicle testing through a localised New Car Assessment Programme (NCAP), this report will, in time, become redundant.

¹ Road Traffic Management Corporation. (2018). *State of Road Safety Report, January – December 2018*. Retrieved from <http://www.rtmc.co.za/index.php/publications/reports/traffic-reports>

² Road Traffic Management Corporation. (2017). *Annual report 2016/2017*. Retrieved from http://www.rtmc.co.za/images/docs/RTMC%20AR_2017_LowResolutionWeb.pdf

2. Equipment review

2.1 Introduction

For the purpose of this report, the AA examined each of the vehicles in the selected price bracket for what may be regarded as the minimum safety features which promote increased safety, in preventing crashes or moderating their effects. According to an international study, the combination of anti-lock braking systems (ABS), and electronic stability control (ESC) in the European Union, where ESC became a mandatory requirement in all new cars from November 2014, it is estimated that it prevented at least 188 500 injury crashes and saved more than 6 100 lives since 1995³. An explanation of these minimum safety features, as well as the motor vehicles under investigation, follows.

2.2 Active and Passive safety features

2.2.1 **Active safety features** refer to devices and systems that assist in keeping a motor vehicle under control and possibly prevent a crash from occurring. According to the RTMC's State of Road Safety Report for January – December 2017, 91% of fatal crashes were caused by human error⁴. This figure represents a 13-point increase from 78% in 2016.

The Safe-Systems approach recognises that humans will always make mistakes and may get involved in road crashes, and therefore requires all elements of the system to be forgiving of this and not result in death or serious injury.⁵ It is therefore more necessary than ever for cars to be equipped with safety features that prevent accidents. Active safety features, therefore, are automated systems which aid in compensating or

³ International Transport Forum. (2016, October 3). *Zero Road Deaths and Serious Injuries: Leading a Paradigm Shift to a Safe System*. Paris: OECD. Retrieved from <https://www.itf-oecd.org/sites/default/files/docs/zero-road-deaths-media-release.pdf>

⁴ Road Traffic Management Corporation. (2017). *State of Road Safety Report, January – December 2017*. Retrieved from http://www.rtmc.co.za/images/docs/Calendar_Jan_%20Dec%202017.pdf

⁵ Road Traffic Management Corporation. (2018). *Revised Strategic Plan 2015-2020 & Annual Performance Plan 2018-2019*. Retrieved from http://pmg-assets.s3-website-eu-west-1.amazonaws.com/Road_Traffic_Management_Corporation_APP_201819.pdf

human error⁶. Active safety features investigated within the range of motor vehicles are:

- *Anti-lock braking system (ABS)*: ABS prevents the wheels from locking up when the driver applies the brakes, enabling the driver to have better steering control while braking.
- *Electronic stability control (ESC)*: ESC works by detecting if the steering inputs of the driver are inconsistent with the vehicle's direction of travel, and then applies the appropriate brakes to prevent the wheels from slipping, keeping the vehicle under control and on the road in hazardous conditions. It should be noted that ESC systems may have different acronyms between different motor manufacturers. In essence, however, they all aim to achieve the same results.

2.2.2 Passive safety features refer to systems within the motor vehicle that protect occupants from injury in the case of a motor vehicle crash. The passive safety features under consideration for this report are the secondary/supplementary restraint system (SRS), more commonly known as airbags, which provide a cushion upon impact to protect the driver and passengers during a crash. Each vehicle's specification was examined for the presence of:

- Driver side airbags
- Passenger side airbags
- Curtain airbags (airbags located above the head along the roof-lining)
- Side airbags

The location of the various airbags is illustrated in Figure 1

⁶ Global NCAP. (2015, October 19) #STOPTHECRASH: A New Partnership Promoting Life Saving Crash Avoidance Technologies. Retrieved from <http://www.globalncap.org/stopthecrash-a-new-partnership-promoting-life-saving-crash-avoidance-technologies/>.

