Table 1. Frequency of Absence for Reasons other than Sickness

Age group	No. in group	Median age at 1/1/49	1949–50 Average No. of absences per man	1949–50 No. and percentage of men with 0 absences	1957–58 Average No. of absences per man	1957–58 No. and percentage of men with 0 absences
1	20	23	2·35	3 (15)	2·75	3 (15)
2	51	31	1·61	16 (31)	1·71	18 (35)
3	34	40	1·18	18 (53)	1·71	14 (41)
4	35	51	1·63	15 (43)	1·49	15 (43)
All groups	140	35	1·61	52 (37)	1·8	50 (36)

Table 2. Length of Certified Sickness Absences

Age group	No. in group	Median age at 1/1/49	1949–50 Average length of absence (days)	1949–50 Percentage of absences lasting more than 2 weeks	1957–58 Average length of absence (days)	1957–58 Percentage of absences lasting more than 2 weeks
1	20	23	7·43	14	3·83	0
2	51	31	7·65	18	7·47	13
3	34	40	7·82	18	13·12	53
4	35	51	14·22	67	12·64	55
All groups	140	35	9·9	34	10·9	41

data for the end of the period (1957–58) shows that such an increase has, in fact, occurred. In this case the longitudinal method supports the findings of the cross-sectional method, making it probable that this is a true ageing effect.

In the case of frequency of absence (Table 1) this is not so. The cross-sectional analysis (1949–50) shows the youngest group to have a frequency of absence for reasons other than sickness higher than the other groups. Similar findings by other investigators are reported[3]. On this basis one would expect their absences to become less frequent as they grew older, but the data for the end of the period show that this has not happened and that their absence frequency has, in fact, increased relative to the average. The higher absence frequency of this group seems to be a continuing characteristic, independent of age.

The conflict of evidence arising from the use of these two methods indicates the need for greater caution in the interpretation of the results of cross-sectional investigations. The differences shown by this method may be due to the age differences involved, but the possibility that other factors are operating must also be borne in mind.

This work will be published in greater detail in *Occupational Psychology*.

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Role of Experience in Misreaching produced by Visual Cortex Lesions

When the macular projection area—that part of the visual striate cortex to which the macular region of the retina projects—is removed in monkeys a characteristic symptom can be demonstrated. The animal frequently misreaches for small pieces of food when they are presented to him on a flat surface[1,2]. The error involved may be as much as three inches, and two inches is common. It is the direction of the object, rather than the distance, which is usually gauged incorrectly by the animal; that is, his fingers fall to the sides of the object rather than beyond or in front of it. The direction of the error appears to depend primarily on which hand is used, misreaching to the left tending to occur when the left hand is used and misreaching to the right when the right hand is used. The position of the food relative to the animal's body is also important. This type of behaviour is often called 'past-pointing'; but since the error tends to be one of direction rather than distance, and also because past-pointing is also used to refer to vestibular or cerebellar derangement, we prefer to use the term 'misreaching'.

Misreaching is easily demonstrated during the first few days after operation. It declines, and almost invariably disappears within ten days. Afterwards, operated animals are as adept as normal animals at detecting and picking up small objects.

It has never been shown whether practice is necessary for this recovery to occur or whether it is the result of a spontaneous re-organization of the visual system after part of it has been damaged. The latter hypothesis might seem rather improbable were it not for the fact that we now know that the rhesus monkey is not blind in the centre of its visual field after this operation, although this region is less efficient than in the normal animal[3]. Whichever hypothesis is correct, it is interesting to contrast the high degree of plasticity in such monkeys with the lack of correction in orientation after eye rotation or similar alterations in Amphibia[4].

In order to distinguish between these two views about the recovery process—spontaneous recovery or practice—an animal was kept in total darkness for ten days after the macular projection area had been removed; he was then tested for misreaching. The result was clear. The animal misreached in exactly the same manner and for the same length of time as previous animals which had been tested without a delay after surgery. A control animal which was kept in the dark for 10 days showed no misreaching when it emerged. These statements are based on daily observations made in an experimental situation which permits quantitative estimates of misreaching from ciné film records.

It is concluded that, although the cause of misreaching is still not perfectly clear, recovery depends on experience in the light. It cannot be said without further experimental work whether mere exposure to the light is sufficient, or whether specific practice in reaching for objects is necessary. The latter appears more likely in view of recent work on the recovery of misreaching by human subjects wearing prisms[5].

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