One method used to measure pain is the observational method. This involves the observation of patients who are in pain and evaluation of their behaviour to detect whether they are in pain or not. Turk et al. state four observable criteria for observing pain; the first of which is audible or visual expressions of pain. For example, this could be hearing or facial displays of pain like grimacing.

Secondly, duration to the patient's body and their movement can be assessed for example limping could be taken as an
indication of pain. Thirdly the negative emotional consequences of pain can be noted for example the patient becoming irritable, annoyed and irritable. Finally the avoidance of activity is an observable pain measure. Due to being in pain and needing to rest, Turk argues the individual will avoid any unnecessary activity. Turk argues this observational method of measuring pain can be done by talking to a relative, friend or family member living with the patient.

b) There are many methods to measure pain and many factors that could be taken in isolation, therefore, each may have a questionable validity.

For example because pain is a subjective experience and is easily observable by others, this means it is highly influenced greatly by reinforcement. For example an individual may display they are in pain (by using behaviours such as limping) in order to get positive social reinforcement (sympathy and attention) not because they are actually in pain. Therefore this lowers the validity of the observational method of pain measurement as lowered due to the influence of social reinforcement. The influence of reinforcement may be lowered if pain behaviour is checked against criteria for pain pain behaviour as this would make it a more objective measure. However this has a low validity in itself as deciding on what certain pain behaviour should look like and what it consists of has been determined by someone's subjective opinion. This will be invalid as it may overestimate the importance of some behaviours and underestimate others, it may also completely miss out some aspects of pain behaviour.
Physiological methods of measuring pain may be more valid measures for example headaches can be measured through the use of an EEG. Peaks in the EEG readings have correlated with headaches and individuals self reports of their headaches making this a more valid measure.

Another physiological measure is to assess muscle tension using an ECG machine as increased muscle tension is associated with pain. However patterns on ECG machines have not correlated with patients reports of pain making this a less valid measure. Testing the individual's autonomic response to pain is another physiological measure, e.g. heart rate, blood pressure and skin conductance and temperature. These factors would increase with increased pain. However, these readings may be confounded by the fact that the patient is nervous from being tested and ready up to machines. Increased nervousness would therefore also lead to increased autonomic response making this a less valid measure for measuring pain.

Finally the extent of tissue damage may also be an indicator of pain, with increased tissue damage being associated with increased pain. However, this measure lacks validity as it assumes tissue damage directly relates to pain which is too simplistic as there are multi-dimensional factors affecting the sensation of pain.

4a) Psychologists have learnt that the causes of accidents are multi-dimensional. Reventlow describes accidents as "unseen, unplanned and uncontrollable events usually with unhappy consequences." These investigations into the causes and preventive measures taken for the prevention of accidents