

The Individual Deprivation Measure South Africa Country Study Briefing Note No. 4

Results update by disability status



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HELEN SUICH, TRANG PHAM AND JANET HUNT

The Individual Deprivation Measure (IDM) is a gender-sensitive, individual measure of multidimensional poverty, which is assessed across 14 dimensions¹, making it possible to see who is poor, in what ways and to what extent.

The IDM has been under development since 2009. The aim of the first phase (2009–2013) was to formulate a just and justifiable measure of poverty, the design of which reflects and is grounded in the experiences and priorities of poor men and women, and which measures things that are known to be important to gender equity. A second phase of research commenced in 2016 to improve the pilot measure and test it in different contexts.²

The IDM South Africa Country Study was undertaken in 2019, and was one of two ANU-led country studies designed to test the revised measure during this phase of the research.

This briefing note presents the overall IDM Index Score, disaggregated by disability status, for the first time using the South African data. The IDM Index Score is the score across all 14 dimensions—enabling one to see who is multidimensionally poor. This note also provides an overview of the updated (dimension-level) analyses of the national-level main survey, based on refined scoring and aggregation procedures.

A summary of what is measured in each of the 14 dimensions can be found in Briefing Note No. 6, which also provides background information about the South African Country Study and the main sample, and briefly describes the revisions to the scoring and aggregation methods used to generate the results presented here.

The revised scoring procedures and aggregation methods are described in detail in Suich et al. (2020b). The primary difference in the methods used is that the new aggregation method does not allow a low score in one indicator or theme to be fully offset, or compensated for by a high score in another.

1 THE IDM INDEX SCORE

As noted above, the IDM Index Score for the main, national-level sample is presented here for the first time. The summary statistics of the IDM Index Score for those categorised as with and without disabilities are shown in Table 1. An individual is categorised as having disabilities if they reported having ‘some’ or ‘a lot of’ difficulty in at least one of the six domains assessed in the Washington Group Short Set of Questions on Disability, or if they are unable to function at all in at least one domain (WGDS ud). The reasons for using this relaxed criteria are discussed in Suich et al. (2020c), and it is recognised that more strict criteria are often used.

As can be seen in Table 1, the range of scores for those with disabilities is slightly narrower than for those without. The higher minimum score for those with disabilities means that there are a number of individuals without disabilities that face the highest levels of deprivation in the sample. However, the IDM Index Scores of those with disabilities have both a lower mean and median—indicating that, on average, those with disabilities face greater deprivation than those without.

¹ The research team collected data on an additional dimension—violence—but due to lack of comparability between the types of violence experienced by men and women it is not reported.

² The early development process is described in Wisor et al. (2014), and its more recent development and refinement in Hunt et al. (2017) and with particular reference to South Africa in Suich et al. (2020c).

