Analysis of Character On Gameplay

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by
David Corliss
Joshua Doyle
Timothy Poliquin
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Approved:
Professor David Finkel, Co-Advisor
Professor James Doyle, Co-Advisor

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1 Abstract

This study tested the effects of introducing written character stories on a player's decision process in role playing games. Participants read a short character story, being told that this character would be the person the subject was to portray in a game. We found little correlation between what character information players were given and what decisions were made in game. Instead, results indicated that players will do what seems to be more fun or beneficial to the progression of the game.

2 Background Information

2.1 Introduction

The purpose of our experiment was to determine the effect of a character's back story upon the actions of a player in a virtual environment. This knowledge would help developers in the industry to understand how story affects the players of their games. Knowing this, storytellers could have a better understanding of what types of stories can be effectively told in a virtual space. In addition, this could improve how ideas and messages are told in serious games, greatly improving their quality and value as a teaching tool.

Until the final years of the Super Nintendo, story telling in games was predominantly in the field of adventure games (Jerz). Console games and first person shooters had such rudimental stories that any serious critic would dismiss them as nonexistent. This legacy continues in many puzzle games. This raises the argument that perhaps storytelling is not a necessary function of good video games. For the sake of this experiment, we will disregard this question and instead examine how developers might approach trying to tell a story. As technology developed, games began attempting to tell more powerful stories. With the decline of adventure games and the creation of games such as *Final Fantasy VII,* the role-playing game rose to be the prominent vehicle for telling stories in a video game (Costikyan). They achieved this by creating rich fantasy worlds, combined with text based dialog and vivid pre-rendered cut scenes. However there was a large divide between storytelling and game-play.

This is a trend that would continue into present day games. With the success of RPGs and games such as *Metal Gear Solid,* which also placed a strong focus on story, and the continued development of technology, we begin to see story being spread into other genres. The action/adventure and platformer genres which made up some of the earliest games began to use cut scenes to tell more complex stories than simply "rescue the princess". In the process, they began to create more complex and advanced characters.

One of the more common characters to be created by video games was the anti-hero. Appearing in games as far back as the *Castlevania* series, the dark, brooding anti-hero can be found in many games such as *Devil May Cry*, *Grand Theft Auto*, and *Metal Gear Solid*. However, while the anti-hero may have gained popularity with a medium attempting to reach the cynical modern young adult, the old standby silent hero maybe as popular as ever (Kojima). While classic characters like *Mario* may have become a cheesy stereotypical Italian, *Link* from Nintendo's other major franchise *Zelda* has remained through all his games the silent protagonist. This trend has continued into present day games such as *Halo* where *Master Chief* remains faceless and hidden behind his helmet, as well as *Half-Life's, Gordon Freeman*. While these are two of the most popular character types, there are numerous others. This raises a question: do the characters shown in cut scenes translate into the game-play.

There is some evidence that it does in some way affect game-play. In an interview, Hideo Kojima, creator of the *Metal Gear Series* stated he wanted his protagonist *Snake* to be dressed completely in gray so that his personality became more neutral so that players would have an easier time projecting themselves onto him. The question for our group became could we influence how players played by giving them a character with a strong back-story.

2.2 Choosing a Topic

Over the course of a few meetings at the beginning of the term, we brainstormed on a number of potential topics for our experiment. Following these brainstorms, we researched the general field of video game user studies to see if the topic appeared to have merit and to gather other potential ideas. After a number of these sessions, we had reduced our pool of endless potential topics to 3 fields of interest: learning in video games, with a potential focus on aural vs. visual delivery of information, importance of story in games, and the role of a character's identity in how a game is played.

As it is Professor Finkel's field of interest and research, we were strongly considering performing some form of experiment in the realm of learning in games. Recently this has been a popular topic of study; in fact, several books and articles have been written in this field, including James Paul Gee's *What Video Games Have to Teach Us About Learning and Literacy* and Steven Johnson's *Everything Bad is Good For You*. This at first seemed to be an advantage. It provided us with plenty of experiments to model after, as well as an abundance of background information. However, our research also made it clear that it would be difficult for us to perform an original experiment. As such, we decided that we did not want to be covering ground that had already been covered; we wanted to break out and try to discover something new.

Our next topic was the importance of story in a video game. This has been a topic of debate for a long time, but most of the evidence provided was anecdotal and tended to be personal opinion, without much, if any, scientific backing. The lack of any scientific backing made this topic an intriguing potential field for our experiment. Additionally, a definitive answer could shape the way video games are created and marketed. However, performing a definitive scientific test of this nature would prove difficult, as, in order to test the perceived importance of a game's story by a player, the player would be required to play a large portion of the game. Additionally, there are several variables that could affect a players' response to a story, including a poorly written story, bad acting in stories carried by voice dialog, and poor balancing of game-

action and story development. Even poor game play could turn a player off to a game's story. In the end we determined that the process of testing would be far too difficult and the results would probably prove to be inconclusive. As such, we set it aside for another time.

Finally we looked at the topic of identity in a video game; specifically, we became interested in how a player uses a story model of a character when playing as that character. Although much research has been done on the behavioral effects of violence in video games, little has been found pertaining to the relationship between a player and the character controlled. Despite the lack of background information directly applying to this topic, we were able to discover some other experiments that we could potentially use to model our own after. Of particular use was an experiment by Thaddeus Griebel, which dealt with how a player's values were projected onto a character. Wishing to answer the question of how a person's personality and values are manifest in a player's game experience, Griebel began a study using the life simulator *The Sims 2* with two hypotheses. The first was that personality characteristics would relate to game-play, and the second was that subjects would pass their personal values onto their Sims (the player's character in *The Sims 2*). For example, it was believed that extroverted subjects would make Sims who were more socially aware, while more conscientious subjects would make more career driven Sims.

In this study, 30 students from Dominican University were given the Neuroticism Extraversion Openness Five-Factor Inventory test to determine a basic personality type and the Schwartz Values Survey to determine personal values (Griebel 5). Then, each subject was instructed to play The Sims for a total of 10 hours over the course of 30 days. At the end of this period, each subject filled out a questionnaire detailing his or her experience with the game. The results from this questionnaire were compared with the results from the personality and values examinations to determine how a player projects his/her self onto a character. The results showed that 27 of the 30 players had created a Sim or a family of Sims that reflected the personality and values of the player (Griebel 8). For example, subjects who had a high neuroticism score

were more likely to change jobs, less likely to achieve their Sims' goals, and would often miss bill payments. Likewise, players with high conscientiousness scores led their Sims into more organized lives with more clean living environments. With these results, we can see that a person's personal traits significantly affect the way that a game is played. However, Griebel's experiment does not answer the question of how a character's background affects the way a game is played. As this question remains unanswered and Griebel's experiment shows that it is possible to test the effect of personality in a game, an experiment comparing a player and character's identity in a game seemed promising. As such, we decided to forgo further research into the other two topics and began pursuing the question of how a player uses a character's identity when playing a game.

2.3 Game Selection

In order to properly gather the necessary information to answer our research question, we needed a game that satisfied a very specific list of requirements. First we wanted a game that presented the user with a number of situations in which the players were granted the freedom to make choices that would express their personalities. At the same time, however, we needed a game with enough structure that it would provide a similar enough experience that we could compare the data between individual subjects. We also desired a story with characters that would be relevant in the player's decision making process. Finally we decided that it would be helpful if the game provided some way of objectively measuring the user's choices

These requirements would eliminate MMOs (massively multiplayer online games) from our consideration, as we could not find a way to maintain a similar experience between subjects. Also, it would introduce social pressure into the experiment that may bias the subjects. In addition to MMOs, we also had to eliminate many Role Playing Games as they were either too rigid in how they forced the player to act, or in games such as *Oblivion* the characters were not rigid enough to have any effect on how the user played the game.

Following these criteria we eventually settled on *Vampires: The Masquerade, Bloodlines*. The game is a first-person role-playing game that features a very rich story. The main story line will unfold in the same way, regardless of the choices the player makes. As such, every player will be faced with the same conflicts; however, the manner in which the conflicts are resolved may vary. Through this we will be able to measure differences in how players handle the same situations. The story also creates a system of rules which the player may choose to abide by or break, giving us a means to objectively measure the players actions that is already built into the game. Also, unlike many other games we looked at, many of the conflicts in *Vampires* are not solved through violence, giving the players a diverse set of options they can choose to take. There is an extensive dialogue system that allows the player to diplomatically solve many of the conflicts. Through

this system, we can objectively score the dialogue choices and use them to efficiently and accurately map

the character's personality.

2.4 Game Details

Before playing the game, there are certain rules the player must be familiarized with. The first of these is the *Masquerade,* a system of laws designed to protect the secret vampire society. The player starts with five *Masquerade Points*. One of these are lost every time a player violates one of the rules of the Masquerade, usually using a vampire power outside of combat, or by telling someone about the vampire society. When the player runs out of these points, the game ends. There are, however, points in the game in which the player can gain points. For our experiment we used these as a means to judge how well players followed rules. The second system of use was the player's humanity. Players start with six points in humanity, which can be raised to a maximum level of ten. Raising humanity can be done by doing something humane, and lost by killing innocents. The game uses these to determine how well the player can control "the beast," the demon that resides in all vampires. The higher a player's humanity, the less likely they are to lose control of their character and enter a blood frenzy when low on blood. We used these to determine how humane the individual was. These concepts, in addition to basic game-play elements, were taught to the player through the tutorial. Choosing to take the tutorial was optional; however, it was assumed that most would choose to take the tutorial because they were unfamiliar with the game.

After the completion of the tutorial, the player is placed in an apartment given by the *Camarilla*, the vampire organization that controls the city. Here, players gets some minor information familiarizing them with the world and supplies like food and money. From here, the player can go onto the streets of Santa Monica which serves as the first level of the game. Once on the street, the player is approached by one of the homeless who inhabit the city. The player has the option of giving him a dollar, ignoring him, or feeding off of his blood. From there a short cut scene appears showing *Mercurio*, the player's contact in Santa Monica, dragging himself into a building. After the scene the player regains control of his character; across from the player is a hospital. Approaching the front door will trigger a conversation with Knox, a ghoul

under the control of another vampire. The player can choose to be impolite, dismissive, or nice to Knox.

Depending on how players treat the ghoul, they will learn different information. After this the player will be

able to enter the hospital if they wish. Once inside the hospital, the player has access to the blood bank

where blood packs can be purchased that will serve as potions to restore health and *Blood Spells*, as well as

to drugs which can be stolen, and later sold or used at later points in the game. There are also several

quests that involve the hospital. By reading the computer emails, players can learn about an affair that can

then be used to blackmail one of the doctors. In addition, there is a wounded woman whom the player can

save by feeding some of blood. If the player does this, it engages a conversation in which the player must

choose whether or not to expose their secret life as a vampire. By saving the girl, the player is rewarded

with one humanity point. If they reveal the vampire secrets, it's a masquerade violation and the girl calls for

the police. Finally, at a later point in the game, the player will receive an email asking them to break into the

hospital and steal a sample of Werewolf blood, thus helping to preserve the *Masquerade*.