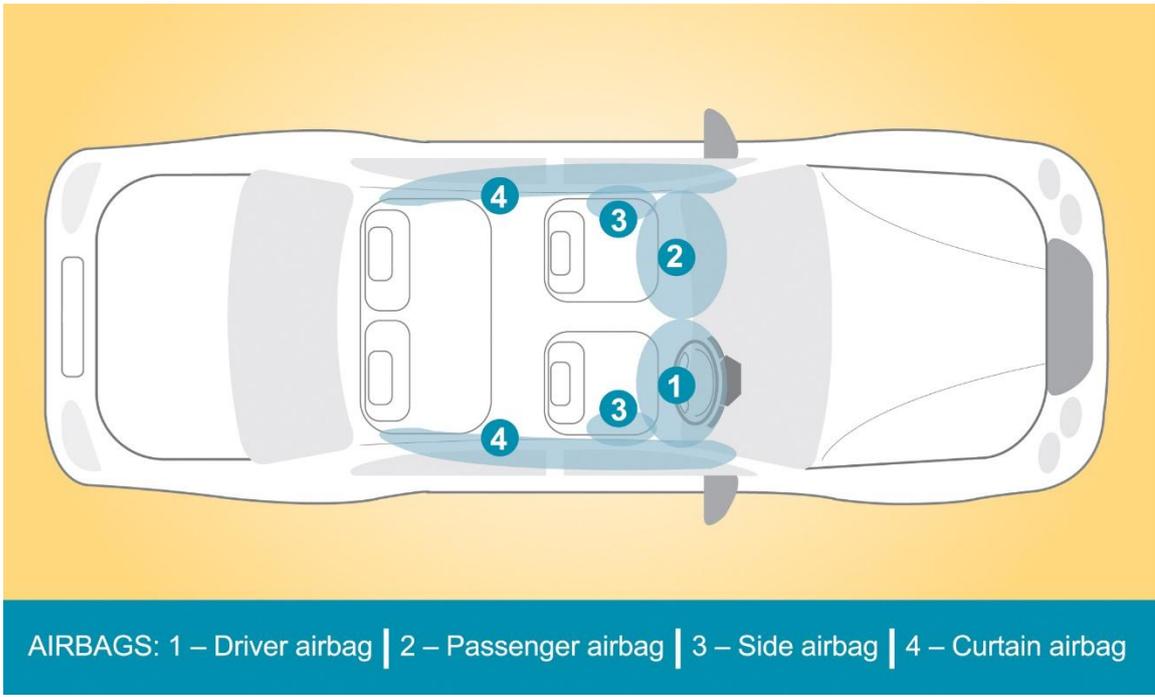


Figure 1. Location of airbags

2.2.3 Global (#SaferCarsForAfrica) NCAP testing – Global NCAP has created the five-star safety rating system to help consumers and businesses compare vehicles more easily, and to help them identify the safest choice for their needs. The safety rating is derived from a series of vehicle tests, designed and carried out by NCAP. These tests represent, in a simplified way, important real-life crash scenarios that could result in injury, or death of occupants, or other road users. The number of stars reflects how well the car performs in NCAP tests but is also influenced by what safety features the vehicle manufacturer is offering in each market. A high star rating shows not only that the test result was good, but also that safety equipment on the tested model is readily available to all consumers.⁷ For this report, only ratings from crash tests conducted for the African market through the Global NCAP's #SaferCarsForAfrica initiative, were considered.

