

STARS

University of Central Florida
STARS

HIM 1990-2015

2013

Profanity's relation to personality and impulsivity

Jasmin Mokbel

University of Central Florida

 Part of the [Psychology Commons](#)

Find similar works at: <https://stars.library.ucf.edu/honorstheses1990-2015>

University of Central Florida Libraries <http://library.ucf.edu>

This Open Access is brought to you for free and open access by STARS. It has been accepted for inclusion in HIM 1990-2015 by an authorized administrator of STARS. For more information, please contact STARS@ucf.edu.

Recommended Citation

Mokbel, Jasmin, "Profanity's relation to personality and impulsivity" (2013). *HIM 1990-2015*. 1439.
<https://stars.library.ucf.edu/honorstheses1990-2015/1439>



PROFANITY'S RELATION TO PERSONALITY AND IMPULSIVITY

by

JASMIN MOKBEL

A thesis submitted in partial fulfillment of the requirements
for the Honors in the Major Program in Psychology
in the College of Sciences
and in The Burnett Honors College
at the University of Central Florida
Orlando, Florida

Spring Term 2013

Thesis Chair: Chrysalis Wright

© 2013 Jasmin Mokbel

ABSTRACT

The relationship of swearing in respect to personality, religiosity, and social influences was analyzed in this study. Many assumptions are made about the effects of swear words and the act of swearing can have on an individual. The present study hypothesizes that the use of swear words is dependent on an individual's personality characteristics and that exposure first happens from an external source (mass media outlets) rather than a familiar source (family member). More specifically, extroverted personality types will be more likely to engage in the use of profanity, due to their more impulsive nature. Online surveys such as the Big Five Inventory (BFI) and The Urgency, Premeditation, Perseverance, & Sensation Impulsive Behavior Scale (UPPS-P) were used to collect data from 763 participants. The results indicated impulsivity was positively correlated with personality characteristics of neuroticism and swearing acceptance. Swearing acceptance was negatively correlated with how often participants' families took part in religious activities growing up and was positively correlated with how important religion is the participant, their family, and religious affiliation. In conclusion, familial exposure (i.e., mother) was dominant over any media source for exposure to swearing, which goes against the previous assumptions about swearing.

DEDICATIONS

To my mother Silvia Mokbel and father Samir Mokbel, who have always offered unconditional support, love and guidance throughout my life and academic career.

ACKNOWLEDGMENTS

I would like to extend a special thank you to my chair, Dr. Chrysalis Wright for her guidance, patience, and encouragement throughout this entire process, and for teaching me to strive for more in my research and career.

I would also like to thank my committee members Mr. Chesnut, and Mr. Long for their valuable knowledge and time contributed to this study.

Table of Contents

LIST OF TABLES	viii
CHAPTER ONE: INTRODUCTION.....	1
What is a Swear Word?	2
Why People Swear?	3
Pros and Cons of Swearing	4
Factors Related to Swearing.....	4
The Current Study	5
CHAPTER TWO: METHODS.....	6
Participants and Procedure	6
Measures.....	6
Impulsivity (UPPS-P)	6
Personality Traits (BFI).....	6
Religiosity.....	7
Swearing Exposure.....	7
Swearing History.....	8
Acceptable use of swears words.....	8
Social Construction of Swears Words.....	8
Demographic Questionnaire.....	9
Procedure.....	9
CHAPTER THREE: RESULTS	11
Intercorrelations of Study Measures.....	11
How Were Participants Exposed to Swearing?.....	13
What are the Swearing Habits of Emerging Adults?	13
What Factors are Associated with the Use of Swear Words?	15
CHAPTER 4: DISCUSSION.....	18
Results of the Current Study	18
Significance of Current Study	19
Implications for Future Research	20

Limitations of Current Study.....	20
APPENDIX A: APPROVAL OF EXEMPT HUMAN RESEARCH.....	21
APPENDIX B: TABLES	23
LIST OF REFERENCES	43