From the hospital, the next step would be to follow Mercurio to his apartment. Like Knox before

him, the player can either treat Mercurio poorly or be nice to him. Since he's been beaten pretty badly, the

player can give him some of the morphine found in the hospital. Mercurio will tell players that they need to

recover some explosives from the guys who beat him up. This can be done by going to the Santa Monica

Beach. On the beach the player will be stopped by a collection of *Thin Bloods*, Vampires with no Sires and

weak powers. Here, the player can pick up another side quest. Unfortunately, every time the subjects

attempted to participate in this scene, the game crashed. Because of this we instructed them to ignore the

thin bloods, making this series of quests irrelevant to the personality scoring. At the beach house, the

players found the thugs who had the explosives. Mercurio requests that the player kill all of them, however

the player could also choose to sneak into the house and steal the explosives, use persuasion to get by the

guards and buy them, try to intimidate them (this would not work and the player would need to kill all of the

thugs), or seduce the thugs and convince them to give away the explosives. Regardless of how the player achieves the feat, once the explosives are recovered they must return them to Mercurio. Also hidden in the house is the money stolen from Mercurio. Back at Mercurio, the player must give him the explosives. However, players have the option of not returning the stolen money. In either case, Mercurio will instruct the player to seek out Therese Vorman so that she may call off a feud with Bertrand Tung. Tung is necessary for the player to complete their mission in Santa Monica, but he is hidden because of this Feud. To find Therese, the player must seek her out at the night club she owns with her sister, Jeanette: The Asylum,

Upon entering the Asylum, the player is greeted by Jeanette. Here, the player can choose any range of reactions from dismissive to seduction. After their conversation, players must seek out her sister. To do this, the players talk with the bartender. After they persuade him, he'll give them access to the upstairs of the Asylum. Upstairs, Therese will meet the player, upon which she will give them a task. The player must accept this task but can choose to be either rude in doing so or accept gladly. Before heading off to the hotel to complete the assigned task, the players may stop at the bail bond agent and receive a quest. The quest is to find a missing bounty hunter. There are no options to the quest; it is simply a matter of following the bounty hunter's footsteps until the player find him locked up in the basement of a serial killer. The player must kill the serial killer and then return to the quest giver to claim the reward. The Player then must enter the sewers and navigate to the Ocean View Hotel. The quest Therese has for the player is to help her exorcise the hotel of the ghost haunting it. The player only has one way of doing this: recover the pendant left by the ghost.

When the player returns to the office of the Asylum, Jeanette is waiting for them. She asks for the necklace, and the player can either give it to her, or after putting up with some begging, refuse. If players give the necklace to her they fail the quest as she throws it in the ocean and reprimanded by Therese next time they see her. Nothing happens if players refuse to turn over the necklace; the player simply returns it

to Therese the next time she is encountered. In either case, Jeanette also has a task for the player. She wants to destroy paintings at an art gallery and steal the charity box there. As one of the characters was an artist, we thought that this would prove to be a very useful quest in determining if the subjects played like their characters. The player can either accept the quest or refuse to do it. Since the event is being put on by Therese, not doing it saves the player from being yelled at, but other than that there is no reward. For the quest, the player simply has to go to the Gallery Noir and slash the paintings in the proper order. Doing so releases a *Blood Guardian* who attacks the player. Stealing the charity box is optional and has no effect on future options. Upon returning to the Asylum, (if players refuse to take the quest, they must leave the Asylum and then reenter) if the player has done anything to anger Therese they will get yelled at, after which she will tell the player to apologize to Jeanette for her. When the player attempts to do so, he is attacked by some thugs. Upon killing them, the player receives a phone call from Jeanette. Here, it is revealed that Therese was just attempting to be rid of the player so she could kill her sister. The player is to return to the Asylum, hoping to save Jeanette. Here, the player discovers that both Therese and Jeanette are the same person. They will tell the player their life stories, and, depending upon how the player responds, the personality of Jeanette, Therese both will be saved from death. At this point we stopped the subjects' play sessions and thanked them for their time.

3 Methodology

3.1 Character Creation

We created two characters for use in this experiment—Sarah Parker, a fairly amicable female artist whose life seems to revolve primarily around her boyfriend, and Michael Rooney, a self-important self-indulging self-righteous sexist vagrant who does what he finds amusing at any given time. These characters are detailed in the form of an interview, which provides insight into the life events and general attitude of the character described. The interviews can be found in Appendix A (A.1, A.2). Using the information in these interviews, we performed a personality examination on our fictitious characters (more on personality exams in 3.4). Once a strong understanding of each character had been reached, the experimenters played the game, making note of decisions that the player was capable of making, both through dialog and action, throughout the game, and how each character would approach these situations. Collectively, we agreed upon specific decisions as they would pertain to the character playing them. Since we performed the same task we would be asking the subjects to do (play the game from the perspective of each character), it follows that, as a group, our decisions on each action would be those that we should expect from other players attempting to play the role of each character. However, an end survey was determined to be necessary, in order to allow the subjects to justify actions made, should they not align with the actions determined by us for each character. These situations and decisions are detailed on the Player Review Sheets for Mike and Sarah, which can also be found in appendix A (A.3, A.4).

3.2 Using The Characters In Game

While playing through the game after creating the two personalities, we found several important decision points where we could apply the personalities. In general, we saw Mike as having no regard for other people except when they can do something for him. This is exhibited in his riff about how most people are just boring clones of each other. He also states that he likes to intimidate people to get his way and, if that fails, he would likely fight them just to relieve his boredom. This indicated a tendency toward violent behavior, leading to many decisions focused on intimidation and violence. In contrast, Sarah is a more caring individual who sees the conflicts of the world, but tries to find the balance in life. This is shown in her description of her paintings. Traits for both characters have other specific in game consequences. For example, Mike would only use Mercurio to get the information he needs to survive in Santa Monica. When it becomes necessary for him to recover the explosives for Mercurio, he would likely take Mercurio's suggestion to kill the thugs, perhaps after relieving some boredom through toying with them. Sarah would likely show concern for Mercurio's injuries, finding the morphine in the hospital to relieve his pain, and would persuade the gang into selling her the Astrolite. These traits also cause the characters to behave in a similar manner during their interactions with the beggar, Knox, and the girl in the hospital.

Another major decision point, especially for Sarah, revolves around the art show. Sarah, an artist herself, would likely refuse to destroy the paintings for Jeanette. Mike would not likely have a problem with the vandalism and would be more likely to steal the charity money. Another important difference between the two characters is the fact that Mike is a womanizer, as exhibited by his comments to the secretary during the interview. Sarah, on the other hand, has a serious boyfriend. We would expect Mike to attempt to seduce any women he came across but Sarah would not show interest in anyone else. When determining who to give the necklace recovered from the haunted mansion to, Mike would be more likely to give the necklace to Jeanette, the girl who was flirting with him than Therese, the woman who was giving him orders.

Sarah is a somewhat meek individual, as displayed in the beginning of the interview where she chooses to remain standing. Thus, she would probably be intimidated by Therese and therefore be more likely to give it to her. In the end, when the two sisters are fighting, Mike would find it amusing to play one sister against the other. Also, given his reputation with women, he would likely choose to spare Jeanette. Sarah however would try to persuade the sisters to put an end to their conflict. Given Michael's aggressive nature, one would expect him to kill at least one innocent, perhaps more, while Sarah would avoid the killing of innocents at all costs.

3.3 Fixing Character Attributes

Many of the game's decision points require that the character have an aptitude in a particular field. For example, when one person wishes to intimidate another, having a larger body or an aggressive demeanor assists in the success of this action. At the beginning of *Vampires: The Masquerade – Bloodlines*, characters are given a limited number of points which they may assign to feats, such as Intimidation or Brawling. The higher one's level of skill in a particular field, the greater the chance of success. In order to allow our subjects to explore the world as their characters without fear of failure at a particular feat due to poor point allocation, we created save points at the beginning of the tutorial level for each character with all feats learned to their highest level. Therefore, characters were more adept at combat, taking little damage in fights, and were able to perform any conversational feat, such as Intimidate, Persuade, or Seduce, with total success. This also had the side benefit of skipping the introduction movie, which provides character information which would have gone against those prepared for the subject. One save point was created for each character, as each character needed to have an appearance that matched the character descriptions. Thus, Michael was created as a large male vampire who belonged to a clan of vampires known for aggressive behavior. Meanwhile, Sarah is a smaller female vampire, belonging to a clan known for its interest in the arts. Images of each character can be found below.

Michael's large stature, grungy look, and slogan "SYCOSIS" help indicate that the character is an aggressive individual unconcerned with society's rules and expectations.

Sarah is smaller and physically less intimidating. Her well-groomed appearance and fashionable outfit should indicate the character's social reserve and normalcy.

Here, one can see the many conversation options available to players. Blue indicates a persuasion technique, green indicates an intimidation feat, and pink indicates seduction.

3.4 Personality Exam

Each subject was given one of the two characters to assume while playing *Vampires*. However, it was necessary to ensure that each subject would not be assuming the role of a character too similar to his or her self. Therefore, we distributed a personality exam to each of the subjects. We also collectively performed this test on ourselves, assuming the role of each of the characters, to gain a general idea as to what the personality of each character would be. Once we received the results of all personality examinations, we contrasted each subject's results with those of the characters in order to determine which character the subject would assume.

The personality examination used was based on the Big Five five-factor personality model. Finalized by Naomi Takemoto-Chock, this personality model consists of five broad traits, each of which are composed of several more specific attributes. The Big Five attributes are Extraversion, Agreeableness, Conscientiousness, Stability/Neuroticism, and Culture/Openness to Experience (John 6). In response to this model, psychologists Costa and McCrae devised a 240 item questionnaire that could map a person's personality across these five factors and their sub factors (John 16). Used for our experiment is a reduced form of this test, developed by Dr. John A. Johnson, a professor of psychology at Penn State University. In addition to being a professor, Dr. Johnson has conducted deep research into the validity of personality tests, about which he has published several articles (Johnson PSU). Johnson's test is a free electronic examination which allows users to save the results page for free distribution. The personality test used breaks each of the five traits into six more specific attributes. Extraversion is composed of friendliness, gregariousness, assertiveness, activity, excitement-seeking, and cheerfulness. Agreeableness is composed of trust, morality, which here is defined as a tendency toward truthfulness, altruism, cooperation, modesty, and sympathy. Self-efficacy, orderliness, dutifulness, goal-orientation, self-discipline, and cautiousness define Conscientiousness, while anxiety, anger, depression, self-consciousness, immoderation, and vulnerability, or

confidence under stress, make up Neuroticism. Finally, Openness to Experience is defined by imagination,

artistic interests, emotionality, adventurousness, intellect, and liberalism. A sample result page can be found

in Appendix A (A.5).

4 Performing the Experiment

4.1 Experiment Overview

In order to determine how players use a character's background and personality when making decisions in a game, we implemented the following method. First, we created two fictitious characters for subjects to assume the role of in game play. Then, we delivered the personality examination to the subjects to ascertain a general view of each subject's personality. These personalities were then compared with the personality evaluations of each fictitious character to split the subject pool into two groups. We gave these groups one of the character interviews to provided insight into the personality of the character the subject would be assuming. We then monitored and recorded each player's actions on the Player Review Sheet (Appendix C.1). Upon completion of the assigned level, we delivered an exit survey to the players to ascertain what influenced the player's decisions.

4.2 Subject Selection

Participants for the experiment were recruited by speaking to classes about the experiment and collecting names and e-mail addresses of those interested. In total, 29 people expressed an interest in the experiment. Each of these potential participants was e-mailed with a request to complete the online personality examination (as discussed in 2.5) and the entry questionnaire (Appendix B.1). The questionnaire was used to ascertain whether the subject was of legal age to perform the experiment, and to ensure that the subject was comfortable playing mature rated games. Additionally, we wished to know if the subject had previous experience with *Vampires: The Masquerade – Bloodlines*, as any previous knowledge of the game might affect the decisions made while playing. Only subjects of legal age who had not played the game and who were comfortable with mature rated games were selected to participate in the experiment. In the end, 6 of the 29 potential subjects were recruited for the experiment.

4.3 Conducting the Experiment

Before testing began, each subject was asked to read and sign an informed consent agreement (Appendix B.2). Next, we seated each subject at a station and delivered the printed character interview which corresponded with the character that subject was to assume in game. After reading the interview, the subjects were instructed to play the game, starting at save points established at the beginning of the tutorial level. Each subject was allowed to play the game until he had completed the scene where Jeanette and Therese reveal their multiple personality disorder. Meanwhile, two experimenters observed the subject and recorded the subject's performance on the Player Review Sheet (Appendix C.1). Given the simple nature of the Player Review Sheet and the clear presentation of decisions in *Vampires: the Masquerade – Bloodlines*, there were no instances of disagreement. After the last decision point had been reached, we instructed the subjects to stop and complete an exit survey (Appendix B.3), detailing the subject's experience and rationale for decisions made. Using the rationale recorded on the exit survey and the actions recorded on the Player Review Sheet, a determination was made as to how well each subject assumed the role of the character assigned. This will be further explained in section 4.