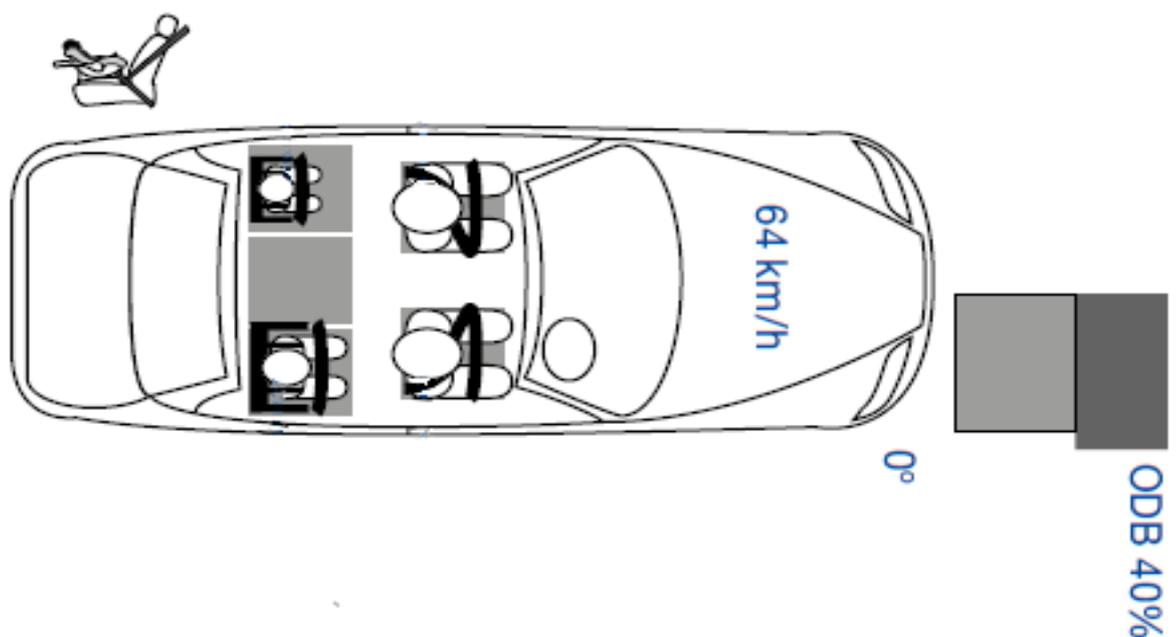


Figure 2. Crash test protocol for #SaferCarsForAfrica

The Global NCAP's #SaferCarsForAfrica was launched in South Africa in November 2017 and included five cars for crash testing. Cars are crashed at 64km/h in a straight line at 40% offset.⁸ The second round of testing was conducted in September 2018 and the results were released at the official AA/Global NCAP launch on 2 November 2018. In April 2019, an additional three

⁷ EuroNcap. (2016, September 20). *How To Read The Stars*. Retrieved from <http://www.euroncap.com/en/about-euro-ncap/how-to-read-the-stars/>.

⁸ Global NCAP. (2017), #SaferCarsforAfrica. Retrieved from <http://www.globalncap.org/safercarsforafrica/>

cars were NCAP tested, with the results released on 29 May 2019. The 2019 NCAP test results have been added to this report.

NOTE: There are several NCAP testing standards throughout the world (EuroNCAP, ANCAP, ASEAN NCAP, IIHI, etc.) and while these tests are critical in terms of a high quality third party independent testing standard, buyers would be encouraged to look at the testing requirements for their region. It cannot be assumed that two similarly named vehicles will have the same rating in different markets. A three (3) star rating on one may not be the equivalent to a three (3) star rating on another. Further, any change in manufacturing process, materials or specifications can have a direct impact on the safety rating of a vehicle. For this reason, the only vehicles awarded additional points for being crash tested were those tested as part of the #SaferCarsForAfrica campaign.

The presence of the features highlighted will serve as the standard to determine the level of safety of motor vehicles under R180 000 in South Africa. A point-based system is used to award motor vehicles 'safety points' in relation to the existence of fitted safety equipment. Furthermore, motor vehicles crash tested under the NCAP system (in this case Global NCAP's #SaferCarsForAfrica) will be given additional points as this indicates that these cars' safety ratings have been tested for the South African market. This scoring procedure is explained in further detail in the methodology section. The AA recognises that various safety features contribute differently in terms of fatality/injury prevention, but for the purpose of this report, scores are awarded merely on the face value of their existence.

2.3 Sample of motor vehicles

Table 1 indicates the motor vehicles that, at initiation of the study, had a retail price of less than R180 000. Twenty-seven (27) models make up the sample of vehicles from fifteen (15) different manufacturers. In this year's report, entry-level bakkies were included, as they are used by many people as passenger vehicles. They are also used in fleets, which directly impacts occupational health and safety, of drivers and labourers. All vehicle pricing and safety features have been collected from dealership brochures, confirmed with manufacturer product managers telephonically, and are correct as of 31 April 2019.

Note: Not all levels of the same vehicle models were selected, only vehicles with variances in safety equipment were included.

