**After**consulting the answer sheet and carefully looking over your answer, if you have a disagreement or do not understand your grade, make an appointment with the person who graded the question as indicated on the answer sheet.  You will need to make a careful argument why a grade should be changed rather than ask the grader to justify the grade.  Please keep in mind that the total point total for the class is 600 points.

**Mean = 87.16, SD = 8.83**

***Questions 1, Graded by JeeEun Lee (jl3738)***

A. **[Statement of Problem: 2 points]** These are adult toilets in a nursery school which are too high/tall for young children. **[Link to Manifest Function: 2 points]** This illustrates a problem with manifest functioning. The objective functional requirements for using a toilet are violated. **[Explanation : 1 points]** The explicit meaning or identified properties of a toilet are not served because the child cannot use it properly

B. **[HER Process: 1 points]** One is personal space. **[Explanation: 2 points]** Using one toilet while another is in use would likely violate create discomfort because the toilets are so close together that personal space would be impinged upon. **[Linking to Latent Function: 3 points]** This illustrates a latent function because this has nothing to do with the manifest function of the toilets. We also know that personal space bubble size is influenced by sociocultural meanings such as the nature of the relationship one has with the person close by.

OR

 **[HER Process: 1 points]** Privacy is another one. **[Explanation: 2 points]** Because the toilets are in open space (high visual exposure), most people would feel this is creating too much social interaction or more intimacy than desired. **[Linking to Latent Function: 3 points]** This illustrates latent function for similar reasons as above. Part of using a toilet is the latent function of privacy or being shielded from the views of others. Moreover the degree to which this might bother individuals is likely related to their expectations or feelings about using a toilet.

C. **[Statement of Problem: 2 points]** Answer needs to describe a gap and then **[Linking to L or M Functions: 1 points]** link it to latent or manifest function (or both). **[Reason why they are L or M: 3 points]** The answer has to describe why latent/manifest/both.

D. **[Universal or Subgroup? : 2 points]** Answer needs to explain whether they think universal problem of some likely subgroup of Cornell students might experience it differently. **[Reason why U or S? : 3 points]** Common examples of latter are likely to be gender, culture/ethnicity, disabilities.

E. Answer follows from above. **[Correct Answer for D : 1 points]** If universal than no person X environment interaction. If a subset has a different reaction to the gap, then a person X environment interaction. **[Explanation : 2 points]** Person X environment interaction means that the impacts of the environment on human beings varies or is moderated by some characteristic of the person. \*\*\* 0 point for ‘E’ if the student doesn’t understand the concept of interaction correctly, even though they answered Yes/No correctly.

***Questions 2, Graded by Heather Bazille (hb456)***

A. **(6 pts total)**

Personal space is the zone or area around the body than we maintain between ourselves and other human beings. **(2 pts)**

 Two theories that will be discussed: **(4 pts)**

1. Overload/stress theory - Personal space acts as a shield or buffer to help reduce the amount of stimulation we are exposed to from others. When someone is too close there is an overload of stimulation from various sensory systems. We find this stressful. Partitions cut down on stimulation and thus can be readily linked to this theory. The distance between the booths could fit her or under the equilibrium theory.
2. Equilibrium/intimacy theory - Personal space is one of several mechanisms we use to try a regulate the degree of intimacy we experience with another person. It is part of a system of behaviors available to us to regulate intimacy that also includes things like eye contact, bodily orientation, various nonverbal postures such as crossing arms/legs. If the person we are interacting with is some we have or wish to have more intimacy with, we will reduce the personal space bubble and vica versa if we desire less intimacy. Thus, the nature of our relationship with the other person is a critical feature of personal space behavior. The spatial orientation of the booths is an example of a mechanism used to regulate the desired level of social interaction. Thus, if we wanted less interaction with strangers in nearby booths, by having the booths oriented away from one another, intimacy is lowered. Also, it is likely to minimize eye contact with the nearby voter.

B. **(7 pts total)**

female bubble is smaller than male bubble **(1 pt)**

German bubble is bigger than Japanese bubble **(1 pt)**

Schizophrenic bubble is highly variables. Mildly depressed bubble is large but static **(1 pt)**

Two ways (at least) to answer the partition question: **(4 pts)**

The size of the bubbles for each will get smaller. The German bubble will change less than Japanese because the partition helps with visual stimulation but not auditory. Both are important to German whereas for Japanese main issue is visual protection/privacy.

On other hand, Japanese are considered a close or contact culture whereas German considered a noncontact or far culture. Partitions will be less influential for someone such as Japanese who already is comfortable with closer interaction distances. For Germans who have bigger bubbles and prefer more distant interpersonal zones, partition will matter more.