5. Analysis

5.1 Data Sources

The data we used in the analysis of each player in our experiment came from three separate sources. The first was the personality test that we had each player take before the experiment. This was used as a base line for each player so we could tell if their game play was influenced by the character or just their own personality. Our second and most important source of data was the record that we made of all the decisions the players made in the game, which was used to decide how much the player followed the personality of the character they played. Lastly the post experiment survey was used to find out what the player was actually thinking when they were playing and why they made the choices they did. All of this data was evaluated in order to determine if the player's game play was actually influenced by the character they played.

5.2 Demographics

The players were not a very diverse group of people. They were all recruited from an IMGD class taught by Professor Finkel so they fit into a very small demographic. All participants were male and most were IMGD majors. This also means that all of the players had a significant amount of videogame experience, though one mentioned he didn't have much experience at the type of game that we were using for the test.

5.3 Character Analysis

After all subjects had been tested, all player review sheets were scored on the following system. Each decision was given a weight value; those answers which corresponded with a Mike-like decision were given -10 points, while answers that reflected a Sarah-like decision were given +10 points. Decisions that complemented each other to form larger decisions were given +/- 5 points. For example, in the art gallery, the player is given the choice of destroying the paintings and stealing the charity money. If the player only destroys the paintings, but leaves the charity money, -5 points are awarded (see figure 5G for details). The weighted decision sheet can be found in Appendix C.2. Given this system, a player would gather points ranging between -110 and +110, where -110 indicates complete following of the Michael character, while +110 indicates complete following of the Sarah character. Of the players assuming Michael, the average score was -5, with the most Mike-like score being a -60, and the least Mike-like score being +35. Interestingly, the average score of people assuming the Sarah role was also a -5, with the most Sarah-like score being a +5, and the least Sarah-like being a -15. Despite this similarity, few choices in-game were consistent between subjects. All choices can be seen in the graphs below.

Figure 5A
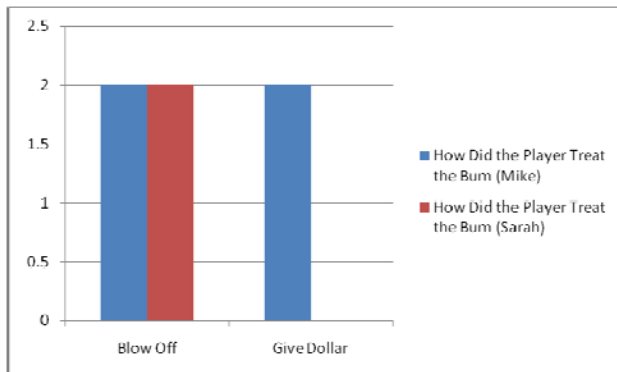
This was one of the primary tests of how well a person followed their character. It was expected that people assuming the role of Sarah would pay the beggar, while those playing as Mike would simply ignore him. As can be seen by the results, all people assuming the role of Sarah ignored the beggar, while people assuming the role of Michael were split between the two decisions.

Figure 5B
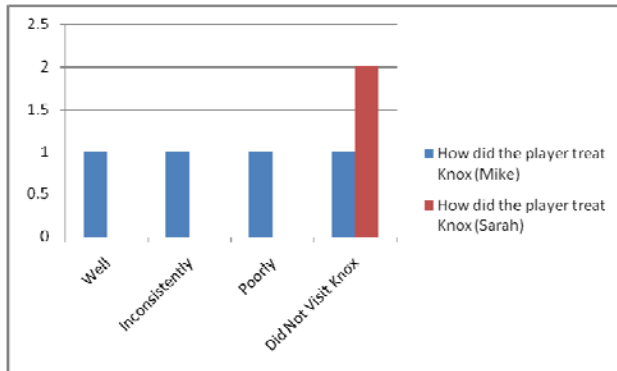
Figure 5C
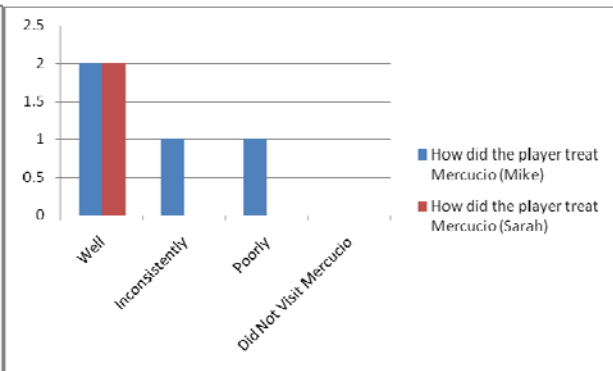
The manner in which subjects approached conversation with other characters in game was thought to be another important aspect of how a person assumes the role of a character. It was felt that, although Sarah is a timid individual, she would be more likely to treat characters in the game politely than Michael would. However, as can be seen in 5C, the two subjects playing as Sarah and two of the four assuming the role of Michael treated Mercurio well, while only two subjects did not consistently treat Mercurio with kindness and respect.

Figure 5D
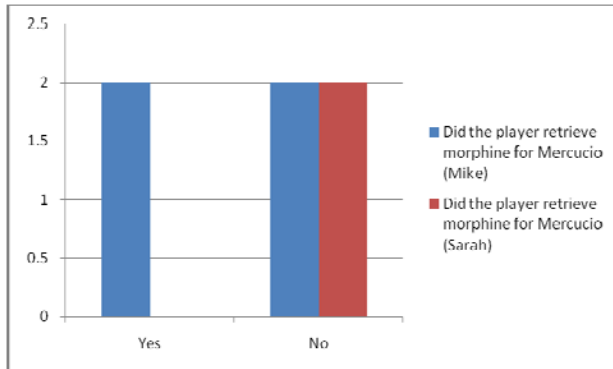
Upon meeting Mercurio, the player finds him heavily wounded. It was expected that subjects assuming the role of Sarah would attempt to find the morphine Mercurio requests. However, only two subjects attempted to recover the morphine, both of whom delivered it to Mercurio.

Figure 5E
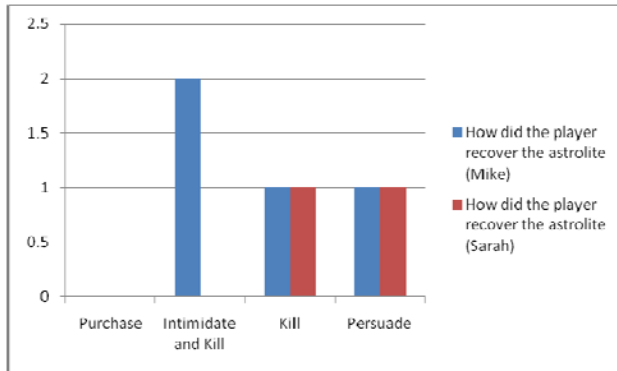
When charged with the task of recovering the Astrolite for Mercurio, several approaches are possible. The player can find money in the lair of the thugs with which he can purchase the Astrolite, intimidate his way through the ranks until he reaches the gang leader, at which point he must fight and kill him, simply charge the complex and kill all gang members in sight, or persuade the gang leader to give the astrolite on credit. It was expected that Sarah would either purchase the astrolite, or persuade the gang leader to give it to her on credit, while Michael would be more likely to shed blood.

Figure 5F
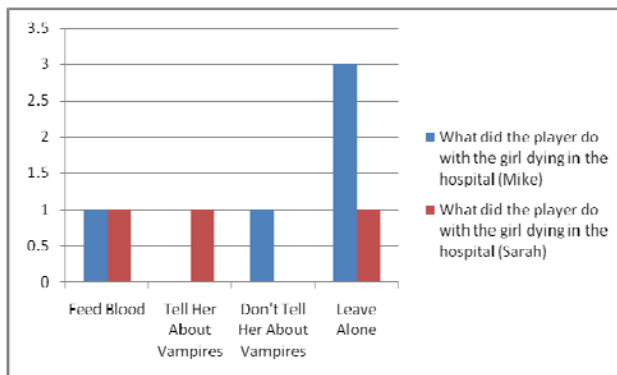
In the hospital, the player finds a girl who is heavily wounded. The player is given several choices: he can attempt to save the girl by feeding her blood, after which he is questioned about what has just happened. The player can tell the wounded girl about what he has done, thus revealing vampire society, or he can ignore her requests. Finally, the player is given the option to step away. It was expected that Michael would ignore her, seeing his own business to be more important than the life of somebody else. Conversely, it was expected that subjects assuming the role of Sarah would feed the dying girl her blood. Although most of the subjects playing Michael left the girl alone, one of the subjects assuming Sarah also ignored her.

Figure 5G
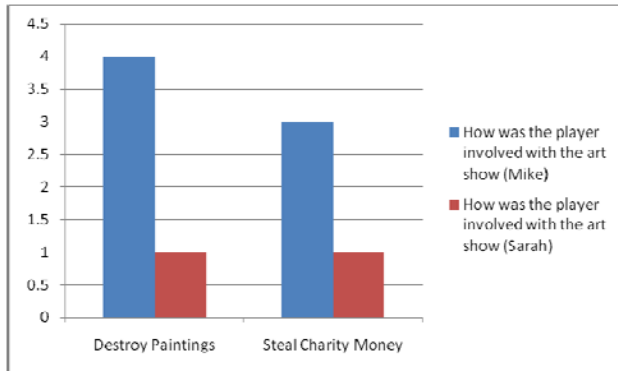
This was considered another critical test of how the player assumed the role of the character he was given. As Sarah was an artist, it was expected that she would not accept the mission to destroy the paintings in the art gallery. Michael was expected to destroy the paintings and the charity money. All subjects who reached this point in the game destroyed the paintings, and only one failed to steal the charity money. However, when prompted for his reasoning for not stealing the charity money, the subject stated that he had forgotten it, indicating he had the intention to steal.
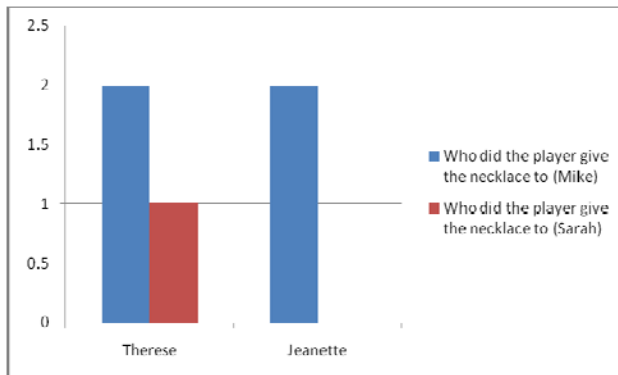
Figure 5H   **Figure 5I**
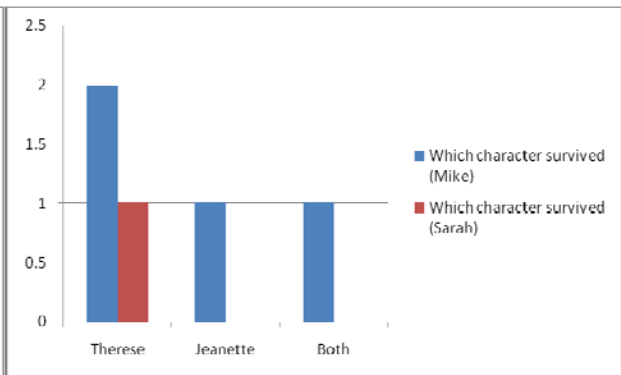
Upon returning from the haunted mansion, the player is prompted with the decision to give the necklace retrieved for Therese to either Therese or Jeanette. Being a somewhat more dutiful person, we expected that Sarah would give the necklace to Therese, while Michael would be more willing to give the necklace to Jeanette in order to win favor with her. Half of the subjects assuming Michael gave the necklace to Therese. Then, the player is prompted with a decision to save Therese, Jeanette, or attempt to save both. Again, it was expected Sarah would attempt to save both personalities, or just Therese, while Michael would focus on saving Jeanette. Again, half of the subjects assuming Michael saved Therese, and a third Michael subject was the only to save both Jeanette and Therese.
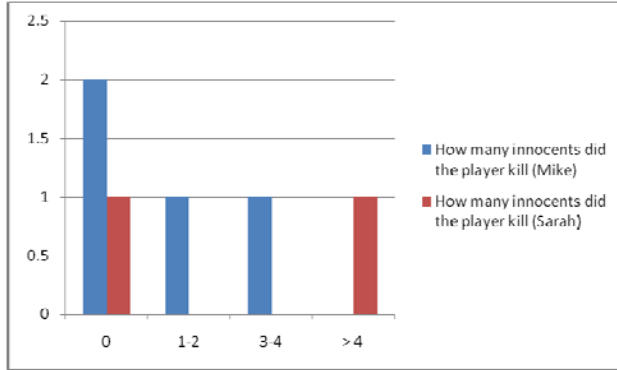
Figure 5J   **Figure 5K**
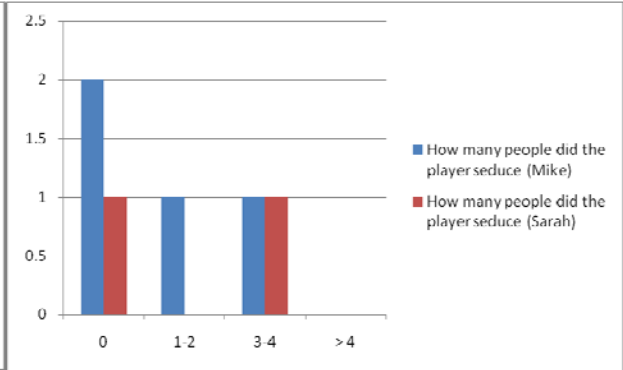
Here, it was expected that subjects playing as Michael would be more likely to kill and flirt excessively, while players assuming the role of Sarah would not kill or seduce. One of the Sarah subjects followed this role, while the other did the opposite. Likewise, half of the subjects playing as Michael did not kill any innocent people, nor did they seduce anyone.