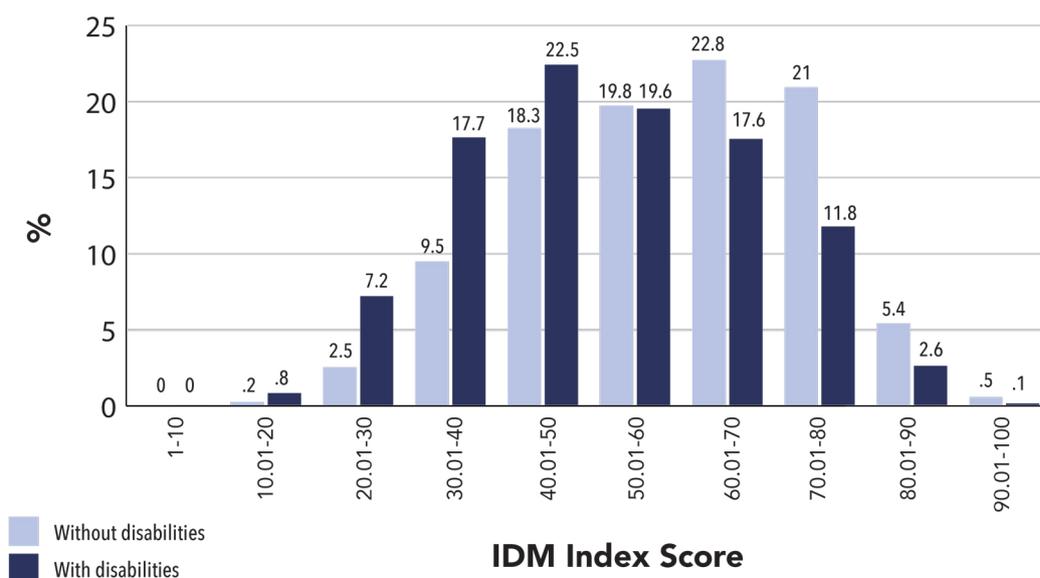
The IDM Index Score quartile cut-offs presented in Table 1 are created by ordering the scores of all individuals in the main sample from lowest to highest, and then dividing the sample into four equal groupings (i.e. 25% of the main sample fits in to each of the four categories). It can be seen that a higher proportion of individuals with disabilities compared to those without disabilities are in the lowest scoring quartile, and a smaller proportion are in the highest scoring quartile, indicating overall, the higher levels of deprivation experienced by many individuals with disabilities compared to those without.

Table 1 IDM Index Score summary statistics and quartiles, national-level main sample, South Africa, by disability

SUMMARY STATISTICS	WITHOUT DISABILITIES	WITH DISABILITIES (RELAXED)
Minimum	10.6	14.7
Maximum	94.1	93.9
Range	83.5	79.2
Median	59.7	50.8
Mean	58.6	51.8
OVERALL SAMPLE QUARTILE CUT-OFFS (%)		
Lowest quartile: 10.58-44.41	19.4	35.2
Second quartile: 44.42-56.38	24.6	25.8
Third quartile: 56.39-68.79	26.5	22.3
Highest quartile: 68.80-94.10	29.6	16.7
n=	5,586	3,066

Figure 1 shows that, for all deciles below an IDM Index Score of 50, there is a higher proportion of individuals with disabilities compared to those without. In contrast, for each decile of IDM Index Scores of 60 and above, there is a higher proportion of individuals without disabilities than with disabilities.

Figure 1 IDM Index Score by deciles, national-level main sample, South Africa, by disability status