C. **(7 pts total)**

The lowest level of discomfort is going to be in personal territory and high visual exposure because in your personal territory you need/expect to have a lot of control over social interaction. For the same reason, the highest comfort is going to be when on your own territory and low visual exposure. It is highest because you are on your own territory which supports the most security and familiarity. For public territory, high exposure is negative but not nearly as much as on the personal territory. Thus, the difference between the high and low exposure rows is relatively small. The group territory is someplace in between. High exposure is negative but less so than in personal territory. **(1 pt)**

Note: the pattern is what is critical, not the absolute values. **(6 pts)**

4 3 1

5 6 10

D. **(5 pts)**

Territoriality is one of the processes/mechanisms we use to help regulate social interaction. Low visual exposure affords more privacy. In a personal territory we need to have maximum ability to regulate social interaction. In a group territory we need to be able to know who belongs and as a group can control the space. For a public territory we have little or no ability or need to control the space since it does not belong to us. We may feel some temporary sense of ownership or control but pretty minimal.

***Questions 3, Graded by Tuvshinzaya Amarzaya (ta357)***

Part A = 2 pts x 4 part = 8

2 pts (1 for IDing and describing HER process and 1 for IDing design element difference)

A. Homeyness qualities of a setting that make it feel more like a home, a place that is ours and that we are attached to and reflects some of our personality/values, a latent function of a house is homeyness. the nursery school is more homey because [**Need one design element to illustrate difference**] it has some diminutive spaces, it has more variety, it has more homey, aesthetic features such as natural light and more natural materials (wood), it has some mnemonics (personal indicators of the occupants identities), embracing (hierarchy of space from public to private)

Personal space the area/zone/bubble around our bodies that we maintain in order to regulate intimacy (nature of interpersonal relationship) with others Because the chairs are fixed in the classroom and have only a small barrier between them, personal space invasion is more likely in the college classroom than in the nursery school where there are more options of places to sit. Also easier to move in or away in the nursery school classroom. The partitions in the nursery school are larger and more substantial than the arm rests and thus afford more comfort vis a vis personal space.

Territoriality for human beings territoriality refers to place attachment where individuals feel some sense of connection or identity with the space; it also a place that one has some sense of ownership or control over and often helps us organize our daily activities. the college classroom is a public territory where occupants only temporarily can control or regulate it whereas the nursery school classroom is a group/secondary territory with a set of qualified users who identify with and control the space. There is evidence of personalization or marking behavior in the nursery school space but none in the college classroom. Both are similar in clarity of boundaries of the territory. Because there are corners and partitions in the nursery school classroom, it may be easier to defend the space or control the behavior of others there.

\*\* The argument for college classroom having more territoriality than nursery - on basis of claiming seat ownership for semester at a time - was accepted ONLY IF there was acknowledgment that college classroom is a public setting whereas the nursery is a secondary space for preschoolers (1 point off if this is not acknowledged)

Privacy the dynamic optimization of desired vs. achieved social interaction. There are many more options in the nursery school to regulate more or less social interaction than in the college classroom. One reason is because the chairs are fixed and highly visually exposed in the college classroom whereas in the nursery school exposure varies by position in the room. It is also easier to manipulate visual access in the nursery school.

Part B = 4 points = 2 points for data (1 for both right variables\*\* + 1 for data pattern that indicated interaction) + 2 points for explanation

\*\* In order to show interaction, there needs to be 2 variables in which one is age (college vs preschool) and the other has to be an element of the nursery room design (toys, bright colors, cubbies etc)

B. To show a person x environment interaction some aspect of the physical environment must vary on two or more levels and be juxtaposed with some aspect of the person. Herein the latter is proscribed by the question: college student and preschool child.

There are many possible answers to the question. For instance:

1= low preference 5 = high preference

 Child scale of furniture

 Absent Present

Preschoolers 1 5

Undergrads 3 2

 Bright colors Muted colors

 5 2
 1 3

 Cubbies No cubbies

 5 1
 2 2

Part C = 3 points = 1 for IDing a variable correctly + 2 for explanation

C. Gender males in the classroom might be more uncomfortable than females because they have larger personal space bubbles (could do same for introverts vs. extroverts, or non-contact vs. contact culture.

Part D = 10 points = 2 points x 5 parts

D. A design guideline for purposes of the exam must have:

1. 2 points Succinct and clear behavioral or performance guideline *(allow a prescriptive guideline even if inappropriate)*
2. 2 points Define the primary HER process your guideline reflects
3. 2 points Describe in terms of that HER process, the rationale for the guideline
4. 2 points Comment about a social identity (e.g., gender, age, culture/ethnicity, disability, etc.) that might be important to consider in terms of your guideline. (Note: this is an example of person X environment interaction) or explain why you think the guideline is likely to apply similarly to most people. Another way to think about this is - are your guidelines universal (“one size fits all”)?
5. 2 points Draw how to implement the guideline (drawing needs to make sense, it does not need to be beautiful).