Table 1. Make, model, and retail value (lowest to highest) of motor vehicles

Make and Model	Price
Renault Kwid 1.0 Expression 5 door	R132 500
Suzuki Celerio 1.0 GA	R139 900
Datsun GO mid	R144 500
BAIC D20 hatch 1.3 Comfort	R149 990
Kia Picanto 1.0 Start	R150 995
Mahindra Bolero 2.5Di Maxitruck Plus	R153 999
Datsun GO+ mid	R154 200
Datsun GO+ Panel Van	R155 900
Kia Picanto 1.0 Street	R158 995
GWM Steed 5 Single Cab 2.2 petrol workhorse	R159 900
Suzuki Swift hatch 1.2 GA	R160 900
Suzuki DZire sedan 1.2 GA	R161 900
Mahindra KUV100 1.2 NXT K4+	R163 999
Honda Brio hatch 1.2 Trend	R164 200
Hyundai i10 Grand 1.0 Motion	R164 900
Kia Picanto MT 1.0 Style	R168 995
Toyota Aygo 1.0	R171 900
Volkswagen Take up!	R172 200
GWM M4	R172 400
Nissan NP200 1,6i	R173 500
Datsun Go+ 1.2 Lux	R175 900
Smart ForTwo (Base)	R176 434
JMC 2x4 Boarding	R176 880

Suzuki Ignis 1.2 GL 5MT	R176 900
Nissan Micra Active 1.2 Visia+	R177 900
Toyota Etios Hatch 1.5 Xi HB	R179 500
Renault Sandero 66kw turbo expression	R179 900
Haval H1	R179 900
Honda Amaze 1.2 Trend	R179 900

Pricing source: (Manufacturer websites and brochures)

3. Research methodology

3.1 Identification of vehicle sample

For the 2019 report, the R180 000 designation was set as the benchmark in identifying the potential vehicles for investigation. This price level has been increased by R20 000 from 2017 but is still representative of what may be regarded as 'entry-level' vehicles in South Africa.

Scoring increments are considered at values of R10,000. The purpose of this is to allow a prospective buyer to consider how much more safety they can “buy” for an additional R10,000. By way of example, a vehicle costing R160 000, with a 10% deposit, financed over 72 months, and with an interest rate of 12%, produces an estimated monthly instalment of R2 815. A variance of R10 000 on the vehicle's purchase price will add or remove roughly R176 from the monthly instalment costs.

Note: These figures are indicative. They are provided to indicate an approximation of the difference in monthly instalment that a buyer may expect based on this financing model – *real world numbers will vary.*

3.2 Safety scoring

A safety point-based system was developed with weights allocated to the existence of certain safety features. Active safety features such as ABS and ESC were given the most significant weights (30 points each), in recognition of their core function of **avoiding collisions**.

In relation to passive safety features, each available airbag scored 10 points. The only exception is the curtain airbag, which scores 20 points (an additional 10 points), as studies show curtain airbags can reduce life threatening head injuries by up to 50%.⁹

Safety points are also allocated to motor vehicles that are confirmed to have undergone the Global NCAP #SaferCarsForAfrica crash test. As NCAP testing is not mandatory for vehicles to be approved for market release, the vehicles which have undergone the process represent a particular, repeatable safety benchmark which allows the public to evaluate their crash performance. As such, an additional five safety points is allocated for each star achieved on the NCAP safety rating scale (maximum of five stars, 5 x 5 = 25 maximum achievable points).

A **maximum of 135 points** is achievable if a motor vehicle has all the safety features installed. Safety feature weighting can be seen in the Table 2:

⁹ Insurance Institute for Highway Safety. (2006, October 7). *Status Report* Vol. 41, No.8.