2 DIMENSION LEVEL RESULTS

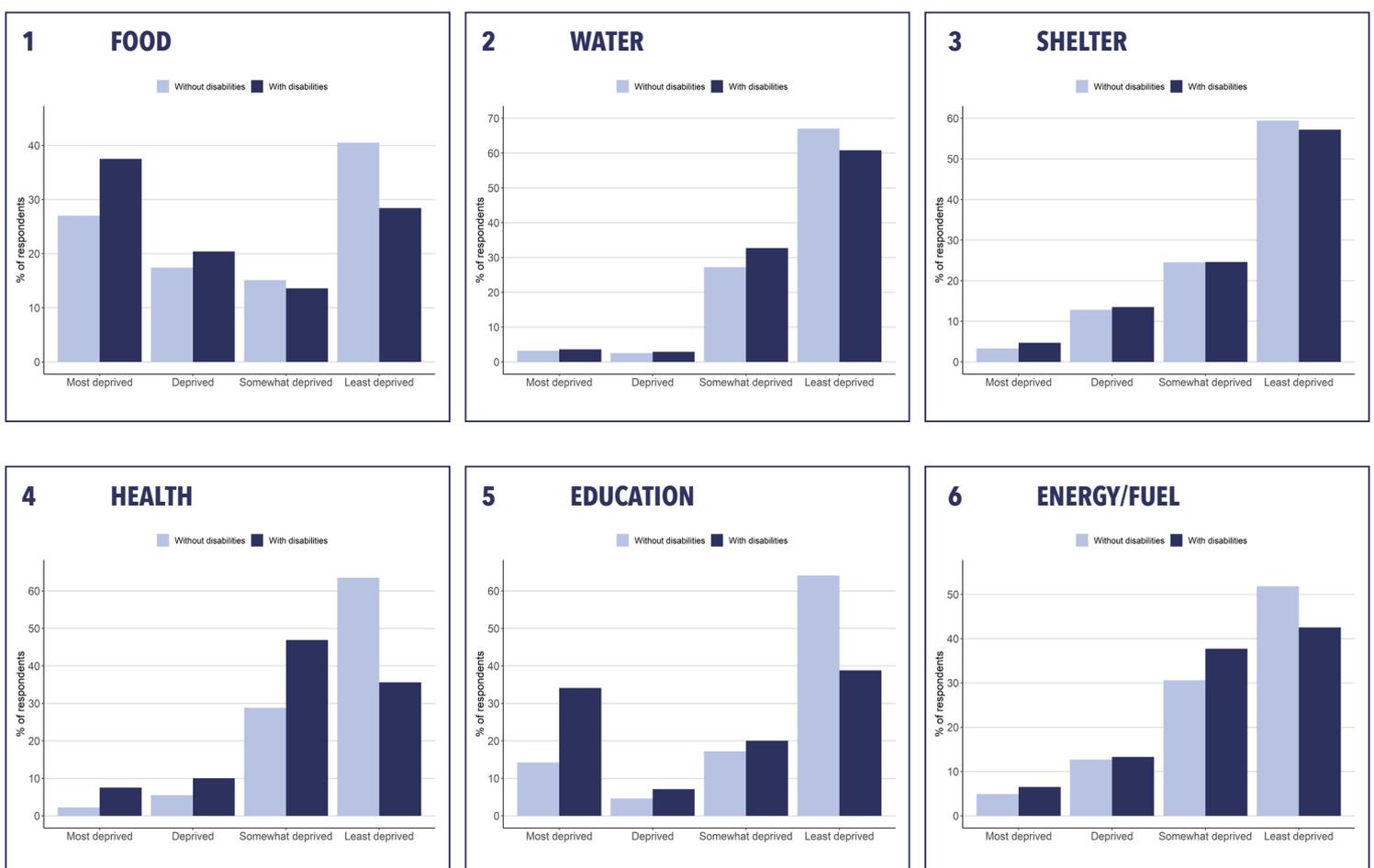
The overall main sample results for each dimension are grouped according to the depth of deprivation—the four categories are least deprived, somewhat deprived, deprived and most deprived. The scores for each dimension are normalised (i.e. put onto a scale of 0.01 to 1.00). The scores from 0.01 to 0.25 are categorised most deprived, between 0.25 and 0.5 are categorised as deprived, between 0.5 and 0.75 are categorised as somewhat deprived, and those above 0.75 are categorised as least deprived. The dimension results show the proportion of individuals categorised in each level of deprivation.