5.4 Personality Analysis

        Each subject's personality was analyzed in regards to the decisions made in game. Below is a graph

showing the five-factor model of each subject, as taken from the personality exams the subjects returned.

The scores shown are the values calculated by the examination scorer based upon the results of each sub-

section.
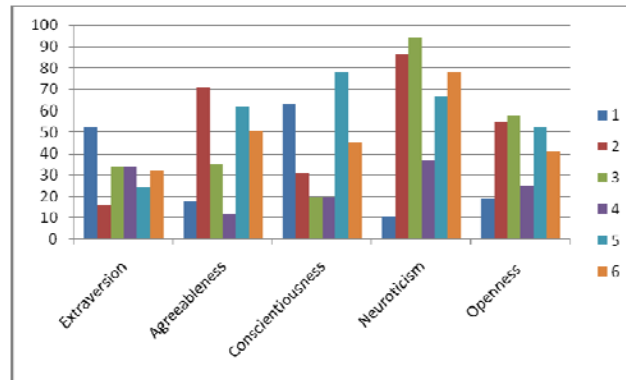
Scores of subjects in each of the five attributes defined by the Big Five personality model

The scores shown were analyzed in conjunction with the actions taken by the subjects while playing

Vampires: the Masquerade – Bloodlines. No definitive correlation was found between the big five

personality scores and the decisions the players made. Thus, a deeper look was taken into the scoring of the

subjects' personalities. Scores in each of the subcategories were compared with each subject's results to

reveal a few potential correlations. First, a correlation was found between how gregarious a person was

(figure 5L) and how likely he would be to use the seduce feat on a character (figure 5K).

Figure 5L
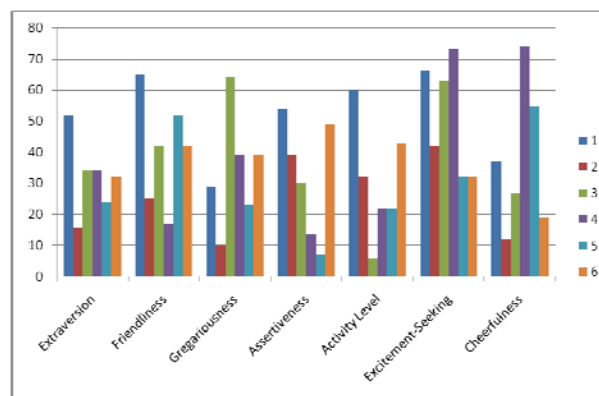
Subjects 1, 3, 4, and 6 all scored in the average-to-high range for gregariousness and used the seduce feat

between two four times, while subjects 2 and 5 scored very low and did not use the seduction feat at all.

Next, subjects 3 and 5 were the only two to pay the beggar upon entering Santa Monica, and both scored

highly in the sympathy category (figure 5M).

Figure 5M
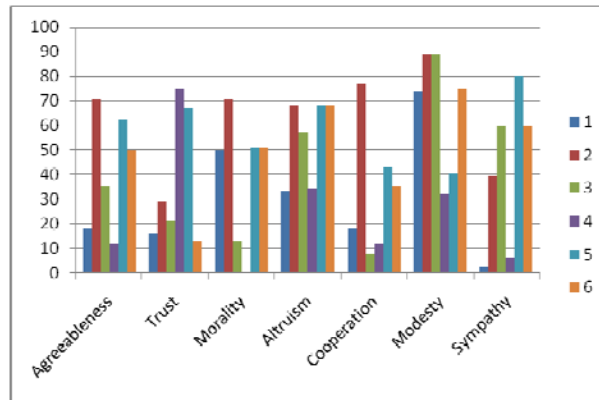
Subjects 3 and 5 scored the highest in Sympathy, and also were the only two to give money to the beggar.

Those who scored highly in the morality (figure 5M) category killed the gang members who were harboring

explosives, while those with higher self-efficacy scores (figure 5N) were the only to kill innocent civilians.

Figure 5N
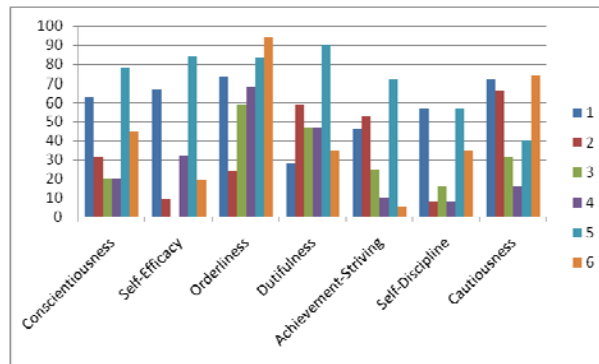
Subjects 1, 4, and 5, who scored highly in self-efficacy, were the only to kill innocents.

Lastly, when prompted with the decision of giving the necklace recovered from the haunted mansion to

either the quest giver, Therese, or her manipulative sister, Jeanette, those with lower dutifulness scores

(figure 5N) were the only to give the necklace to Jeanette. Full details of each subject's sub-scores can be

found in Appendix C.3.

5.5 Post Survey Responses

By using a combination of short answer and multiple choice questions, the goal of the post-survey was to better understand what factors influenced the player's decision making processes. If our players utilized the back story to form the character, then we should have frequently noticed statements such as: "Trying to stay in character" or "Because my character would have." However, this only occurred once when in response to question 11: (Subject 4) "Also it was kind of in character (I was a murderer after all.)" Interestingly, this particular participant was playing the character of Sarah who was in fact not a murderer. This single response may suggest that the players create their own narratives for the characters as the game progresses. While the character of Sarah was not a murderer at the start of the session, elements within the game force Sarah to kill. The player, recognizing this, may have projected some change onto the character of Sarah; she wasn't a murderer before but was forced to become one. This new defining trait overshadows the previous character and causes her to act differently after killing someone than before she had committed the act of killing. Unfortunately no one else made any comments relating to character so it is unclear what actually happened in this situation.

Aside from the one situation, no players responded that staying in character affected their decision making. We found that there were no consistent differences between the subjects who were given the character of Mike and those who were assigned to play as Sarah. However over half the participants (4/6) responded to question 1 that they made decisions that would not violate the rules of the game (either to preserve the Masquerade or prevent losing humanity). Interestingly, three of the four who responded in this manner played the character of Mike who, if played according to character, would have been most likely to ignore or even intentionally break the game's rules. It is important to point out that there are tangible penalties associated with violating the rules established by the game. The second most frequently chosen rationale was because a particular game option seemed more fun than alternatives. Half (3/6) of the

participants chose this particular option. Since video games are primarily sought after as a form of

recreation this seems rather logical. The other questions dealt with specific instances in the game. For the

most part, players completed every quest they discovered regardless of what was asked of them. Of the

quests not completed, responses indicated that they were not completed because the quests had not been

discovered or the player could not resolve how to complete it. Again, only one person responded that they

acted as they thought their character would. Players instead focused on strategies that they believed would

be most likely to grant them a favorable outcome.

5.6 Possible Sources of Error

While planning and carrying out the experiment, several different things came up that we believe may have adversely affected the results. The most important source of error is likely the small amount of players that were tested. This was due to time constraints on the experiment which prevented us from testing a larger pool of subjects. Secondly, despite all of our efforts to prevent this, it is possible that the players may have inferred the purpose of the experiment from the personality test and character descriptions they were given. This may have caused them to behave differently and purposely try to play like or not like the character. Another possible source of error came from our observing of the players. The players may have behaved differently because they knew we were watching them. For example they may have chosen not to seduce any of the women in the game because we were watching, though they might have done it if they were alone. There were also technical issues that we discovered while doing the experiment. The game tended to crash at a certain point in the game, which caused an interruption in the game play. This crash point was also linked to one of the main side quests available to the player, the result of which would have allowed deeper insight into the player's decision process.

6 Future Work

The first and most glaring problem with our research was the fact that we only managed to find six participants. The first reason for this was that, while nearly thirty students gave us their contact information, only six actually responded with the forms that we required in order to complete the experiment. With this in mind, future researchers should be prepared to work to find willing participants, maybe even offer incentives for people to participate in the experiment. The second and more important reason for the small number of people was time restrictions. The actual time with each participant in front of the computer was about two and a half hours, with two researchers accompanying him, taking notes on the subject's progress. However, this seemed to be overly redundant, as both researchers provided identical information. The next issue was the lack of any control group. This would have been particularly helpful as there didn't seem to be any distinguishing trends between the two characters assigned. A third group that was not provided with any characters would have maybe displayed that another variable was responsible for the actions taken by the player. Finally, the characters we gave to the participants were created by us. As they were simply a sheet of paper and not something fully integrated into the game, it is likely that players were not able to easily connect the character they were given to events in the game. In the future, it might be best to choose a game with characters already built into it. However this may prove an issue as the game may be built so as to reward players who play like the character they are given, or even out right force them to, defeating the purpose of the experiment. This leads to another potential study of interest.

As it appears that players will not naturally assume the role of a character in a video game, it may be interesting to examine how games enforce role-playing. This could be done by examining what rules are put in place by the game, or what choices it allows the player to make. Other things to look at are how the game uses art and music to create the characters or how it defines strengths and weaknesses of the

character. It may also be interesting to see if it is beneficial to the game to have fixed characters or a well

defined narrative. It is likely that results of such an experiment would be largely subjective and would vary

from subject to subject. As such, any future work should attempt to examine large sample sizes in order to

observe subtle trends in opinions.

7 Conclusion

The results of our experiment show that there is no noticeable correlation between a character's

back story and the how players play the game. We noticed three major factors aside from the character

that effected the decisions people made. From the post survey responses, the players seemed to be making

decisions based on what they felt would help them progress through the game or what seemed to be most

fun. Carefully examining the players' personalities and comparing them to their actions showed that there

was a strong correlation between their personality and what actions they took. All of this makes sense, as

the game originally was not designed around the two characters we created but was rather open so that the

players could play the game as they desired. This being said, the experiment does not in any way suggest

that strong characters hurt the experience. The role of the artist is to challenge the views and conceptions

of the audience. Having a strong character that exposes the player to decisions and choices that they are

uncomfortable with is a very powerful way of doing this. However, it is clear, if a game designer wishes to

create strong lead characters, there has to be a correlation between game design and the story.   The game

designer cannot simply present alternate options; instead, designers must structure the game world in a

way that reinforces the beliefs of the lead character by rewarding the player when the player performs as

the character. If done with the proper subtlety, this can be a great tool to future story tellers who are

interested in using virtual environments as a medium.