LIST OF TABLES

Table 1 <i>Correlations of Personality Characteristics and Outcome Variables</i>	24
Table 2 <i>Correlations of Swearing Exposure, Age at Exposure and Outcome Variables</i>	25
Table 3 <i>Correlations of Religiosity and Outcome Variables</i>	26
Table 4 <i>Correlations of Demographic Variables and Outcome Variables</i>	27
Table 5 <i>Swearing Exposures</i>	28
Table 6 <i>Age at Exposure Prior to Age Five</i>	29
Table 7 <i>Current Swearing Habits</i>	30
Table 8 <i>Swearing Acceptance for Race Difference</i>	31
Table 9 <i>Swearing Acceptance Interaction for Race and Gender</i>	32
Table 10 <i>Family View of Swearing Interaction of Race and Gender</i>	33
Table 11 <i>Swearing Amount Differences for Race</i>	34
Table 12 <i>Swearing in Private Interaction in Gender and Race</i>	35
Table 13 <i>Swearing in Public Places</i>	36
Table 14 <i>Regression Coefficients of Swearing in Public</i>	37
Table 15 <i>Regression Coefficients for Swearing in Private</i>	38
Table 16 <i>Regression Coefficients for Swearing Around Family</i>	39
Table 17. <i>Regression Coefficients for Family View of Swearing</i>	40
Table 18 <i>Regression Coefficients for Swearing Acceptance</i>	41
Table 19. <i>Regression Coefficients for Social Construction</i>	42

CHAPTER 1: INTRODUCTION

The use of profanity has risen greatly since the 1960s. This rise has been attributed to increasing social familiarity and independence in western society, lack of religious importance, and the reduction of profanity restrictions in movies and media (Baruch & Jenkins, 2007). It is estimated that 80 to 90 swear words are used daily by U.S. citizens (Jay, 2009). Even so, research in this area is extremely limited, with past studies focusing on swearing as an expression of anger and frustration (Jay, 2009). However, it is interesting to note that swearing crosses all socioeconomic statuses and levels of education (Jay, 2009).

There are many assumptions about the use of swear words that are not based on research. For instance, it is assumed that media plays an influential role in exposing children to swear words. Even though implications of harm from swearing through media sources have yet to be proven, censorship of such sources has been put in place as means of prevention. Without certainty about the implications of swearing and the source from which profanity is initially introduced to a child, funding for prevention may not be adequately applied to the source from which a child is actually being exposed to such stimuli (Jay & Janschewitz, 2012). Swearing, however, is common within cable television programming, occurring in 9 out of 10 shows at least once every five minutes (Kaye & Sapolsky, 2009). There is concern about anti-social effects of the media introducing adolescents to offensive language. Researchers found that there were minimal effects; determining children under the age of twelve are unlikely to even comprehend such language (Jay, 2009). Considering the high usage frequency of swear words among the public and the varying misconceptions about the influence of swear words, research in this area is needed.

The use of swear words among children and adolescents is often considered verbal aggression and parents often fear that adolescents will repeat the words in socially unacceptable ways (Kaye & Sapolsky, 2009). With these assumptions, exposure to profanity seems to be a determining factor in parental monitoring in western culture (Jay & Janschewitz, 2012). It may seem like common sense to assume that various forms of aggression and swear words are linked in a negative way during child development. However, there is no definitive connection between forms of aggression and the use of swear words (Jay, 2009).

What is a Swear Word?

Language is an important aspect of one's culture and a form of communication of one's ideas, emotions, and state of mind (Jay, 2009). Language is unique across cultures with varying degrees of expression in communication that may be central to one culture but not another (Jay, 2009). One aspect that seems to be static across culture barriers is that each language has its own form of profanity or taboo words that express emotion (Patrick, 1901). Swearing across cultures can be categorized on seven levels: names sacred to religious symbols (e.g., angels, demons), labels tied to important events in religion and places (churches, mosques), names of holy icons (saints, prophets) words relating to the future (wishing future ill will on an individual), vulgar references, and phrases (Patrick, 1901). Suggesting that swearing has roots in religious connotations designed to offend or shock the individual may be a plausible explanation as to where or why swearing began to be considered negative and offensive (Patrick, 1901).