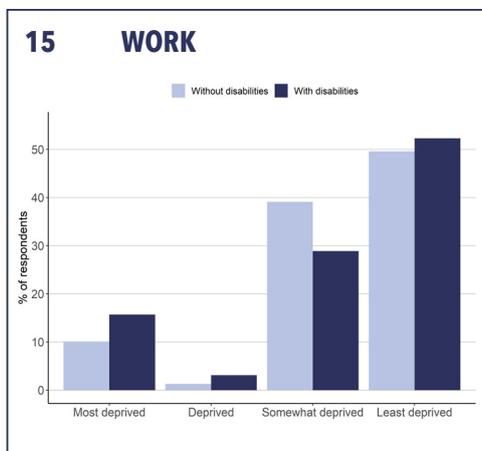
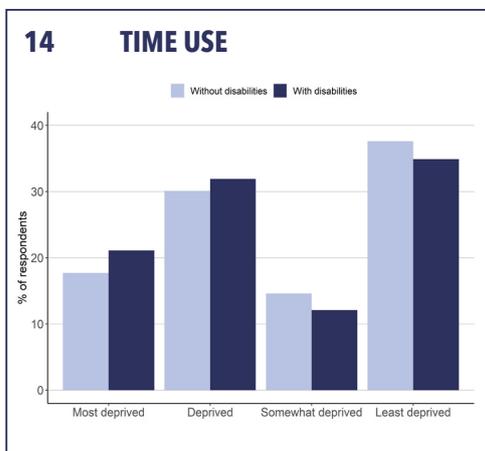
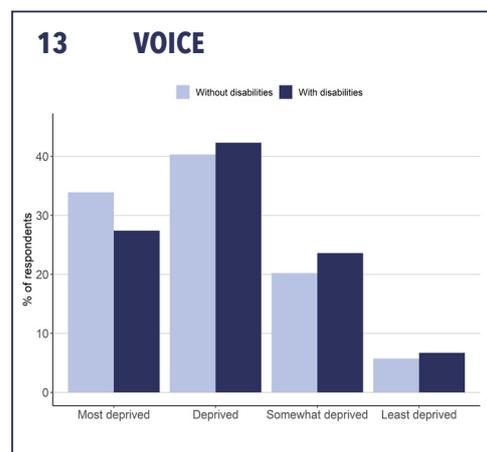
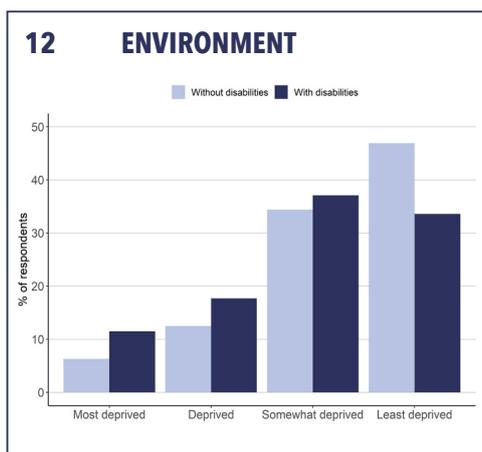
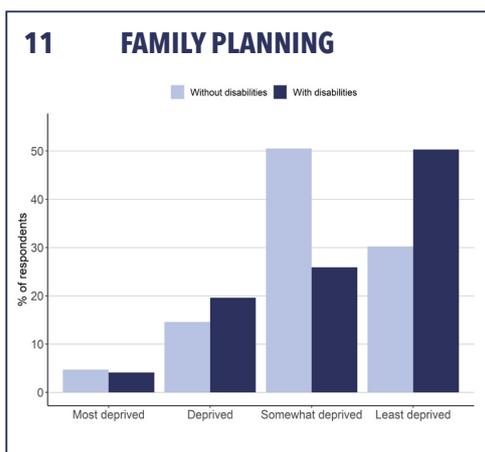
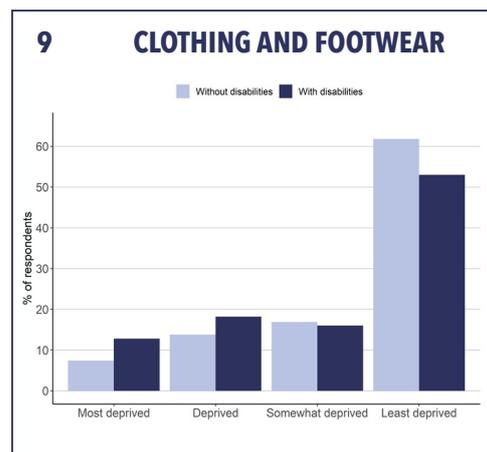
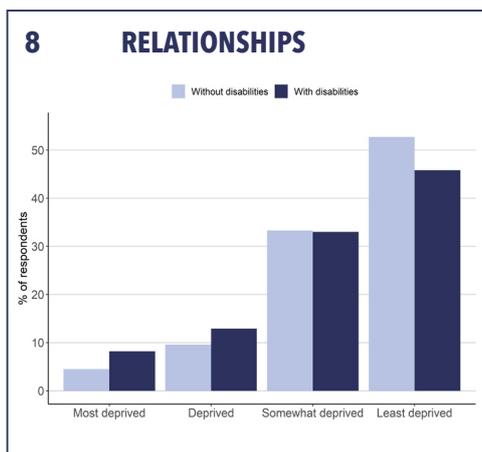
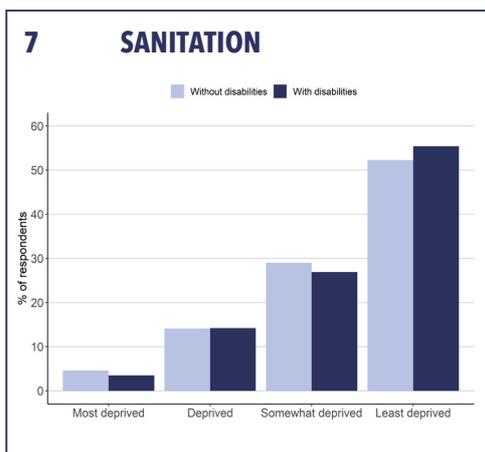
The IDM does not measure the full extent of achievement, which means that being categorised as least deprived does not mean a person is not deprived at all—in many cases, the least deprived category indicates a relatively low level of attainment, such as in the clothing and footwear dimension.

