

mality in ditto) was 40.7%, field-III (suspected neurosis) was 11.2% and field-IV (neurosis) was 2.3%. Although the above results are more desirable compared with results of ordinary persons, further investigations should be made on the fact that the sum of percentage in field-III and IV reached 13.5%.

### 352. MENTAL EXCITATION IN THE CREATING PROCESS OF DANCE

T. WATANABE AND Y. KAWAHARA

*Ochanomizu University for Women*

There have been few reports of scientific analysis of dance as its creation belongs to art field. The authors tried to find the process of creation in the mental aspect through EEG and GSR by getting the subjects to create the dance.

Rhythm of accompanied music was based on heart rate. Investigating upon the creative process of the creator and upon the accepting process of the as- pector, the authors studied on the differences and similarities between them.

As the dance has close relation the accompanied music, relation between the dance and the accompanied music was studied by experimentally separating.

### 353. ACUTE PULMONARY EDEMA AT ALTITUDE

K. TATSUNUMA

*Laboratory of Physical Education, Keio University*

There have been many case reports of death from pneumonia at altitude. The author had a doubt as to a case which he encountered at altitude of 5600 meters in Mt. Himalaya and studied on similar eight cases. The chief symptoms at the initial stage were no appetite, nausea, weakness, sore throat and cough. Then the patients' condition deteriorated rapidly and they suffered from mucous spumescent sputum or red-whity sputum, tachycardia and orthopnea, and they fell into collapse status followed by death. No pyrexia was at initial period.

Symptoms of circulatory disturbance at altitude are generally tachycardia, heart enlargement and polycythemia. It is considered that pulmonary stagnation occurs from little oxygen-intake despite of hyperventilation owing to rapid want of oxygen, which charges heavy load to the right ventricle and leads to heart enlargement. Increase of erythrocytes brings about prolongation of blood circulation time, which results in stagnant anoxia. It is matter of course that heart enlargement and blood concentration result in disturbance of pulmonary circulation, and that heart enlargement is surely preceded by pulmonary stagnation and excess loading to the right ventricle, namely by disturbance of pulmonary circulation. This status aggravates more rapidly by muscular