That being said, there will always be a give and take in this medium. The environment that we had

was too open to support a strong lead character. However, applying too many restraints can negatively

impact the player's experience. Future games may wish to use controlled environments and events to pose

questions and foster new and different questions rather than preach to the player. In this way one can

stimulate the type of thoughts and ideas one might expect the main character to grapple with in the mind of

the player. Interestingly, this is more-or-less the same basic concept behind the "show, don't tell" rule that

every author working in a traditional medium must adhere to when composing a good story. When it comes

to storytelling, the same rules apply to video games as they do anything else. The creator must find ways to

believably immerse the player into a fictional world, overcome the limits of the user interface, and create a

relatable lead character that users can project themselves onto so they can experience the world. Only the

medium and the tools are different.

Appendix A

A.1 Interview with Michael Rooney: November 19,2007, 15:50.

Alright Michael..

Mike.

Sorry, Mike, so we're going to run through a few questions, answer however you wish. And don't feel restrained to stay on the topic, they're just to guide you. If you think of something else just say it. Understand.

Yeah, no problem.

Any questions before we begin.

Yeah who's the chick in the corner.

My assistant she'll be helping me record this conversation.

Hey cutie wanna get out of here and have some fun.

Can we just get started.

Oh, sorry mate didn't know you had dibs.

Are we ready.

Shoot.

So what can you tell me about your parents.

Not much, they were good people, boring people. Hard working, god fearing, blah blah blah. Friggin left them as soon as I could. Sermons and lectures are all I got out of them. You can only hear so much before you tell 'em to shove it and take off.

So where'd you go?

Out here, LA, you can't get much farther away. Well without a passport at least. So yeah I've come out here dicked around a bit at various jobs, nothing steady, but that's cool I get bored easily.

You said your parents were god fearing; what about you? Are you religious?

Religious, nah.

So you're an atheist?

Could be, I mean, its not something I think about. And by that I mean its something I think about from time to time, you know in the shower. (*Laughs.*) Yeah I guess you could say I'm a regular shower philosopher. Anyway I've come to the conclusion that it doesn't matter. I

mean, I thought about it right. He's god, some big abstract being. I know he's not all knowing 'cause of free will and all, I mean that's a given right. Well for me it is at least, 'cause with out that there's no point in living just shoot me now, so there has to be free will and all, and if there's free will god can't be all knowing, he can be damn smart but not all knowing. So if that's the case he's got a damn crappy perspective to tell me how to live my life. And if you're not going to use religion as the base of your morality. There's no real use for it that I can see.

(Assistant) And you thought of all this in the shower?

Honey, its the only time I stop long enough to think. I say what I feel and do what I feel.

I imagine that's gotten you into trouble.

Sure it has, but I can usually get myself out of trouble just as easily.

What about other people?

What about them.

I'm sure you've hurt others.

Who hasn't, look, I don't really think about them. I mean people are good for somethings. Like your cute assistant I betcha she's real good at somethings. But in the end we've got 6 billion people on this planet, most of whom are just boring clones of each other wasting space. We pretend that cause we look slightly different, or have slightly different tastes we're different. But we're not we're just boring clones of each other, mindlessly propagating our species because of biological whims. So there's no point in worrying about other people it just makes me sleepy. And as for guilt, that's something we made up. So yeah I'm sure I've hurt someone along my way, not my goal in life but it happens, maybe I'm not a great humanitarian but who cares.

So how do you get what you need from people?

Most people are scared of me. It's amazing how co-operative people are when they fear you.

What about politics? Do you belong to any particular party?

That would be a no, both sides just want to ass rape you anyway, only difference is what lie they'll tell you to get ya in the shower.

(Assistant) You're a rather crude individual aren't you?

Oh, now don't become a prude now. *(Pause)* You really want to know the truth, I just talk like that because its fun. Slang is more colorful and helps keep me from getting bored.

So are you bored often?

My life story. Every step I take I'm just trying not to be bored. I've got two modes bored and amused, if I'm bored I'm depressed and if I'm amused I'm happy. I'd rather be happy.

Alright I guess that's enough. Thank you for your time anything else you would like to add.

Nope, peace. Oh and honey if you ever get bored of this guy give me a call.
A.2 Interview with Sarah Parker: November 30, 2007, 14:20.

Welcome Sarah feel free to take a seat.

Is it alright if I stand.

I suppose. We're going to run through a few questions here, all we ask is that you answer them openly and honestly don't feel restrained by them, if you think of something just say it. Understand.

Yeah

Any questions before we begin?

No

Alright then, why don't we start with your parents.

What about them?

Well are they still alive?

I think so.

You don't know?

No they're still alive, I still get calls from my mom from time to time.

What about your father?

He gave up long ago.

Why the rift?

They're mad I left college. My mom keeps threatening me, saying if I don't go back they're going to make me repay them for all the money they spent. Not like they can do anything.

Why did you leave school?

There was no point staying, I knew everything they were trying to teach me, and what I didn't know I didn't care about.

What were you studying?

Pre-med, my parents choice, I've always wanted to paint.

Is that what you do now?

I mostly wait tables, I mean I still do paint but I'm not making anything with it right now. My boyfriend's band is doing pretty well though, and I'm sure I'll break through soon.

What do you paint about?

They're not really about anything; I'm just trying to show the world as I see it.

How do you see it?

Well its weird there's these contradictions everywhere, I'm just living in between that dichotomy.

So there's a lot of conflict in your work?

It's not really conflict, just, well it's like, there's a peace in the conflict, it just kind of exists, I'm trying to find out why, the world should be tearing itself apart, but its not.

You don't see the world as being at conflict?

No it is, but its all superficial, even those conflicts add to it, I don't know I can't really explain it, I don't know the right words, but I can show it, I can definitely show what I mean.

What about other parts of your life, you mentioned a boyfriend.

Yeah Steve Woods, he plays bass for *Wandering Trees*, have you heard of them.

No

Oh well you probably wouldn't have, but they're about to make it big.

Anything else going on?

Not really all my free time is spent painting or spending time with him.

Alright, I guess we're through here. Anything you would like to add?

I don't think so.

Then, thank you for your time.

A.3 Player Review Sheet – Michael Rooney

How did the player treat the Bum?

    A. Blow off   B. Give a dollar

How did the player treat Knox?

    A. Well   B. Inconsistently   C. Poorly   D. N/A

How did the player treat Mercurio?

    A. Well   B. Inconsistently   C. Poorly   D. N/A

Did the player retrieve morphine for Mercurio?

    A. Yes   B. No

What did the player do with the girl dying in the hospital? (circle all that apply)

    A. Feed Blood   B. Tell her about vampires   C. Don't tell her about vampires   D. Leave alone

How did the player recover the astrolite?

    A. Purchase   B. Intimidate and Kill   C. Kill

Did the player reunite E with Lily?

    A. Yes   B. No

How was the player involved with the art show?

    A. Destroy Paintings   B. Steal Charity Money   C. A & B   D. Neither A or B

Who did the player give the necklace to?

    A. Therese   B. Jeanette

Which character survived?

    A. Therese   B. Jeanette   C. Both

How many innocents did the player kill?

    A. 0   B. 1-2   C. 3-4   D. 4+

How many people did the player seduce?

    A. 0   B. 1-2   C. 3-4   D. 4+

A.4 Player Review Sheet: Sarah Parker

How did the player treat the Bum?

    C. Blow off   D. Give a dollar

How did the player treat Knox?

    E. Well   F. Inconsistently   G. Poorly   H. N/A

How did the player treat Mercurio?

    E. Well   F. Inconsistently   G. Poorly   H. N/A

Did the player retrieve morphine for Mercurio?

    C. Yes   D. No

What did the player do with the girl dying in the hospital? (circle all that apply)

    E. Feed Blood   F. Tell her about   G. Don't tell her   H. Leave alone
                                        vampires   about vampires

How did the player recover the astrolite?

    D. Purchase   E. Intimidate and Kill   F. Kill

Did the player reunite E with Lily?

    C. Yes   D. No

How was the player involved with the art show?

    E. Destroy   F. Steal Charity   G. A & B   H. Neither A or B
       Paintings   Money

Who did the player give the necklace to?

    C. Therese   D. Jeanette

Which character survived?

    D. Therese   E. Jeanette   F. Both

How many innocents did the player kill?

    E. 0   F. 1-2   G. 3-4   H. 4+

How many people did the player seduce?

    E. 0   F. 1-2   G. 3-4   H. 4+

IPIP-NEO Narrative Report

NOTE: The report sent to your computer screen upon the completion of the IPIP-NEO is only a temporary web page. When you exit your web browser you will not be able to return to this URL to re-access your report. No copies of the report are sent to anyone. IF YOU WANT A PERMANENT COPY OF THE REPORT, YOU MUST SAVE THE WEB PAGE TO YOUR HARD DRIVE OR A DISKETTE, AND/OR PRINT THE REPORT WHILE YOU ARE STILL VIEWING IT IN YOUR WEB BROWSER. If you choose to save your report, naming it with an .htm extension (example: *Myreport.htm*) as you save it may help you to read it into a web browser later. If you choose to print the report, selecting <u>landscape</u> orientation for your paper will display the graphs properly. Using portrait orientation (normally the default for printers) will cause the graphs to wrap around and render them unreadable.

This report compares Chris from the country USA to other men between 21 and 40 years of age. (The name used in this report is either a nickname chosen by the person taking the test, or, if a valid nickname was not chosen, a random nickname generated by the program.)

This report estimates the individual's level on each of the five broad personality domains of the Five-Factor Model. The description of each one of the five broad domains is followed by a more detailed description of personality according to the six subdomains that comprise each domain.

A note on terminology. Personality traits describe, relative to other people, the frequency or intensity of a person's feelings, thoughts, or behaviors. Possession of a trait is therefore a matter of degree. We might describe two individuals as *extraverts*, but still see one as more extraverted than the other. This report uses expressions such as "extravert" or "high in extraversion" to describe someone who is likely to be seen by others as relatively extraverted. The computer program that generates this report classifies you as low, average, or high in a trait according to whether your score is approximately in the lowest 30%, middle 40%, or highest 30% of scores obtained by people of your sex and roughly your age. Your numerical scores are reported and graphed as *percentile estimates*. For example, a score of "60" means that your level on that trait is estimated to be higher than 60% of persons of your sex and age.

Please keep in mind that "low," "average," and "high" scores on a personality test are neither absolutely good nor bad. A particular level on any trait will probably be neutral or irrelevant for a great many activites, be helpful for accomplishing some things, and detrimental for accomplishing other things. As with any personality inventory, scores and descriptions can only approximate an individual's actual personality. High and low score descriptions are usually accurate, but average scores close to the low or high boundaries might misclassify you as only average. On each set of six subdomain scales it is somewhat uncommon but certainly possible to score high in some of the subdomains and low in the others. In such cases more attention should be paid to the subdomain

49

scores than to the broad domain score. Questions about the accuracy of your results are best resolved by showing your report to people who know you well.

John A. Johnson wrote descriptions of the five domains and thirty subdomains. These descriptions are based on an extensive reading of the scientific literature on personality measurement. Although Dr. Johnson would like to be acknowledged as the author of these materials if they are reproduced, he has placed them in the public domain.

Extraversion

Extraversion is marked by pronounced engagement with the external world. Extraverts enjoy being with people, are full of energy, and often experience positive emotions. They tend to be enthusiastic, action-oriented, individuals who are likely to say "Yes!" or "Let's go!" to opportunities for excitement. In groups they like to talk, assert themselves, and draw attention to themselves.

