

and six feet high. The entire barge is of all-welded construction, and all three pontoons are divided into watertight compartments.

The craft has now successfully passed initial tests. These included climbing steep embankments in addition to travel in mud, sand and surf. Traction in mud

flats is obtained through vertical fins installed in the bow of the inner pontoon and in forward sections of the others. They are automatically raised into the hull as the barge makes a forward step and lowered into the mud when it touches.

*Science News Letter, January 3, 1948*

PSYCHOLOGY-AAAS

## Stress May Be Ulcer Clue

➤ MEN are more likely to have stomach ulcers because women, although they react more to stress, relax more rapidly and recover more quickly.

The answer to sex differences in ulcers is explained by the way boys and girls react to stress, Dr. L. W. Sontag, of the Fels Research Institute, Yellow Springs, reported.

Dr. Sontag found that girls react more to stress, but that they also relax and recover more effectively than boys. The experiments included plunging a child's hand or foot into cold water for a minute, or tilting the person tested head down at a 45-degree angle for two and a half minutes, and then measuring changes in heart rate, blood pressure,

electrical resistance of the skin, and other physical clues to emotion.

Although the shock of cold water or turning upside down is purely physical, Dr. Sontag explained that it produces almost exactly the same kind of physiological changes as do shocks of a mental or emotional nature.

Dr. Sontag's findings fit in with facts discovered earlier in collaboration with Dr. Hudson Jost. Cousins were found to be much more alike in reaction to stress than unrelated children. Brothers or sisters are more alike than cousins, and identical twins are even more alike.

All this suggests to Dr. Sontag that the way a person behaves under stress is in part due to his inheritance.

*Science News Letter, January 3, 1948*

ETHNOLOGY-AAAS

## Baby Care Just Average

➤ AMERICAN infants get just about average treatment compared with babies in other parts of the world, Dr. John W. M. Whiting, of the State University of Iowa, is convinced.

How mothers of 85 different peoples, including the U. S. A., feed their babies and wean them, teach them manners in regard to toilet habits, give sex instruction or prohibitions, train them to be independent and to control aggression, was studied by Dr. Whiting in collaboration with Dr. Irvin L. Child, of Yale University. The American study was conducted on "middle-class" mothers.

American mothers, they found, seem to be in a big hurry to start training their babies. American babies are weaned earlier and must get their toilet training and sex training way ahead of most other children.

But the American mother does not hold the record for nonindulgence in nursing her baby. That goes to a Polynesian tribe, the Marquesans, where the mothers believe that nursing the baby

will spoil their beauty. Feeding times have nothing to do with the protests of the child. Only in this tribe, among the Maori, and in the American middle class, is the baby weaned before he is a year old. Two societies do not wean their youngest children at all, but the average is two and a half years.

Babies are trained in modesty all over the world, even where adults do not wear clothes. The Kwoma of New Guinea, for example, teach girls to sit modestly and boys not to stare at girls or women. Americans have a just average rating in modesty.

In this tribe, the lucky babies receive the most indulgent care from their mothers. The tribe is polygynous, and when the baby is born the mother is excused from all household and gardening cares, and devotes herself entirely to the baby until the child is weaned. During this time, the co-wife must do all the other work.

In punishment for aggression, again the American middle-class stands on

middle ground. Among two peoples, the Lepcha and Hopi, aggression is discouraged completely and consistently from birth. The Kwoma, on the other hand, give specific encouragement and training in aggression during childhood. Ratings were made separately for physical aggression, verbal aggression, property destruction and wilful disobedience. Property destruction is punished most severely, wilful disobedience next. Least severely punished form of aggression is physical aggression.

With regard to severity, the American mother takes her place at the most harsh end of the scale with regard to sex and toilet training. She is most indulgent in training for independence. She is just average in weaning her baby and in teaching him to control his aggressiveness.

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