Active safety (crash prevention)	Maximum Score	Comments
Anti-lock brakes (ABS)	30	Present – full score. Absent – no score
Electronic Stability Control	30	Present – full score. Absent – no score
Passive safety (crash protection)	Maximum Score	Comments
Driver's airbag	10	Present – full score. Absent – no score
Front passenger airbag	10	Present – full score. Absent – no score
Side airbags	10	Present – full score. Absent – no score
Head / curtain airbags	20	Present – full score. Absent – no score
Crash test rating (frontal impact)	25	Pro-rata – five points per star. Must be for equivalent spec vehicle rated under current Global NCAP
Total points achievable	135	Perfect score

Table 2. Safety feature weighting

In addition to the weights/points allocated, the following 'Safety/Affordability' index is provided:

$$\frac{\text{Overall Safety Score}}{(\text{Price of Vehicle} \div R10000)} = \text{Safety/Affordability Score}$$

Example:

$$= \frac{135}{(R180000 \div R10000)}$$

$$= \frac{135}{(18.0)}$$

$$= \underline{7.50} \quad (\text{Safety/Affordability score})$$

The example above is calculated with the maximum scores of 135 safety points and the R180 000 vehicle price in mind. This index allows us to compare the safety features (associated with this report) one can buy in terms of every R10 000 spent.

4. Overall results

Table 3. Overall safety scores for all 27 vehicle models (from highest to lowest total safety points)

Make and Model	Price	Total	Anti-lock brakes (ABS)	Electronic Stability Control	Driver's airbag	Front passenger airbag	Side airbags	Curtain airbags	Crash test rating (Ncap)	Safety per 10k
Maximum Score	R 180 000	135	30	30	10	10	10	20	25	7,50
Volkswagen Take Up!	R 172 500	110	30	30	10	10	10	20	0	6,38
Renault Sandero 66kw turbo expression	R 179 900	105	30	30	10	10	0	0	15	5,84
Toyota Aygo 1.0	R 171 900	90	30	30	10	10	10	0	0	5,24
Smart ForTwo	R 176 434	90	30	30	10	10	10	0	0	5,10
Toyota Etios Hatch 1.5 Xi HB	R 179 500	70	30	0	10	10	0	0	20	3,90
Honda Amaze 1.2 Trend	R 179 900	70	30	0	10	10	0	0	20	3,89
Suzuki Ignis 1.2 GL	R 176 900	65	30	0	10	10	0	0	15	3,67
Suzuki Celerio 1.0 GA	R 139 900	50	30	0	10	10	0	0	0	3,57
Datsun GO Mid	R 144 500	50	30	0	10	10	0	0	0	3,46
BAIC D20 hatch 1.3 Comfort	R 149 990	50	30	0	10	10	0	0	0	3,33
Datsun GO+ Mid	R 154 200	50	30	0	10	10	0	0	0	3,24
Datsun GO+ Panel Van	R 155 900	50	30	0	10	10	0	0	0	3,21
Kia Picanto 1.0 Street	R 158 995	50	30	0	10	10	0	0	0	3,14
Suzuki Swift hatch 1.2 GA	R 160 900	50	30	0	10	10	0	0	0	3,11
Suzuki Swift DZire sedan 1.2 GA	R 161 900	50	30	0	10	10	0	0	0	3,09
Mahindra KUV100 1.2 NXT K4+	R 163 999	50	30	0	10	10	0	0	0	3,05
Honda Brio hatch 1.2 Trend	R 164 200	50	30	0	10	10	0	0	0	3,05

Hyundai i10 Grand 1.0 Motion	R 164 900	50	30	0	10	10	0	0	0	3,03
Renault Kwid 1.0 Expression 5 dr	R 132 500	40	30	0	10	0	0	0	0	3,02
Kia Picanto MT 1.0 Style	R 168 995	50	30	0	10	10	0	0	0	2,96
GWM M4	R 172 400	50	30	0	10	10	0	0	0	2,90
Nissan Micra Active 1.2 Visia+	R 177 900	50	30	0	10	10	0	0	0	2,81
Haval H1	R 179 900	50	30	0	10	10	0	0	0	2,78
Datsun GO+ 1.2 Lux	R 175 900	15	0	0	10	0	0	0	5	0,85
Kia Picanto 1.0 Start	R 150 995	10	0	0	10	0	0	0	0	0,66
Nissan NP200	R 173 500	0	0	0	0	0	0	0	0	0,00
JMC 4x2 Boarding	R 176 880	0	0	0	0	0	0	0	0	0,00

5. Discussion and findings

The purpose of this report is to inform the public on the safety features currently available in the 'entry-level' segment of motor vehicles in South Africa. Anecdotal evidence suggests buyers of entry-level motor vehicles may prioritise affordability over all other vehicle features. However, the safety aspect should not be disregarded when making this important decision.