Introverts lack the exuberance, energy, and activity levels of extraverts. They tend to be quiet, low-key, deliberate, and disengaged from the social world. Their lack of social involvement should <u>not</u> be interpreted as shyness or depression; the introvert simply needs less stimulation than an extravert and prefers to be alone. The independence and reserve of the introvert is sometimes mistaken as unfriendliness or arrogance. In reality, an introvert who scores high on the agreeableness dimension will not seek others out but will be quite pleasant when approached.

```
Domain/Facet.......... Score 0--------10--------20--------30--------40--------50--------60--------70------
--80--------90--------99

EXTRAVERSION..............52 **************************************************

..Friendliness............65 *****************************************************************

..Gregariousness..........29 ***************************

..Assertiveness...........54 ****************************************************

..Activity Level..........60 ************************************************************

..Excitement-Seeking.......66 ******************************************************************

..Cheerfulness............37 ***********************************
```

Your score on Extraversion is average, indicating you are neither a subdued loner nor a jovial chatterbox. You enjoy time with others but also time alone.

Extraversion Facets

- *Friendliness*. Friendly people genuinely like other people and openly demonstrate positive feelings toward others. They make friends quickly and it is easy for them to form close, intimate relationships. Low scorers on Friendliness are not necessarily cold and hostile, but

they do not reach out to others and are perceived as distant and reserved. Your level of friendliness is average.

- *Gregariousness*. Gregarious people find the company of others pleasantly stimulating and rewarding. They enjoy the excitement of crowds. Low scorers tend to feel overwhelmed by, and therefore actively avoid, large crowds. They do not necessarily dislike being with people sometimes, but their need for privacy and time to themselves is much greater than for individuals who score high on this scale. Your level of gregariousness is low.
- *Assertiveness*. High scorers Assertiveness like to speak out, take charge, and direct the activities of others. They tend to be leaders in groups. Low scorers tend not to talk much and let others control the activities of groups. Your level of assertiveness is average.
- *Activity Level*. Active individuals lead fast-paced, busy lives. They move about quickly, energetically, and vigorously, and they are involved in many activities. People who score low on this scale follow a slower and more leisurely, relaxed pace. Your activity level is average.
- *Excitement-Seeking*. High scorers on this scale are easily bored without high levels of stimulation. They love bright lights and hustle and bustle. They are likely to take risks and seek thrills. Low scorers are overwhelmed by noise and commotion and are adverse to thrill-seeking. Your level of excitement-seeking is average.
- *Cheerfulness*. This scale measures positive mood and feelings, not negative emotions (which are a part of the Neuroticism domain). Persons who score high on this scale typically experience a range of positive feelings, including happiness, enthusiasm, optimism, and joy. Low scorers are not as prone to such energetic, high spirits. Your level of positive emotions is average.

Agreeableness

Agreeableness reflects individual differences in concern with cooperation and social harmony. Agreeable individuals value getting along with others. They are therefore considerate, friendly, generous, helpful, and willing to compromise their interests with others'. Agreeable people also have an optimistic view of human nature. They believe people are basically honest, decent, and trustworthy.

Disagreeable individuals place self-interest above getting along with others. They are generally unconcerned with others' well-being, and therefore are unlikely to extend themselves for other people. Sometimes their skepticism about others' motives causes them to be suspicious, unfriendly, and uncooperative.

Agreeableness is obviously advantageous for attaining and maintaining popularity. Agreeable people are better liked than disagreeable people. On the other hand, agreeableness is not useful in situations that require tough or absolute objective decisions. Disagreeable people can make excellent scientists, critics, or soldiers.

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Domain/Facet.......... Score 0--------10--------20--------30--------40--------50--------60--------70------
--80--------90--------99

AGREEABLENESS.............18 ******************

..Trust...................16 ****************

..Morality...............50 **************************************************

..Altruism...............33 ******************************

..Cooperation............18 ******************

..Modesty................74 **************************************************************************

..Sympathy...............2 **
```

Your score on Agreeableness is low, indicating less concern with others' needs Than with your own. People see you as tough, critical, and uncompromising.

Agreeableness Facets

- *Trust*. A person with high trust assumes that most people are fair, honest, and have good intentions. Persons low in trust see others as selfish, devious, and potentially dangerous. Your level of trust is low.
- *Morality*. High scorers on this scale see no need for pretense or manipulation when dealing with others and are therefore candid, frank, and sincere. Low scorers believe that a certain amount of deception in social relationships is necessary. People find it relatively easy to relate to the straightforward high-scorers on this scale. They generally find it more difficult to relate to the unstraightforward low-scorers on this scale. It should be made clear that low scorers are <u>not</u> unprincipled or immoral; they are simply more guarded and less willing to openly reveal the whole truth. Your level of morality is average.
- *Altruism*. Altruistic people find helping other people genuinely rewarding. Consequently, they are generally willing to assist those who are in need. Altruistic people find that doing things for others is a form of self-fulfillment rather than self-sacrifice. Low scorers on this scale do not particularly like helping those in need. Requests for help feel like an imposition rather than an opportunity for self-fulfillment. Your level of altruism is average.
- *Cooperation*. Individuals who score high on this scale dislike confrontations. They are perfectly willing to compromise or to deny their own needs in order to get along with others. Those who score low on this scale are more likely to intimidate others to get their way. Your level of compliance is low.
- *Modesty*. High scorers on this scale do not like to claim that they are better than other people. In some cases this attitude may derive from low self-confidence or self-esteem. Nonetheless, some people with high self-esteem find immodesty unseemly. Those who <u>are</u> willing to describe themselves as superior tend to be seen as disagreeably arrogant by other people. Your level of modesty is high.
- *Sympathy*. People who score high on this scale are tenderhearted and compassionate. They feel the pain of others vicariously and are easily moved to pity. Low scorers are not affected strongly by human suffering. They pride themselves on making objective judgments based

on reason. They are more concerned with truth and impartial justice than with mercy. Your level of tender-mindedness is low.

Conscientiousness

Conscientiousness concerns the way in which we control, regulate, and direct our impulses. Impulses are not inherently bad; occasionally time constraints require a snap decision, and acting on our first impulse can be an effective response. Also, in times of play rather than work, acting spontaneously and impulsively can be fun. Impulsive individuals can be seen by others as colorful, fun-to-be-with, and zany.

Nonetheless, acting on impulse can lead to trouble in a number of ways. Some impulses are antisocial. Uncontrolled antisocial acts not only harm other members of society, but also can result in retribution toward the perpetrator of such impulsive acts. Another problem with impulsive acts is that they often produce immediate rewards but undesirable, long-term consequences. Examples include excessive socializing that leads to being fired from one's job, hurling an insult that causes the breakup of an important relationship, or using pleasure-inducing drugs that eventually destroy one's health.

Impulsive behavior, even when not seriously destructive, diminishes a person's effectiveness in significant ways. Acting impulsively disallows contemplating alternative courses of action, some of which would have been wiser than the impulsive choice. Impulsivity also sidetracks people during projects that require organized sequences of steps or stages. Accomplishments of an impulsive person are therefore small, scattered, and inconsistent.

A hallmark of intelligence, what potentially separates human beings from earlier life forms, is the ability to think about future consequences before acting on an impulse. Intelligent activity involves contemplation of long-range goals, organizing and planning routes to these goals, and persisting toward one's goals in the face of short-lived impulses to the contrary. The idea that intelligence involves impulse control is nicely captured by the term prudence, an alternative label for the Conscientiousness domain. Prudent means both wise and cautious. Persons who score high on the Conscientiousness scale are, in fact, perceived by others as intelligent.

The benefits of high conscientiousness are obvious. Conscientious individuals avoid trouble and achieve high levels of success through purposeful planning and persistence. They are also positively regarded by others as intelligent and reliable. On the negative side, they can be compulsive perfectionists and workaholics. Furthermore, extremely conscientious individuals might be regarded as stuffy and boring. Unconscientious people may be criticized for their unreliability, lack of ambition, and failure to stay within the lines, but they will experience many short-lived pleasures and they will never be called stuffy.

```
Domain/Facet........... Score 0--------10--------20--------30--------40--------50--------60--------70-----
--80--------90--------99
```

```
CONSCIENTIOUSNESS..........63 *******************************************************************

..Self-Efficacy............67 *********************************************************************

..Orderliness..............73 ****************************************************************************

..Dutifulness..............28 **************************

..Achievement-Striving.....46 ***********************************************

..Self-Discipline..........57 *********************************************************

..Cautiousness.............72 ***************************************************************************
```

Your score on Conscientiousness is average. This means you are reasonably reliable, organized, and self-controlled.

Conscientiousness Facets

- *Self-Efficacy*. Self-Efficacy describes confidence in one's ability to accomplish things. High scorers believe they have the intelligence (common sense), drive, and self-control necessary for achieving success. Low scorers do not feel effective, and may have a sense that they are not in control of their lives. Your level of self-efficacy is average.
- *Orderliness*. Persons with high scores on orderliness are well-organized. They like to live according to routines and schedules. They keep lists and make plans. Low scorers tend to be disorganized and scattered. Your level of orderliness is high.
- *Dutifulness*. This scale reflects the strength of a person's sense of duty and obligation. Those who score high on this scale have a strong sense of moral obligation. Low scorers find contracts, rules, and regulations overly confining. They are likely to be seen as unreliable or even irresponsible. Your level of dutifulness is low.
- *Achievement-Striving*. Individuals who score high on this scale strive hard to achieve excellence. Their drive to be recognized as successful keeps them on track toward their lofty goals. They often have a strong sense of direction in life, but extremely high scores may be too single-minded and obsessed with their work. Low scorers are content to get by with a minimal amount of work, and might be seen by others as lazy. Your level of achievement striving is average.
- *Self-Discipline*. Self-discipline-what many people call will-power-refers to the ability to persist at difficult or unpleasant tasks until they are completed. People who possess high self-discipline are able to overcome reluctance to begin tasks and stay on track despite distractions. Those with low self-discipline procrastinate and show poor follow-through, often failing to complete tasks-even tasks they want very much to complete. Your level of self-discipline is average.
- *Cautiousness*. Cautiousness describes the disposition to think through possibilities before acting. High scorers on the Cautiousness scale take their time when making decisions. Low scorers often say or do first thing that comes to mind without deliberating alternatives and the probable consequences of those alternatives. Your level of cautiousness is high.

Neuroticism

Freud originally used the term *neurosis* to describe a condition marked by mental distress, emotional suffering, and an inability to cope effectively with the normal demands of life. He suggested that everyone shows some signs of neurosis, but that we differ in our degree of suffering and our specific symptoms of distress. Today neuroticism refers to the tendency to experience negative feelings. Those who score high on Neuroticism may experience primarily one specific negative feeling such as anxiety, anger, or depression, but are likely to experience several of these emotions. People high in neuroticism are emotionally reactive. They respond emotionally to events that would not affect most people, and their reactions tend to be more intense than normal. They are more likely to interpret ordinary situations as threatening, and minor frustrations as hopelessly difficult. Their negative emotional reactions tend to persist for unusually long periods of time, which means they are often in a bad mood. These problems in emotional regulation can diminish a neurotic's ability to think clearly, make decisions, and cope effectively with stress.

At the other end of the scale, individuals who score low in neuroticism are less easily upset and are less emotionally reactive. They tend to be calm, emotionally stable, and free from persistent negative feelings. Freedom from negative feelings does not mean that low scorers experience a lot of positive feelings; frequency of positive emotions is a component of the Extraversion domain.