Standards of what makes a certain word a swear word are difficult to determine because words are subject to variability, which makes context difficult to determine (Jay, 2009). For instance, Siperstein, Pociask, and Collins (2010) examined the social context of using the word

“retard.” They found that if the word was not being used in reference to or heard by someone mentally disabled then the term was deemed acceptable and even considered slang when referring to someone as an “idiot.”

Janschewitz (2008) analyzed the relationship between taboo words and emotionally neutral words to determine how participants differentiated between the words, their frequency of use, and offensiveness. Janschewitz concluded that taboo words were said less frequently than emotionally neutral words, and that participants recorded their use of taboo words as less frequent than hearing taboo words from other sources. Janschewitz estimated that frequency was lower than familiarity in the participants’ speech, due to the demand characteristics of desiring to look more socially acceptable.

Why Do People Swear?

A person may swear when they are punished or feel wronged in some way. Their natural reaction is to release the emotion or built up tension caused by the incident through the expression of words. Internalizing those emotions at that time and expressing them in words may help avoid immediate physical violence (Jay, 2009). Swearing may provide a release of negative emotion that cannot be exhibited in other forms at the present occasion. The use of swearing to release such emotion may be attributed to classical conditioning (Baruch & Jenkins, 2007; Jay, King, & Duncan, 2006). Additionally, in certain social gatherings individuals may use euphemisms in place of profanity or use profanity in a joking manner (Baruch & Jenkins, 2007).

In an effort to investigate parenting styles, Jay, King, and Duncan (2006) asked college students to recall instances in which they were punished for using profanity. The results indicated no differences between men and women in level of emotion in their stories and amount

of swear words used. Mothers tended to be the primary disciplinarian and verbal punishment was more common than physical punishment. Though the students recalled the punishment with accuracy (with vivid detailed descriptions), it was recorded that 94% currently use swear words (Jay et al., 2006). This study supports Jay's earlier findings: Children learn to swear at an early age and continue to do so throughout life (Jay, 1992, 1996). Furthermore, the participants reported learning to swear from peers and people in their social circle, not through various forms of media, such as television (Jay, et al., 2006).

Pros and Cons of Swearing

Robbins et al. (2011) studied the effect that swearing had on coping with illness (i.e., cathartic effect) and discovered swearing in the company of others could be related to decreases in emotional support and increases in depressive symptoms. Their study highlighted the negative consequences of releasing emotion and concluded that swearing might cause others to be distant, making emotional support from others less likely.

While using profanity is not necessarily considered to be socially acceptable, research has found some benefits of swearing. Baruch and Jenkins (2007) found that permitting the use of swear words among peers in the workplace improved management and leadership among workers. Other research has demonstrated the positive effects swearing can have on reducing pain. Stephens and Umland (2011) found that swearing could raise pain tolerance. However, swearing on a daily basis hindered the effect of any benefit swearing can have in helping to reduce pain.

Factors Related to Swearing

Personality has been shown to play a role in the use of profanity. For example, hostile swearing has been positively correlated with Type A personalities (Janschewitz, 2008). Swearing is not limited those of a certain age. Even when individuals suffer from dementia or a degenerative disease that causes harm to brain function or memory, swear words still seem to be present in one's vocabulary (Jay, 2009). The level of control one has is also a factor in how swear words are used (Jay, 2009). For instance, profanity can be used when expressing anger or frustration or in social situations among peers, as well as in a joking manner (Baruch & Jenkins, 2007).