Anti-locking braking system (ABS), electronic stability control (ESC), and the number of airbags on offer, serve as the assessment criteria for the twenty-seven (27) identified motor vehicles. As important as they are, the allocation of points for safety belts is not considered as they are now standardised for all motor vehicles. The presence and nature of head restraints was initially considered as part of the assessment criteria, but insufficient information is available at dealer level, therefore this assessment criterion has been eliminated from the report. In future, this, and other safety technologies, may be considered for inclusion, as the specification level of entry-level vehicles increases over time.

A significant finding of the current report is that four of the cars under investigation come equipped with electronic stability control (ESC). This is a major improvement from previous years where none of the entry-level vehicles had ESC. The most common safety features of the entry-level vehicles for 2019 were front driver airbags (25 vehicles), followed by front passenger airbags (20 vehicles), and ABS (20 vehicles). The least common safety feature was curtain airbags (1 vehicle) and side airbags (3 vehicles).

Another positive improvement is the fact that five of the vehicles under consideration have been crash tested for the South African market, whereas last year, none had. In 2019, in partnership with Global NCAP, the FIA Foundation, and Bloomberg Philanthropies, the AA purchased three vehicles to be tested.¹⁰ A total of twelve vehicles have now been crash tested for the African market. Seven of the twelve are not included in the present report because one is no longer manufactured in South Africa, one has improved safety equipment, and the other five fall above the R180 000 threshold. A handful of vehicles in this report have been crash tested in other NCAP regions, but as it cannot be confirmed that those models are exactly the same as the models sold in South Africa, these test scores were not included in this safety report.

In terms of **true safety points** attained, points of twenty (20) or less are considered as having 'poor' safety. Safety points between twenty (20) and fifty (50) can be considered as having 'moderate' safety, and safety points of fifty (50) and above can be considered as having 'acceptable' safety. In Table 5, four (4) vehicles fall under the 'poor safety' category, sixteen (16) vehicles fall under the 'moderate safety' category, and seven (7) vehicles fall under the 'acceptable' category for 2019. It should be noted

¹⁰ Global NCAP. (2017, November 22). *Global NCAP And AA South Africa Launch #SaferCarsforAfrica*. Retrieved from <http://www.globalncap.org/global-ncap-aa-south-africa-launch-safercarsforafrica/>

that these figures are an improvement on 2017's ratings where ten (10) vehicles fell under the 'poor safety' category, thirteen (13) vehicles fell under the 'moderate safety' category, and only two (2) vehicles fell under the 'acceptable' category. This shows a marked improvement in the overall true safety points attained by the entry-level vehicles from 2017 compared to 2019.

Toyota (2 cars), Volkswagen (1 car), and Smart (1 car) had all their entry-level vehicles score within the acceptable range. The Renault Sandero also scored in the acceptable safety range, however the Renault Kwid scored in the moderate safety range.

It should be noted that a number of dealerships replaced older vehicle models with newer models in 2019 (e.g. Hyundai i10 motion in 2017 replaced by the Hyundai i10 Grand motion in 2019). These latest models included additional safety features that were not available in the 2017 models.

The Volkswagen Take Up! received the highest safety rating, of 110 points. The Volkswagen Take Up! was the only entry-level vehicle to include a curtain airbag, and it was also the only vehicle to include all safety features considered in this report. The car would probably have obtained a higher score had it been crash tested, and the AA therefore recommends that all manufacturers crash test their cars. These tests will not only improve the safety results of the cars but will also provide authoritative demonstrations of the cars' safety levels.

This year also saw the inclusion of entry-level bakkies, which were not included in the 2017 report. The results show that entry-level bakkies are the least equipped with safety features of all entry-level vehicles on the list. The JMC 4x2 Boarding and Nissan NP200 were the only vehicles to contain none of the safety features considered in this report, consequently scoring 0 safety points. All other entry-level vehicles included at least a front airbag for the driver.