It should be remembered that the novel combination of variables included in each dimension and the index construction approach, combined with measurement at an individual (not household) level, means that, even where variable-level data is very similar to data from other sources, the results presented may differ in important ways from other poverty assessments in South Africa.

Figure 2 shows the results for national-level main sample for the 14 dimensions, and the text below highlights the most important differences between those with disabilities and those without. The importance is determined not only by statistical significance, but also by the size of these differences—only those of more than approximately 2% from the overall figures across two or more of the four deprivation categories reported. The detailed results for each indicator, theme and dimension, across each of the subgroup analyses can be seen in the results tables in Suich et al. (2020a).

Figure 2 Overall results for the IDM dimensions, South African main sample, by disability status (updated)





There are three dimensions in which there are no substantial differences between the two groups—shelter, sanitation and voice. The family planning dimension is the only one for which those without disabilities are, on average, worse off than those with disabilities. For the ten remaining dimensions—food, water, health, education, energy, relationships, clothing and footwear, environment, time use and work—those with disabilities have worse outcomes than those without disabilities.

There are four dimensions in which more than 50% of both those with and without disabilities are categorised as least deprived—water, shelter, sanitation and clothing and footwear. This is also true for 18 themes across eight dimensions. In the health, education, energy and relationships dimensions, more than 50% of those without disabilities (but a smaller proportion of those with disabilities) are categorised as least deprived, as is the case for the health status and functional literacy and numeracy themes.

There are two dimensions—family planning and work—in which more than 50% of those with disabilities, but a smaller proportion of those without disabilities, are categorised as least deprived, and this pattern also holds for the work for pay, profit and production theme.

More than 10% of both those with and without disabilities are categorised as most deprived in four dimensions—food, education, voice and time use. This is also true for eight themes (security of tenure, functional literacy and numeracy, heating energy, washing facilities, basic clothing and footwear, other clothing and footwear, natural resource utilisation and voice in the public domain).

There are three dimensions in which more than 10% of people with disabilities (but not those without) are categorised as most deprived—clothing and footwear, environment and work. This pattern is also followed in the three themes of ownership of essential household items, health status and education level. There are no themes or dimensions in which more than 10% of those without disabilities (but not those with) are classified as most deprived.



