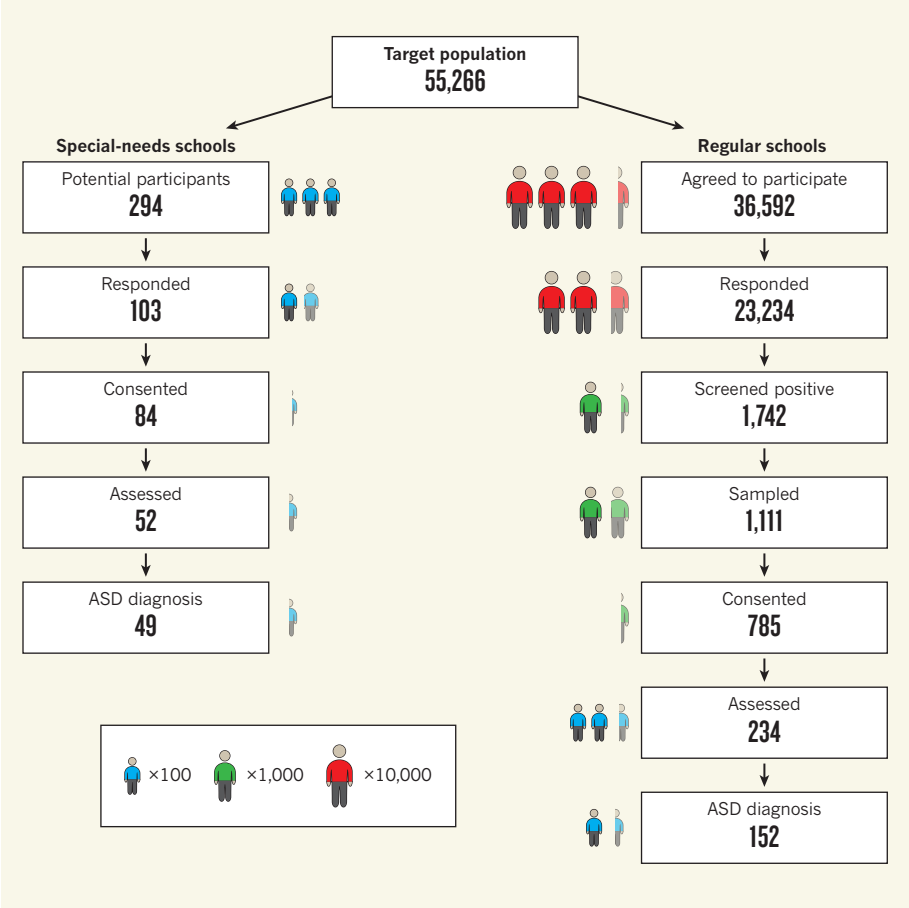

Figure 1 | Kim and colleagues' study[2]. Although the authors set out to investigate a large target population of 7–12-year-old children from two groups in a South Korean community, the number of children they eventually assessed for autism spectrum disorders (ASDs) gradually decreased, as is typical of such studies.

Korea, to show that they could differentiate children diagnosed with ASDs from those without — the standard way in which the methods are evaluated in other cultures.

The study is remarkable in its attempt to identify ASDs in children in mainstream schools, as well as in children receiving special care. The overall response rate was about 60% (Fig. 1). Although 7% of the mainstream schoolchildren screened positive, only 13.4% of these could be further evaluated, primarily because families did not consent to, or did not attend, subsequent assessments. In the end, Kim and colleagues assessed a total of 286 children, and used a range of statistical measures to reach estimates for a population of more than 55,000. In such research, prevalence rates depend on data from the screening questionnaires, which are necessary to make inferences about children not seen. The priority is that no case should be missed. The negative consequences — both clinical and political — of low rates are often assumed to be much greater than those of overestimating.

Yet a larger question arises. Should individuals who are without impairment or disability — that is, without any suffering, limitations or restrictions in daily functioning — be diagnosed with an ASD? In many areas of medicine, diagnosis with a disease (for instance, diabetes) can be clearly separated from the associated disability (from no effect to significant limitation in activity)[6]. By contrast, for a variety of reasons — including avoiding the unfortunate stigma of psychological difficulties — standard-setting agencies[7] have typically required that definitions of ASDs include an impairment or, in the case of young children, a high risk of impairment before a diagnosis is considered.

To identify the presence of impairment, many studies include a measure of adaptive functioning that indicates children's ability to carry out everyday tasks; this is usually markedly impaired in those with ASDs, even in children of high intelligence[8]. In the South Korean study, however, it was not clear whether the children identified as having an ASD needed help but were not receiving it, or whether the mainstream schoolchildren estimated to have considerable ASD symptoms were otherwise without impairments. (The latter would possibly support proposals by self-advocacy groups[9] and others[10] that ASDs are conditions not disorders, but contradicts norms for most standard

50 Years Ago

'[A Symposium on] Solar Variations, Climatic Change and Related Geophysical Problems' — It became abundantly clear how large a number of investigators are patiently accumulating evidence of the amplitude, character, effects and especially the dating of climatic fluctuations all over the world. Speculations regarding the causes abound; supporters of each of the popular theories — solar variation, atmospheric turbidity, carbon dioxide, ozone, variations in the Earth's orbital elements — find their several gods alternately set up and cast down … It now seems almost certain that no one simple panacea is in any way adequate to explain the intriguing patterns of climatic fluctuation to which the evidence points.

From *Nature* 10 June 1961

100 Years Ago

In the meteorological charts of the North Atlantic and Indian Oceans for the month of June … there is an interesting article on the phenomenon of St. Elmo's Fire or corposants (*corpus sanctum*), the harmless luminous electricity of low intensity seen sometimes at night on ships' masts, &c., during unsettled weather. Many examples of authenticated experiences in olden and modern times are quoted, *e.g.* one by Columbus in October, 1495, during a severe storm. It was then assumed that the light emanated from the saint's body, and was a sure sign that the gale was at its maximum … The phenomenon is not unfrequent on land; it was quoted by Caesar and others. On the summit of Ben Nevis the observatory was at times ablaze with it; the observers were not in any way inconvenienced, except by a slight tickling sensation in head and hands.

From *Nature* 8 June 1911