```
Domain/Facet.......... Score 0--------10--------20--------30--------40--------50--------60--------70------
--80--------90--------99

NEUROTICISM...............11 ***********

..Anxiety.................19 ******************

..Anger...................20 *******************

..Depression..............22 *********************

..Self-Consciousness......15 ***************

..Immoderation............12 ************

..Vulnerability...........38 *************************************
```

Your score on Neuroticism is low, indicating that you are exceptionally calm, composed and unflappable. You do not react with intense emotions, even to situations that most people would describe as stressful.

Neuroticism Facets

- *Anxiety*. The "fight-or-flight" system of the brain of anxious individuals is too easily and too often engaged. Therefore, people who are high in anxiety often feel like something dangerous is about to happen. They may be afraid of specific situations or be just generally fearful. They feel tense, jittery, and nervous. Persons low in Anxiety are generally calm and fearless. Your level of anxiety is low.

- *Anger*. Persons who score high in Anger feel enraged when things do not go their way. They are sensitive about being treated fairly and feel resentful and bitter when they feel they are being cheated. This scale measures the tendency to *feel* angry; whether or not the person *expresses* annoyance and hostility depends on the individual's level on Agreeableness. Low scorers do not get angry often or easily. Your level of anger is low.
- *Depression*. This scale measures the tendency to feel sad, dejected, and discouraged. High scorers lack energy and have difficult initiating activities. Low scorers tend to be free from these depressive feelings. Your level of depression is low.
- *Self-Consciousness*. Self-conscious individuals are sensitive about what others think of them. Their concern about rejection and ridicule cause them to feel shy and uncomfortable abound others. They are easily embarrassed and often feel ashamed. Their fears that others will criticize or make fun of them are exaggerated and unrealistic, but their awkwardness and discomfort may make these fears a self-fulfilling prophecy. Low scorers, in contrast, do not suffer from the mistaken impression that everyone is watching and judging them. They do not feel nervous in social situations. Your level or self-consciousness is low.
- *Immoderation*. Immoderate individuals feel strong cravings and urges that they have have difficulty resisting. They tend to be oriented toward short-term pleasures and rewards rather than long- term consequences. Low scorers do not experience strong, irresistible cravings and consequently do not find themselves tempted to overindulge. Your level of immoderation is low.
- *Vulnerability*. High scorers on Vulnerability experience panic, confusion, and helplessness when under pressure or stress. Low scorers feel more poised, confident, and clear-thinking when stressed. Your level of vulnerability is average.

Openness to Experience

Openness to Experience describes a dimension of cognitive style that distinguishes imaginative, creative people from down-to-earth, conventional people. Open people are intellectually curious, appreciative of art, and sensitive to beauty. They tend to be, compared to closed people, more aware of their feelings. They tend to think and act in individualistic and nonconforming ways. Intellectuals typically score high on Openness to Experience; consequently, this factor has also been called *Culture* or *Intellect*. Nonetheless, Intellect is probably best regarded as one aspect of openness to experience. Scores on Openness to Experience are only modestly related to years of education and scores on standard intelligent tests.

Another characteristic of the open cognitive style is a facility for thinking in symbols and abstractions far removed from concrete experience. Depending on the individual's specific intellectual abilities, this symbolic cognition may take the form of mathematical, logical, or geometric thinking, artistic and metaphorical use of language, music composition or performance, or one of the many visual or performing arts. People with low scores on openness to experience tend to have narrow, common interests. They prefer the plain, straightforward, and obvious over the complex, ambiguous, and subtle. They may regard the arts and sciences with suspicion, regarding these endeavors as abstruse or of no practical use. Closed people prefer familiarity over novelty; they are conservative and resistant to change.

Openness is often presented as healthier or more mature by psychologists, who are often themselves open to experience. However, open and closed styles of thinking are useful in different environments. The intellectual style of the open person may serve a professor well, but research has shown that closed thinking is related to superior job performance in police work, sales, and a number of service occupations.

```
Domain/Facet.......... Score 0--------10--------20--------30--------40--------50--------60--------70------
--80--------90--------99

OPENNESS TO EXPERIENCE.....19 ********************

..Imagination..............0

..Artistic Interests.......31 *****************************

..Emotionality............32 ******************************

..Adventurousness.........69 **********************************************************************