The results show that individuals with disabilities are more likely to be deprived and more deeply deprived than those without. Individuals with disabilities are less likely than those without to be in the least deprived category (28.4% compared to 40.5%) and more likely to be in the most deprived category (37.5% compared to 27.0%). Indeed the differences between these two groups are the largest for all of the sub-group analyses (i.e. the differences are larger than for the corresponding comparison by gender, by age and by locality).



In the water dimension, individuals with disabilities are slightly less likely than those without to be in the least deprived category (60.8% compared to 67.0%), and slightly more likely to be in the somewhat deprived category (32.7% compared to 27.2%). The proportions are very similar in both the deprived (2.5% and 2.9%) and most deprived (3.2% and 3.6%) categories.

The dimension level results are strongly influenced by the relatively high proportions of both groups that are in the somewhat deprived category for drinking water (40.2% for those without and 44.5% for those with disabilities). This category includes individuals who have access to clean water sources, but with insufficient supplies, or who can only access unclean sources but have enough to meet needs. Those with disabilities are slightly more deprived in both the drinking water and domestic water themes, but there are no differences between the groups in the water collection threats theme.



At the dimension level, there are no differences between the two groups with respect to the deprivation categories, with fewer than two thirds in the least deprived category (59.4% of those without disabilities and 57.2% of those with disabilities). The proportion of both groups in the somewhat deprived category is the same, 24.5% of those without, and 24.6% of those with disabilities. The figures in the deprived category are 12.8% and 13.5%, respectively, and 3.35% and 4.7% in the most deprived category.

These results are influenced, in particular, by the crowdedness indicator in the habitability theme, and by the relatively poor results for both groups in the ownership of essential household items theme. For the former, approximately 26% of both groups feel that their housing is overcrowded (strongly influencing the approximately 27% of both groups in the deprived category for the habitability theme). For the latter, there are differences at the theme level—63.6% of those without disabilities compared to 55.8% with disabilities are in the least deprived category for the ownership of essential household items (i.e. they own all four household item categories, of cooking utensils, tableware, water storage and/or carrying vessels and bedding). There are no differences between the two groups in the security of tenure theme.



The difference in the health dimension between those with and without disabilities is substantial—those with disabilities are more likely to be deprived and more deeply deprived than those without disabilities—and is one of the largest across the 14 dimensions. At the dimension level, 63.5% of those without disabilities are least deprived, compared to 35.6% of those with disabilities. In the somewhat deprived category are 28.8% of those without and 46.9% of those with disabilities, and the figures for the deprived category are 5.5% and 10.0% respectively. 2.2% of those without disabilities and 7.5% of those with disabilities are in the most deprived category.

This pattern of deprivation holds not only at the dimension level, but also for both of the themes—health status and health care access and quality. It also holds for three of the four indicators, excluding prenatal health care access, where there are no differences.



Individuals with disabilities are substantially more likely to be deprived, and more deeply deprived in the education dimension than those without. For the education dimension, while 64.1% of those without disabilities are least deprived, just 38.8% of those with disabilities are, and 17.2% of those without disabilities are in the somewhat deprived category, along with 20.0% of those with disabilities. The figures for the deprived category are 4.6% and 7.1%, respectively, and for the most deprived category, the figures are 14.2% of those without disabilities and 34.1% of those with disabilities. This pattern of greater deprivation amongst those with disabilities holds for the two themes, educational completion and functional literacy and numeracy, and all three indicators.



In the energy dimension, those with disabilities are more deprived than those without, which is also true for the themes of cooking energy, lighting energy and energy collection. There are no differences between the two groups in the heating energy theme. In the least deprived category are 51.8% of those without disabilities compared to 42.5% of those with disabilities, with a further 30.6% and 37.7%, respectively, in the somewhat deprived category. In the deprived category there are 12.7% of those without disabilities, and 13.3% of those with disabilities. Finally, there are 4.9% of those without disabilities and 6.5% of those with disabilities in the most deprived category.