Table 5

2019		
'Poor' Safety (Score ≤ 20)	'Moderate' Safety (Score 20 - 50)	'Acceptable' Safety (Score > 50)
Datsun GO+ 1.2 Lux	Suzuki Celerio 1.0 GA	Volkswagen Take up!
Kia Picanto 1.0 Start	Datsun GO Mid	Renault Sandero 66kw turbo expression
Nissan NP200	BAIC D20 hatch 1.3 Comfort	Toyota Aygo 1.0
JMC 4x2 Boarding	Datsun GO+ Mid	Smart ForTwo
	Datsun GO+ Panel Van	Toyota Etios Hatch 1.5 Xi HB
	Kia Picanto 1.0 Street	Honda Amaze 1.2 Trend
	Suzuki Swift hatch 1.2 GA	Suzuki Ignis 1.2 GL
	Suzuki Swift DZire sedan 1.2 GA	
	Mahindra KUV100 1.2 NXT K4+	
	Honda Brio hatch 1.2 Trend	
	Hyundai i10 Grand 1.0 Motion	
	Renault Kwid 1.0 Expression 5 dr	
	Kia Picanto MT 1.0 Style	
	GWM M4	
	Nissan Micra Active 1.2 Visia+	
	Haval 1	

2017		
'Poor' Safety (Score ≤ 20)	'Moderate' Safety (Score 20 - 50)	'Acceptable' Safety (Score > 50)
Renault Kwid 1.0 Expression	Chery QQ3 1.1 TXE	Toyota Aygo 1.0
Kia Picanto 1.0 Start	Chevrolet Spark 1.2 Curve	Nissan Micra 1.2 Visia+ (audio)
Datsun GO+ 1.2 Lux	Mitsubishi Mirage 1.2 GL	
Kia Picanto 1.2 Start	BAIC D20 hatch 1.3 Comfort	
Hyundai i10 1.1 Motion	Chery J2 1.5 TX	
Chery QQ3 0.8 TE (aircon)	Kia Picanto 1.0 Street	
Datsun GO 1.2 Mid	Suzuki Swift hatch 1.2 GA	
Tata Indica 1.4 LGi	Mahindra KUV100 1.2 G80 K4+	
Tata Vista 1.4 Ini Bounce	Tata Vista 1.4 Ignis	
Tata Manza 1.4 Ini	Suzuki Swift DZire sedan 1.2 GA	
	Honda Brio hatch 1.2 Trend	
	Tata Bolt hatch 1.2T XMS	
	Suzuki Celerio 1.0 GA	

As for the Safety/Affordability index, it can be used as a guide to understand the 'Affordability of Safety' proposition. For this report, a score of four (4) points and above can be seen as 'acceptable safety/affordability', a score between three (3) and 3.99 points can be seen as 'moderate safety/affordability', whereas 2.99 points and below can be seen as 'poor safety/affordability'.

As indicated in Table 6: four (4) vehicles fall under the 'acceptable safety/affordability' category, fifteen (15) vehicles fall under the 'moderate safety/affordability' category, and eight (8) vehicles fall under the 'poor safety/affordability' categories. These figures are a major improvement on 2017's results, where only one (1) vehicle fell under the 'acceptable safety/affordability' category, fourteen (14) vehicles fell under the 'moderate safety/affordability' category, and ten (10) vehicles fell under the 'poor safety/affordability' category.

There has been a marked improvement in safety/affordability scores from 2017 to 2019.

Three vehicle models, the Datsun GO 1.2 Mid, the Hyundai i10 1.1 Motion and the Renault Kwid 1.0 Expression, moved from the poor safety/affordability score range in 2017 to the moderate safety/affordability score range in 2019 with the latest model of each vehicle sporting additional safety features. The Toyota Aygo 1.0 moved from the moderate safety/affordability score range to the acceptable safety/affordability range.