..Intellect...............37 **********************************

..Liberalism..............34 ********************************
```

Your score on Openness to Experience is low, indicating you like to think in plain and simple terms. Others describe you as down-to-earth, practical, and conservative.

Openness Facets

- *Imagination*. To imaginative individuals, the real world is often too plain and ordinary. High scorers on this scale use fantasy as a way of creating a richer, more interesting world. Low scorers are on this scale are more oriented to facts than fantasy. Your level of imagination is low.
- *Artistic Interests*. High scorers on this scale love beauty, both in art and in nature. They become easily involved and absorbed in artistic and natural events. They are not necessarily artistically trained nor talented, although many will be. The defining features of this scale are *interest in*, and *appreciation of* natural and artificial beauty. Low scorers lack aesthetic sensitivity and interest in the arts. Your level of artistic interests is low.
- *Emotionality*. Persons high on Emotionality have good access to and awareness of their own feelings. Low scorers are less aware of their feelings and tend not to express their emotions openly. Your level of emotionality is low.
- *Adventurousness*. High scorers on adventurousness are eager to try new activities, travel to foreign lands, and experience different things. They find familiarity and routine boring, and will take a new route home just because it is different. Low scorers tend to feel uncomfortable with change and prefer familiar routines. Your level of adventurousness is high.
- *Intellect*. Intellect and artistic interests are the two most important, central aspects of openness to experience. High scorers on Intellect love to play with ideas. They are open-minded to new and unusual ideas, and like to debate intellectual issues. They enjoy riddles, puzzles, and brain teasers. Low scorers on Intellect prefer dealing with either people or things

rather than ideas. They regard intellectual exercises as a waste of time. Intellect should <u>not</u> be equated with intelligence. Intellect is an intellectual style, not an intellectual ability, although high scorers on Intellect score <u>slightly</u> higher than low-Intellect individuals on standardized intelligence tests. Your level of intellect is average.

- *Liberalism*. Psychological liberalism refers to a readiness to challenge authority, convention, and traditional values. In its most extreme form, psychological liberalism can even represent outright hostility toward rules, sympathy for law-breakers, and love of ambiguity, chaos, and disorder. Psychological conservatives prefer the security and stability brought by conformity to tradition. Psychological liberalism and conservatism are not identical to political affiliation, but certainly incline individuals toward certain political parties. Your level of liberalism is average.

Appendix B

B.1 E-mail Questionnaire

In addition to performing the NEO PI-R personality exam, we would like you to answer the following questions:

Have you played *Vampires: Bloodlines – The Masquerade* prior to this experiment?

If so, for how long?

Are you over the age 18?

Gender:

If you are uncomfortable playing M-rated games (games intended for audiences over the age of 17) that feature Blood and Gore, Intense, Violence, Mature Sexual Themes, and Strong Language, please let us know and you will be removed from the subject pool.

Informed Consent Agreement for Participation in a Research Study

Investigators: Professor David Finkel, Professor James Doyle, Dave Corliss, Josh Doyle, Tim Poliquin

Contact Information: Prof. David Finkel

>Computer Science Department
>
>Worcester Polytechnic Institute
>
>100 Institute Road
>
>Worcester, MA 01609
>
>Tel. 508-831-5416, Email: dfinkel@wpi.edu

Title of Research Study: Game studies IQP

Introduction:

You are being asked to participate in a research study. Before you agree, however, you must be fully informed about the purpose of the study, the procedures to be followed, and any benefits, risks or discomfort that you may experience as a result of your participation. This form presents information about the study so that you may make a fully informed decision regarding your participation.

Purpose of the study:

The purpose of this study is to gather information on the choices people make while playing video games.

Procedures to be followed:

You will be asked to complete a 120 question (multiple choice) personality test. This test is scored on-line by a computer and the service that offers this test will have access to your answers. You are encouraged to use a fictional name in order to protect your privacy and so that the test providers will not be able to identify you. Next, you will be asked to complete a tutorial for the game *Vampires - The Masquerade Bloodlines*. Then you will be asked to play the game for an additional two hours. All gameplay will be recorded using a screen capture utility. The total length of the session will be approximately three hours.

Risks to study participants:

Vampires - The Masquerade Bloodlines is rated M (mature) for Blood and Gore, Intense Violence, Mature Sexual Themes, and Strong Language. If such things offend you or make you uncomfortable we recommended that you not participate in this study.

Benefits to research participants and others:

By better understanding how players think in interactive environments we can produce more effective interactive narratives as well as better construct virtual worlds through which we can teach individuals.

Record keeping and confidentiality:

Records of your participation in this study will be held confidential so far as permitted by law. However, the study investigators, the sponsor or it's designee and, under certain circumstances, the Worcester

Polytechnic Institute Institutional Review Board (WPI IRB) will be able to inspect and have access to confidential data that identify you by name. Any publication or presentation of the data will not identify you.

Compensation or treatment in the event of injury:
You do not give up any of your legal rights by signing this statement.

For more information about this research or about the rights of research participants, or in case of research-related injury, contact:
Professor David Finkel contact information provided above,
IRB Acting Chair
Professor Kent Rissmiller
Tel. 508-831-5019, Email: kjr@wpi.edu or
The University Compliance Officer
Michael J. Curley
Tel. 508-831-5519, Email: macula@wpi.edu

Your participation in this research is voluntary. Your refusal to participate will not result in any penalty to you or any loss of benefits to which you may otherwise be entitled. You may decide to stop participation in the research at any time without penalty or loss of other benefits. The project investigators retain the right to cancel or postpone the experimental procedures at any time they see fit.

By signing below, you acknowledge that you have been informed about and consent to be a participant in the study described above. Make sure that your questions are answered to your satisfaction before signing. You are entitled to retain a copy of this consent agreement.

_____   Date: _____
Study Participant Signature

_____
Study Participant Name (Please print)

_____   Date: _____
Signature of Person who explained this study

B.3 End Questionnaire

For multiple choice questions, circle all that apply. For written answers, please provide a brief yet detailed answer to the questions being asked. If you run out of room for an answer continue onto the back. Be sure to clearly label your answers.

1. When interacting with NPCs, you made choices based upon
   A. NPC attractiveness
   B. Amount of money you had
   C. What seemed more fun/humorous
   D. Granting/preventing loss of humanity
   E. Losing humanity
   F. The Masquerade rules

2. When given the options (A. Bribe) (B. Seduce) (C. Intimidate) (D. Persuade) (E. Domination) (F. Eat), when would you have used each of the above. If you would not have used it/never had the option, simply ignore it.
   A.

   B.

   C.

   D.

   E.

   F.

3. When you first left your apartment, you were approached by a bum on the streets. What did you decide to do to him? Why did you do that?

4. How much did the Masquerade rules dictate your actions in town?
   A. I was constantly thinking about The Masquerade
   B. I occasionally thought about The Masquerade
   C. I rarely thought about The Masquerade
   D. I never thought about The Masquerade

5. Did you violate The Masquerade rules? Why or why not?

6. How important was your humanity?
    a. I was constantly thinking about my Humanity
    b. I occasionally thought about my Humanity
    c. I rarely thought about my Humanity
    d. I never thought about my Humanity

7. Did you give Mercurio the pain medication he requested? Why/why not?

8. In one of the hospital rooms, there is a woman lying on a table, wounded and covered in blood. Did you choose to feed her your blood? Why/ why not? If you chose to feed her your blood, did you tell her you were a vampire? Why or why not?

9. Which side quests did you complete? How did you choose which ones to complete and which ones to skip?

10. Did you complete the Thinned Blood quest? Did you reunite Lily and E? What reward did you choose? Did you threaten to tell E. that Lily had killed a doctor in the Hospital?

11. Did you complete the Ghost Haunts at Midnight/Spiritual Release quests? Why/Why not? If so, did you steal the charity box from the Gallery Noir? Why/Why not?

Appendix C

C.1 Player Review Sheet

How did the player treat the Bum?

    A. Blow off   B. Give a dollar

How did the player treat Knox?

    A. Well   B. Inconsistently   C. Poorly   D. N/A

How did the player treat Mercurio?

    A. Well   B. Inconsistently   C. Poorly   D. N/A

Did the player retrieve morphine for Mercurio?

    A. Yes   B. No

What did the player do with the girl dying in the hospital? (circle all that apply)

| A. Feed Blood | B. Tell her about vampires | C. Don't tell her about vampires | D. Leave alone |

How did the player recover the astrolite?

    A. Purchase   B. Intimidate and Kill   C. Kill

Did the player reunite E with Lily?

    A. Yes   B. No

How was the player involved with the art show?

| A. Destroy Paintings | B. Steal Charity Money | C. A & B | D. Neither A or B |

Who did the player give the necklace to?

    A. Therese   B. Jeanette

Which character survived?

    A. Therese   B. Jeanette   C. Both

How many innocents did the player kill?

    A. 0   B. 1-2   C. 3-4   D. 4+

How many people did the player seduce?

    A. 0   B. 1-2   C. 3-4   D. 4+

Who did the player play as?

    A. Default   B. Mike   C. Sarah

SUBJECT NUMBER:

C.2 Weighted Player Review Sheet

How did the player treat the Bum?

    A. Blow off (-10)   B. Give a dollar (+10)

How did the player treat Knox?

    A. Well (+10)   B. Inconsistently (0)   C. Poorly (-10)   D. N/A (0)

How did the player treat Mercurio?

    A. Well (+10)   B. Inconsistently (0)   C. Poorly (-10)   D. N/A (0)

Did the player retrieve morphine for Mercurio?

    A. Yes (+10)   B. No (-10)

What did the player do with the girl dying in the hospital? (circle all that apply)

    A. Feed Blood (+5)   B. Tell her about vampires (0)   C. Don't tell her about vampires (+5)   D. Leave alone (-10)

How did the player recover the astrolite?

    A. Purchase (+10)   B. Intimidate and Kill (-10)   C. Kill (-5)   D. Persuade (-5)

Did the player reunite E with Lily? REMOVED DUE TO TECHNICAL DIFFICULTIES

    A. Yes (0)   B. No (0)

How was the player involved with the art show?

    A. Destroy Paintings (-5)   B. Steal Charity Money (-5)   C. A & B (-10)   D. Neither A or B (+10)

Who did the player give the necklace to?

    A. Therese (+10)   B. Jeanette (-10)

Which character survived?

    A. Therese (+5)   B. Jeanette (-10)   C. Both (+10)

How many innocents did the player kill?

    A. 0 (10)   B. 1-2 (-5)   C. 3-4 (-10)   D. 4+ (-10)

How many people did the player seduce?

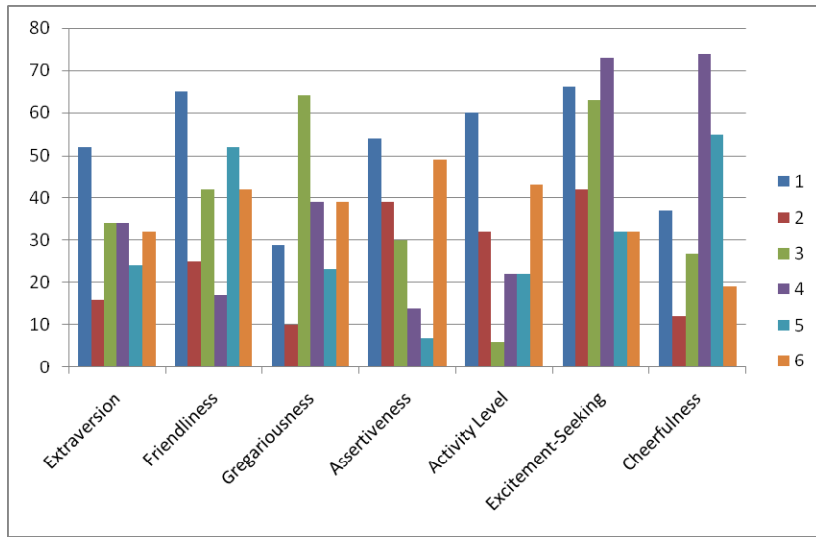   A. 0 (10)   B. 1-2 (-5)   C. 3-4 (-10)   D. 4+ (-10)

Who did the player play as?

    A. Default (0)   B. Mike (-110 MAX)   C. Sarah (+110 MAX)

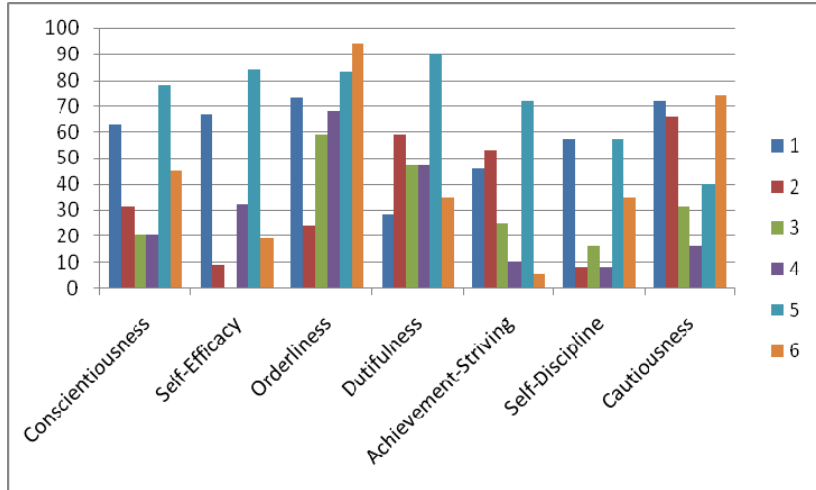SUBJECT NUMBER:

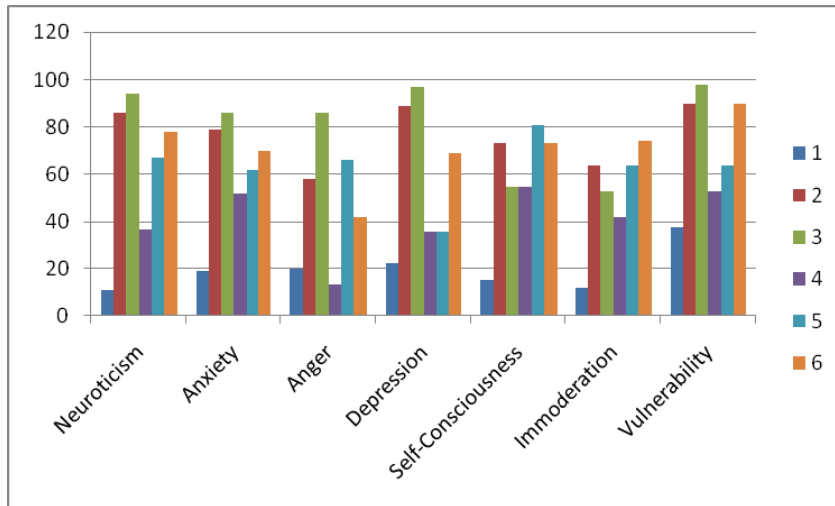## C.3 Subject Personality Graphs

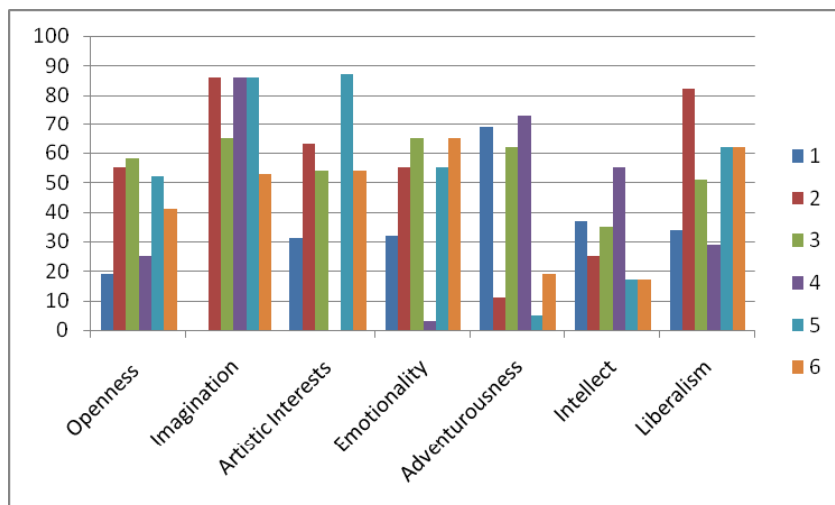Scores for Extraversion
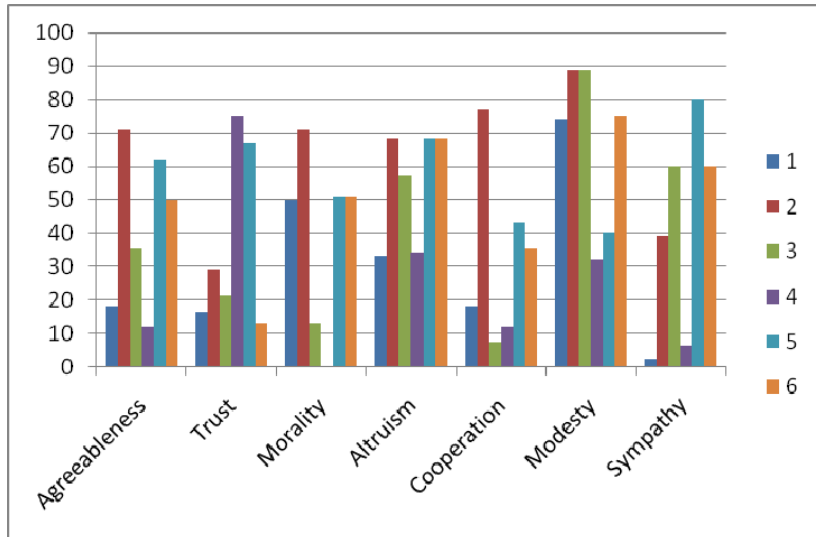
Scores for Agreeableness

Scores for Conscientiousness

Scores for Neuroticism

Scores for Openness

Authorship

David Corliss: The original project idea was conceived of by David Corliss. He went to one of Professor Finkel's classes to recruit students and sent out the email containing the necessary forms for subjects to complete. While designing the experiment, he composed the two character interviews which were used to expose the players to the characters they were meant to play as during the game. He also served as the player when the group identified decision points in *Vampire: The Masquerade - Bloodlines*. David Corliss was present for five of the six play sessions and recruited the sixth player used in the experiment. In addition to this he wrote the introduction and conclusion to the paper, the original draft of section 2.2 Choosing a Topic, as well as sections 2.3 Game Selection, 2.4 Game Details and 5.5 Post Survey Responses.

Josh Doyle: The sections 3.3 Using The Characters In Game, 5.1 Data Sources, 5.2 Demographics, and 5.6 Possible Sources of Error were written by Josh Doyle. Josh visited one of Professor Finkel's classes to recruit students. Also, Josh constructed the Informed Consent form, and assisted in determining key decisions for players in *Vampire: The Masquerade – Bloodlines*.

Tim Poliquin: Tim researched each of the topics discussed in section 2.2 Choosing a Topic, leading to the production of the final draft of Choosing a Topic. Tim play tested several games to find a game suitable to our project. Specifically, *Fable*, *Star Wars: Knights of the Old Republic*, *Vampire: The Masquerade – Bloodlines*, and *Jade Empire* were examined. Accompanied by Josh Doyle, Tim visited Professor Finkel's classroom to recruit students, and composed the e-mails that were delivered to them by David Corliss. For experiment documents, Tim composed the Player Review Sheet, the E-mail Questionnaire, and the End Questionnaire. With David and Josh, Tim found key decision points in *Vampire: The Masquerade – Bloodlines*, and assisted in determining the decisions each personality would take. Tim corresponded with all subjects to organize meeting times, and to ensure that all necessary information had been collected. Additionally, Tim was present for three of the six play sessions. For the final report, Tim composed sections 1 The Abstract, 2.2 Choosing a Topic, 3.2 Character Creation, 3.4 Fixing Character Attributes, 3.5 Personality Exam, 4.1 Experiment Overview, 4.2 Subject Selection, 4.3 Conducting the Experiment, 5.3 Character Analysis, and 5.4 Personality Analysis, and provided all graphs and images found in the document. Also, Tim compiled and formatted the individual sections of the paper into its final form. Finally, Tim served as primary editor for the paper, correcting grammatical, tense, flow, voice, and logical errors as necessary.

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