1. For each of the five studies below,
   • Clearly identify the independent variables, i.e., the antecedent variables that the investigators manipulated or measured; and
   • Clearly identify the dependent variables, i.e., the variables that the investigators thought might be affected by their independent variables.
   • Summarize the results on the basis of the particular figures and/or tables I give below (do not describe results that are not included in those particular figures and tables).

Also, read the question carefully, because in some cases (but not all) I ask you to comment on some particular aspect of the study.

Each part of question 1 is worth 4 points.

a. Berceczkei et al (2007) “Public charity offer as a proximate factor of evolved reputation-building strategy...” – Summarize the major results shown in Figure 2 and Table 1.

IVs: public vs. private charity solicitation; personality characteristics; gender

DV(s): (1) charity offer (yes or no); (2) change in reputation following charity offer

(See extract from their paper at the right.)

Results: (1) Subjects were more likely to make charity offer when it was public; (2) Their reputations went up as a consequence of the public charity offer, but not as a result of private charity offer (which served as a kind of a control); (3) Personality characteristics also were related to whether or not they made charity offer (especially compassion and empathy, also gender, Machiavellianism, community).

b. Puts et al (2006) “Dominance and the evolution of sexual dimorphism in human voice pitch” – Summarize the major results shown in Figures 1 and 2. Be clear about what is meant by ‘social dominance’ and ‘physical dominance’. Comment on how well each of those two variables is measured.

Fig 1: IV = pitch of voice, DV = dominance ratings

(i.e., they asked whether voice pitch would affect the perception of dominance and then they flipped IV and DV and asked whether perceived dominance would affect voice pitch, whether subject would raise or lower it)

(You didn’t have to mention two other DVs that they did nothing with, or found nothing for: self-reported number of sexual partners, and interest in dating “the woman in the other room”.)

[Details (you were not expected to give these but I include them here because this was a tricky one): There were two different groups of subjects. One group of men (‘raters’) rated the social and physical dominance of a second group of men (‘participants’) that had participated in a competitive...]

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dating game scenario. Each participant was recorded giving his unscripted argument as to why he “might be respected or admired by other men” (‘competitive recording’), and this was subsequently rated by the raters. In the first part of the study, the voice pitch of the recordings was manipulated (raised, lowered, or unmodified). This was the IV. The raters were asked to rate the social and physical dominance of the participants on the basis of these recordings. Their ratings were the DV. In the second part of the study, the men who had competed in the dating game scenario were asked to rate their own social and physical dominance, and then rate the dominance of their ‘competitor’ (who was the same pre-recorded individual for all the participants); the difference between the two ratings thus defined the extent to which the subject felt he was dominant or subordinate to the competitor) and this was the IV. The DV was how much the participant raised or lowered the pitch of his voice.]

Results. Figure 1: When voice pitch was lowered, voices were rated as being more socially and physically dominant. Physical dominance ratings were more affected by pitch change than were social dominance ratings. Figure 2: Men raised the pitch of their voices when competing against a male perceived as being more physically dominant than themselves and lowered the pitch of their voices when competing against a male perceived as less physically dominant. (Remember, the competitor was the same for everyone, so the subject was essentially rating himself, with this self-rating ‘calibrated’ against this one particular voice.)

Comparison of how well the two types of dominance were measured: Neither one very good. ‘Social dominance’ and ‘physical dominance’ were both measured via very simple verbal descriptors (roughly, do you give or follow orders?, would you win or lose a fist fight?). Neither one was validated in any way. The ability of raters to assess these two variables was probably better for physical dominance because voice pitch tends to be correlated with size (bigger men generally have lower voices) which is correlated with physical dominance (potentially) but probably not with social dominance, or at least not to the same extent.

c. Baker & Maner (2008) “Risk-taking as a situationally sensitive male mating strategy” – Summarize the major results shown in Table 1. Comment on why females take more risk than males.

IVs: (1) Attractiveness (high and low) of photographs of opposite sex face; (2) gender; (3) mating motivation ratings.

DV: (1) risk-taking in the blackjack task (how many times the participant’s chose to take another card); (2) face recognition memory.

Table 1 shows that in males who had viewed attractive faces there was a positive correlation between mating motivation and risk taking (.55) and facial memory and risk taking (.62). But no such correlation was found for males viewing unattractive faces, or females viewing either attractive or unattractive faces.

