**2 Dematte, Ősterbauer and Spence (smells and facial attractiveness) investigated the effect of olfactory cues on attractiveness of male faces to female participants. They asked the participants many relevant questions prior to the experiment but did not ask about their sexual orientation.**

 **(a) What is meant by ‘generalization’? [2]**

 **(b) To what extent are the findings of Dematte, Ősterbauer and Spence generalizable? [3]**

 **(c) ‘Halo dumping’ was one possible threat to validity considered by Dematte, Ősterbauer and Spence. Discuss the validity of this study. [10]**

 **(d) Discuss the practical and ethical issues raised by the briefing questions in this study. [10]**

**Sample answer to Paper 2 question #2**

**(a) Generalisation refers to the ability of the experimenters to apply their findings and conclusions from a sample to the general population.  If the sample is representative, then it is also generalizable.**

**(b) The sample in Dematte, et al, was 16 college-age females.  They only represent a small proportion of the population and would therefore not be generalizable.   It could be argued that physiological studies are similar due to biological characteristics being similar in all people, and from that standpoint the results could be considered generalizable.  However, a small sample of all females seems weak.**

**(c) Validity is the degree to which the study measures what the researchers claim to be measuring.   In Dematte, “halo dumping”would mean the sample participants were simply mixing the smells with attractiveness in the same way smells are often mixed up with taste ( “that smells so sweet”). Using a repeated measures design meant that all the faces were presented to all the women with varying order (counterbalancing) to prevent them figuring out the true point of the study (order effects).  This would have improved validity in that no faces and smells were ever presented the same way.  However, the procedure required them to breathe in through their nostrils in between faces, then the olfactometer released the odors into the room.  This repeated procedure for 40 faces would almost certainly result in some kind of order effects as the women knew a smell (pleasant or unpleasant) would always follow each face.  The researchers did the best they could in maintaining validity and they waited until after the rating of facial attractiveness to have them rate the intensity of the smells.**

**(d) All psychological studies involve issues (not necessarily violations) of ethics as well as practical concerns.  The Dematte study, for example, had to involve deception in order to be valid.  If the women knew they were being tested on smells and their relation to facial attractiveness, they would almost certainly have yielded to demand characteristics.  The briefing involved questions about past experiences with olfactory problems, illnesses, etc.  These questions relied on self-reports which can be unreliable if the participant isn’t truthful or just forgets something relevant.  Privacy and confidentiality also must be considered when asking questions about someone’s past, especially if the questions include mental illnesses of any kind.  Thorough background checks can be expensive and time-consuming as a practical problem as well.**