There are no differences between the two groups at the dimension level in sanitation. The proportion of those without disabilities in the least deprived category is 52.3%, compared to 55.4% for those with disabilities. Of those without disabilities, 29.0% are in the somewhat deprived category, along with 26.9% of those with disabilities, while the figures for the deprived category are 14.1% and 14.2%, respectively, and 4.6% and 3.5% for the most deprived category. Those without disabilities are more deprived than those with disabilities in the toilet facilities and private changing place during menstruation themes, while those with disabilities are more deprived in the washing facilities theme.

Access to handwashing facilities is of particular relevance during the COVID-19 pandemic, and the data for this indicator shows very poor access to basic handwashing facilities for all respondents. Just 56.4% of those without disabilities and 58.0% of those with disabilities have a place to wash their hands at home, with sufficient soap and water (least deprived). This means that more than four in ten people do not have adequate handwashing facilities (i.e. no place, not enough water and/or no soap or soap substitutes).



At the dimension level, those with disabilities are slightly more deprived than those without. 52.7% of those without disabilities and 45.8% of those with disabilities are in the least deprived category, with 33.3% and 33.0% (respectively) in the somewhat deprived category. The figures for the deprived category are 9.6% and 12.9% for those without and with disabilities, respectively. Of those without disabilities, 4.5% are in the most deprived category, compared to 8.2% of those with disabilities.

For the dependence and support theme, individuals with disabilities are more likely to be deprived, and more deeply deprived, than individuals without disabilities. Less than a third of people without disabilities rely on others to help provide basic necessities (such as food, water and shelter), compared to half of respondents with disabilities. There are also higher proportions of people with disabilities than of those without in each of the categories indicating more severe deprivation, and the size of the differences grows with the increasing severity of deprivation. In contrast, those without disabilities are slightly more deeply deprived in the participation in community events theme (and the size of these differences is far smaller for this theme).



For the clothing and footwear dimension, individuals with disabilities are more likely to be deprived, and more deeply deprived than those without. In the least deprived category are 61.8% of those without disabilities and 53.0% of those with disabilities, with a further 16.9% and 16.0%, respectively, in the somewhat deprived category. In the deprived category are 13.8% of those without disabilities and 18.2% of those with disabilities, and the remaining 7.4% and 12.8% of each group, respectively, are in the most deprived category. This overall pattern of deprivation holds true for each of the three themes—basic clothing and footwear, other clothing and footwear and sanitary product use.



Those without disabilities are more deprived than those with disabilities in this dimension. Of those without disabilities, 30.3% are in the least deprived category (those who have no need for contraception), compared to 50.3% of those with disabilities. Of those without disabilities, 50.5% are in the somewhat deprived category, compared to 25.9% of those with disabilities (they or their partner use a modern contraceptive method). In the deprived category are 14.6% of those without disabilities and 19.6% of those with disabilities (broadly they use traditional method and those who refused to answer). The remaining 4.7% and 4.1%, respectively, are in the most deprived category (women whose (male) partners use traditional methods, and individuals who do not use any methods themselves and do not know if their partner uses any method). The higher proportion of those with disabilities in the deprived category is likely due to the higher proportion of this group refusing to answer this series of questions than those without disabilities.



Those with disabilities are more likely to be deprived, and more deeply deprived than those without in the environment dimension. Of those without disabilities, 46.9% are in the least deprived category, compared to 33.6% of those with disabilities, and 34.4% and 37.1%, respectively are in the somewhat deprived category. Of those without disabilities, 12.5% and 6.5% are in the deprived and most deprived categories, as are 17.7% and 11.5% of those with disabilities, respectively.

This pattern of deprivation held for all three themes in the dimension—exposure to environmental problems, natural resource utilisation and safe environment. The outcomes were poor for both groups in the safe environment theme, though those with disabilities remained more likely to be deprived and more deeply deprived than those without.