That females took greater risks on average than males is counter to the basic assumption of the study, which is that men are greater risk-takers in general, especially when they are competing for women. So it needs to be ‘explained away’ somehow. Possibilities that were suggested were that females were more confident in their blackjack abilities or were more ignorant of the game (and so did not know they were taking a risk) or that they were not engaged (no money at stake), i.e., did not care that much about winning or losing.
d. Cheng et al (2010), “Pride, personality and the evolutionary foundations of human social status” – Summarize the differences between the results shown in Table 2 and Table 3, and describe the authors’ explanation of these differences.

**IVs**: Personality trait ratings, including ‘hubristic’ and ‘authentic’ pride [further detail not required]

**DVs**: Dominance and prestige (self-rated in Study 1, self-rated and peer-rated in Study 2)

People often got these reversed. The study is correlational, but it is important to recognize that the theory posits which variables are causal (the IVs) and which are their consequences (DVs). It was legitimate to say that because this was a correlational study and so there were no IVs (but that kind of misses the point of the study).

Results: Trait hubristic pride predicted dominance and trait authentic pride predicted prestige (in both studies). In addition:

**Study 1 (Table 2)**: Positive traits (genuine self-esteem, self-acceptance, conscientiousness, extraversion, openness) predicted (self-rated) prestige, while negative traits (narcissistic self-aggrandizement, aggression, disagreeableness) predicted (self-rated) dominance.

**Study 2 (Table 3)**: Prestige predicted by positive traits (including especially leadership, social skills), dominance contra-predicted by these skills (all negative correlations except with leadership). Self-reports generally have lower correlations with dominance and prestige ratings compared to peer reports, except for a new variable “Agency” which was positively correlated with both dominance and prestige. Lots of people did not see the forest for the trees in this question and failed to comment on the general pattern of how personality traits differently predicted prestige and dominance. Here is the authors’ summary:

Specific social group, we found that individuals high in dispositional hubristic pride tend to view themselves, and be viewed by their peers, as dominant, whereas individuals high in dispositional authentic pride tend to view themselves and be viewed by peers as prestigious. We and prestige. Dominant individuals tend to be narcissistic, aggressive, extraverted, disagreeable, and agentic. In contrast, prestigious individuals tend to have high genuine self-esteem and be conscientious, socially accepted, agentic, intelligent, prosocial, and capable advisors.

e. Flinn & England (1995) “Childhood stress and family environment” – Summarize the major results shown in Figure 2 and Table 2.

**DVs**: dynamic cortisol response, overall cortisol response levels

**IVs**: family composition, behavioral activities, immune responses, health, events (e.g., severe punishment, family fight), and temperament.

**Figure 2**: Children living with step-fathers, distant relatives, or single parents without kin support had higher cortisol levels than children living with both parents, single mothers with kin support, or grandparents.

**Table 2**: Family conflict or change is associated with high-stress events that increase cortisol levels. Punishment, quarrelling, and residence change also increased cortisol levels. Affectionate contact decreases cortisol levels. These results indicate that family interactions positive and negative modulate psychosocial stress in children.
2. In some but not all of these studies, the experimenters contrasted independent variables of two very different types:
   - those that were stable/chronic/permanent, and
   - those that were dynamic, one-time events.

Identify the studies that did this, identify the variables for each one, and, if there was a difference between the effects of these two classes of variables, comment on which had the bigger effect.

_Below I show the DVs as well as the IVs even though the question asks just about the IVs. Dynamic IVs are shown in brown, stable IVs in blue. Total 5 points: you got 1 pt for each of the three studies (public charity, risk taking, childhood stress) you correctly indicated as having the two types of IVs, and 1 pt for each of the two studies which you correctly indicated did NOT have the two types (pitch dominance and pride & personality) or that you left out of your answer entirely, which implies you had that opinion._

   _IVs: public vs. private charity solicitation; personality characteristics; gender_
   _DV: (1) charity offer (yes or no); (2) change in reputation following charity offer_
   _Biggest effect on whether subject made charity offer and on the change in his/her reputation was the one-time event of whether the charity offer was made in public._

   _(all stable)_

   _IV: (1) Attractiveness (high and low) of photographs of opposite sex face; (2) gender; (3) mating motivation ratings [kind of intermediate really, could categorize either way]._
   _DV: (1) risk-taking in the blackjack task (how many times the participant’s chose to take another card); (2) face recognition memory._
   _Surprisingly large effect of seeing the attractive photographs (for men who were interested in a mate)._

   _(all stable)_

   _IV: family composition, behavioral activities, immune responses, health, events (e.g., severe punishment, family fight), and temperament._
   _DV: dynamic cortisol response, overall cortisol response levels_
   _Both chronic and dynamic effects were important_