*Remember the answer needs to incorporate some feature of the nursery school.*

***Questions 4, Graded by Gary Evans (gwe1)***

A. Poor respiratory health or more allergic reactions, falls (injuries) are a consequence of poor quality housing. Lower mental health/greater psychological distress is a mental health consequence. **2 pts**

B. Because people largely have the option to choose their housing this can create a confounding because it is difficult to disentangle some aspect of housing from characteristics of the person choosing to live in the housing. We can not disentangle whether the environmental characteristic of housing is driving the health or well being outcome or if some characteristic of the person is driving the outcome. For instance perhaps people who live in high rise buildings are different in some way (e.g. personality, SES, mental well being) than those who live in low rise housing. **3 pts**

 Several examples: high rise residents have more crime/more psychological distress than low rise residents. Women living in poorer quality housing have more psychological problems than those in good quality housing. Same for children Because we are comparing different people in different housing conditions, we cannot differentiate the impact of housing from that of some individual difference between the housing conditions **1 pt**

C. Measured women before and after they moved from current low quality housing to better housing.

 India study with a wait list control. All residents chose to move from slum to public housing. One group had already moved and the other still waiting to move. Helps control for factor of choosing to move from slum to public housing since they all have chosen to do this.

 Compared college students in high rise and low rise dormitories. The students were randomly assigned to type of dorm. Random assignment ensures that no characteristic of the resident is different other than the housing they live in. [Similar answers but using suite vs. corridor dorms]. **2 pts.**

D. Housing Quality

 Low High

 Premature infant 10 4

 Full term infant 2 2

1=low respiratory problems 10 = high respiratory problems

Premature infants react more negatively to low housing quality than full term infants where housing quality has little apparent impact. **6 pts. As indicated on the exam, you cannot show a person x environment interaction without having at least two levels/factors of environment variation and two or more person variables variation. If I just have one of the columns from above, I do not know if I would have seen the same degree of influence from the other level of housing.**

E. High rise housing can create problems in relation to privacy because of both too much and too little social interaction. Too little social interaction with neighbors can happen because one is less likely to leave their apartment in order to go outside because it is so far away. This can lead to isolation. Another good answer is because I move throughout the building without seeing others, I do not become friends or at least know my neighbors. At the same time in a high rise because one may spend more time inside their apartment with the people who live there, they may feel “trapped” with less opportunity to escape from them. This could exacerbate feelings of crowded or too much interaction, inability to at least temporarily socially withdraw. **2 pts**

 i. Install some social spaces throughout the building so resident doesn’t have to go outside to meet others. Ditto for play spaces for children. Make corridors into suites and/or reduce size of corridors so that the number of proximate neighbors is smaller. Former makes it easier to access spaces outside apartment to socialize with neighbors. Latter makes it easier to regulate social interaction with your neighbors since more likely to know them (socially legibility). **2 pts**

 ii. Build in more depth so that there are more options to regulate social interaction. Increase visual access and/or reduce visual exposure. Both of these provide a better range of options to optimize social interactions. **2 pts**

 F. Defensible space the link between crime and design. Fear of crime or actual crime increases stress and anxiety, both of which lead to suboptimal parenting. It may also be easier to monitor and control children in a residence where you feel a sense of ownership/control, know your neighbors, and can see better who is coming and going. Good secondary/group territory where a subset of qualified users identifies with and can control the space helps reduce crime.

 Similar arguments about successful aging with respect to fear of crime in elderly. Elderly health is strongly dependent on social networks (social support, good social capital). All of these would be strengthened by defensible space and less crime.

 Territoriality a place where one has control and a sense of attachment (identity). Can also help organize and structure daily life having options for personal, group, and public territory is associated with better well being for everyone, adults, children, and elderly. This range of options affords place attachment, group/social cohesion, and higher residential satisfaction.

 Housing quality building height or structural quality Higher quality in children is associated with better physical health and with lower psychological distress. For elderly adults, a high rise might be especially isolating because of the difficulty of building social networks with neighbors. Taller buildings are also associated with more crime.

 Homeyness characteristics of structure/setting that make it feel more residential, sense of belonging, reflect identity and values of residents. Anyone living in a space from childhood to elderly who feels more comfortable and relaxed will benefit. Residences that feel institutional are alienating and may make us feel powerless and undervalued.

 Environmental stimulation the type and/or amount of cognitive stimulation available is linked to better cognitive development in children.

 **1 pt to define the other HER process 3 pts to explain**