The distribution of the sample across the deprivation categories for the voice dimension is the reverse of the pattern for most other dimensions. In the least deprived category for the voice dimension, there are only 5.7% and 6.7% of those without and with disabilities, respectively. In the somewhat deprived category are 20.2% of those without disabilities and 23.6% of those with disabilities. The two largest categories are the deprived and most deprived categories. In the deprived category are 40.3% of those without disabilities and 42.3% of those with disabilities, while the figures for the most deprived category are 33.9% and 27.4%, respectively.

These results are driven largely by the poor outcomes in the voice in the public domain theme—where those without disabilities are more likely to be deprived and more deeply deprived than those with disabilities (especially in the voting and participation in local decision making indicators), a perhaps surprising result. There are no differences between the two groups in the personal control over decision making theme.



For the time use dimension, those with disabilities are slightly worse off than those without. 37.6% and 34.9% of those without and with disabilities are in the least deprived category, compared to 14.6% and 12.1% in the somewhat deprived category, respectively.

In the deprived category are 30.1% and 31.9% of those without and with disabilities, and the remaining 17.7% and 21.1%, respectively are in the most deprived category. This last category, of around one-fifth of both groups, spends a minimum one-third of their time on-call, and at least 10.5 hours per day on work for pay, profit and production, unpaid domestic and care work and obligatory activities.



Across the work dimension, those with disabilities are slightly more likely to be more deeply deprived than those without. 49.6% of individuals without disabilities are in the least deprived category, compared to 52.3% of those with disabilities. A further 39.1% of those without disabilities are in the somewhat deprived category as are 28.9% of those with disabilities. Only 1.3% of those without disabilities and 3.1% of those with disabilities are in the most deprived category, while the figures for the most deprived category are 10.1% and 15.7%, respectively.

Those without disabilities are slightly more likely to be deprived than those without in the work for pay, profit and production theme, and in the double labour burden theme, while there is no difference between the two groups in the unpaid domestic and care work theme.

3 CONCLUSION

There are several dimensions for which the differences between those with and without disabilities are the largest of all the sub-group comparisons (i.e. when compared with the size of the differences in the comparison between gender, age and rural/urban locality). This was true for food, health, clothing and footwear and environment. The largest sub-group differences at the theme level also occurred between those with and without disabilities for the two themes in health (health status and health care access and quality), for the dependence and support theme (relationships), for the basic clothing and footwear theme (clothing and footwear), and for the safe environment theme in the environment dimension.

There were no differences between the two groups in the three dimensions of shelter, sanitation and voice. Those without disabilities were more likely to be deprived than those without disabilities in just one dimension—family planning. In contrast, those with disabilities are more likely to be deprived, and typically more deeply deprived in ten dimensions—food, water, health, education, energy, relationships, clothing and footwear, environment, time use and work.

The greater deprivation across ten dimensions of those with disabilities, combined with lower mean and median IDM Index Scores indicates the enormous scope for targeted policies and programs to improve outcomes for those with disabilities (and indeed those without, where both groups have poor outcomes).

SUPPORTING DOCUMENTS

This is one of a series of six IDM South Africa Briefing Notes. They provide a summary of the overall results, comparisons by age, gender, locality and disability status, and finally, an overview of the South African Country Study and revised data analysis methods. Two further documents have been produced to support this series of briefing notes:

1. The updated index construction and dimension scoring procedures for South Africa (v2), see Suich et al. (2020b).
2. The detailed tables of updated results for each of the indicators, themes and dimensions for the South African main sample, see Suich et al. (2020a). The differences in results arising from the use of the revised methods can be observed in detail by comparing them with the original results generated from the original methods, provided in Appendix A.2 of Suich et al. (2020c).

These can all be found at: <https://www.individualdeprivationmeasure.org>

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From July 2020, the research reported here will be taken forward under the name Individual Measure of Multidimensional Poverty (IMMP). The IMMP Program will be housed in the Poverty and Inequality Research Centre at the Crawford School of Public Policy, The Australian National University. Information at [IMMP.crawford.anu.edu.au](https://www.immp.crawford.anu.edu.au) For more information, contact immp.crawford@anu.edu.au