We are hopeful this report will inform the public, aid customer purchasing decisions, and persuade motor manufacturers to prioritise safety in vehicles produced for the South African market. Once again, we call upon motor manufacturers to consider substituting luxury or convenience specification items with safety items. We believe this consideration must be weighed against the inexperience of the typical drivers of these vehicles, and the need to protect them against traffic hazards to the greatest extent possible. Furthermore, in light of Global NCAP's #SaferCarsForAfrica latest crash test results, we implore manufacturers to crash test their vehicles before sale. As evidenced, safety features alone do not constitute the overall safety of a vehicle. Only crash testing can provide a holistic view of the safety of the vehicle and should thus be prioritised.

Table 6 Safety/Affordability categories

2019		
'Poor' Safety/ affordability (Score ≤ 2.99)	'Moderate' Safety/ affordability (Score 3 - 3.99)	'Acceptable' Safety/ affordability (Score ≥ 4)
Datsun GO+ 1.2 Lux	Toyota Etios Hatch 1.5 Xi HB	Volkswagen Take up!
Kia Picanto 1.0 Start	Honda Amaze 1.2 Trend	Renault Sandero 66kw turbo expression
Nissan NP200	Suzuki Ignis 1.2 GL	Toyota Aygo 1.0
JMC 4x2 Boarding	Suzuki Celerio 1.0 GA	Smart ForTwo
Kia Picanto MT 1.0 Style	Datsun GO Mid	
GWM M4	BAIC D20 hatch 1.3 Comfort	
Nissan Micra Active 1.2 Visia+	Datsun GO+ Mid	
Haval H1	Datsun GO+ Panel Van	
	Kia Picanto 1.0 Street	
	Suzuki Swift hatch 1.2 GA	
	Suzuki Swift DZire sedan 1.2 GA	
	Mahindra KUV100 1.2 NXT K4+	
	Honda Brio hatch 1.2 Trend	
	Hyundai i10 Grand 1.0 Motion	
	Renault Kwid 1.0 Expression 5 dr	

2017		
'Poor' Safety/affordability (Score ≤ 2.99)	'Moderate' Safety/affordability (Score 3 - 3.99)	'Acceptable' Safety/affordability (Score ≥ 4)
Renault Kwid 1.0 Expression	Toyota Aygo 1.0	Chery QQ3 1.1 TXE
Kia Picanto 1.0 Start	Nissan Micra 1.2 Visia+ (audio)	
Datsun GO+ 1.2 Lux	Chevrolet Spark 1.2 Curve	
Kia Picanto 1.2 Start	Mitsubishi Mirage 1.2 GL	
Hyundai i10 1.1 Motion	BAIC D20 hatch 1.3 Comfort	
Chery QQ3 0.8 TE (aircon)	Chery J2 1.5 TX	
Datsun Go 1.2 Mid	Kia Picanto 1.0 Street	
Tata Indica 1.4 LGi	Suzuki Swift hatch 1.2 GA	
Tata Vista 1.4 Ini Bounce	Mahindra KUV100 1.2 G80 K4+	
Tata Manza 1.4 Ini	Tata Vista 1.4 Ignis	
	Suzuki Swift DZire sedan 1.2 GA	
	Honda Brio hatch 1.2 Trend	
	Tata Bolt hatch 1.2T XMS	
	Suzuki Celerio 1.0 GA	

6. Limitations

The AA notes there are a multitude of safety features available on the market, and also recognises the various effects they may have in reducing fatalities/injuries. As such the calculations used herein are by no means all-encompassing in terms of their ability to save lives, but merely addresses their existence within a motor vehicle. Furthermore, the current weighting system was developed by the AA, and is based on 'face-value' importance of the various safety features under investigation. The AA recognises there will be room for improvement regarding the allocation of weights to safety features in future reports.

7. Conclusion

The purpose of this report was to inform and highlight the value of safety of 'entry-level vehicles' currently available in South Africa. The AA encourages consumers to do adequate research when making a decision on purchasing a motor vehicle. Make sure the vehicle model you intend purchasing comes equipped with the safety features that are advertised. The AA also encourages customers to not be hesitant to ask questions of dealers and salespeople. If you are uncertain about any of the safety aspects of the vehicle you intend purchasing, request a brochure detailing the technical specifications of the vehicle and clarify any uncertainties with the relevant salesperson.

Safety should be the priority when purchasing a vehicle.

8. References

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