The Current Study

An investigation into the causes of swearing may be helpful in determining what makes individuals swear and under what circumstances. By exploring the personalities and impulsive tendencies of individuals who swear, researchers can better determine the effects profanity can have on society. The purpose of the current study was to investigate the relationship between personality characteristics in relation to social constructs, such as religion, ethnicity, and group affiliations, as they correspond to profanity. Determining first instances of exposure and use of swear words by an individual is an important goal of this study, since research in this area is minimal. The present study also aimed to analyze how social constructs of swearing may influence the level of swear word usage and views of swearing. That the use of swear words is dependent on an individual's personality characters, and that exposure first happens from an external source (mass media outlets) rather than a familiar source (family member) is an important aim of the present study. More specifically, extroverted personality types will be more

likely to engage in the use of profanity, due to their more impulsive nature. Finally, variables such as one's openness and family background will affect one's social construction of swearing, and the higher amount of religiosity in a person the lower a person's acceptance of swear words will be. Minimal data on the effects of swearing have been collected, giving researchers little to study in this area. The data that will be acquired from this study is relatively unique in its kind and will help shed light on factors that determine the importance and implications of the use of swearing on society as a whole.

CHAPTER 2: METHOD

Participants

Data was originally collected from 818 undergraduate students from the University of Central Florida. All participants were recruited through psychology courses and received research credit or class extra credit for their participation. A total of 55 participants were deleted from the study because their responses indicated that they were not involved with the survey or they did not answer important questions in the study from which data could not be accurately collected. Of the 763 participants remaining, approximately 66% of the participants were female ($n = 501$) and 34 % ($n = 262$) were male. The majority of the participants (86.7%, $n = 662$) ranged in ages 18-21 years of age and identified themselves as White (74.8%, $n = 571$). Participants came from married two-biological parent families (63.6%, $n = 485$), divorced family structures (17%, $n = 130$), reconstituted families (12.6%, $n = 96$), and never married households (6.8%, $n = 52$).

Measures

Impulsivity

The Urgency, Premeditation, Perseverance, & Sensation Impulsive Behavior Scale (UPPS-P) was used in the present study (Whiteside & Lynam, 2001). This 59-item scale asks participants the extent to which they agree with such statements as “I have a reserved and cautious attitude toward life” and “My thinking is usually careful and proposed.” Response options range from 1 (*agree strongly*) to 4 (*disagree strongly*). Items will be reversed scored and then summed for a total impulsivity scale that will be used in analysis. The alpha reliability for the scale was equal to .92.

Personality Traits

The Big Five Inventory (BFI) (Benet-Martinez & John, 1998; John, Donahue, & Kentle, 1991; John, Naumann, & Soto, 2008) was used to assess participants' level of extraversion, agreeableness, conscientiousness, neuroticism, and openness. This is a 44-item scale that asks participants to rate themselves on a scale of 1 (*disagree strongly*) to 5 (*agree strongly*) on items intended to assess the big five personality traits. Example items for extraversion include "is talkative" and "is reserved." Example items for agreeableness include "is helpful and unselfish with others" and "has a forgiving nature." Example items for conscientiousness include "does a thorough job" and "is a reliable worker." Example items for neuroticism include "is depressed, blue" and "can be tense." Example items for openness include "is original, comes up with new ideas" and "is curious about many different things."

Eight items will be summed to determine level of extraversion with three items being reversed scored. Nine items will be summed to determine level of agreeableness with four items being reversed scored. Nine items will be summed to determine level of conscientiousness with four items being reversed scored. Eight items will be summed to determine level of neuroticism with three items being reversed scored. Ten items will be summed to determine level of openness with two items being reversed scored. The alpha reliability for the extraversion subscale was .85, for the neuroticism subscale was .80, for the agreeableness subscale was .77, for the openness subscale was .76, and for the conscientiousness subscale was .80.

Religiosity

Nine items, developed for this study, was used to assess participants' level of religiosity. Items in the scale measured frequency of religious meeting attendance while growing up to

present, importance of religion currently and while growing up, current religious affiliation, personal views of God, and religious practices.

Swearing Exposure

Eighteen questions, developed for this study, was used in the proposed study that determine the level of exposure to swear words while growing up from such people as participants mother, cousins, friends, teachers during school, celebrities, and music artists. Response options range from 1 (*never*) to 5 (*almost always*). Another fourteen items are being used to determine participants' age when they were exposed to swear words from such people as parents, extended family, friends, and music.

Swearing History

A total of 14 questions developed for this study, are being used to assess participants' history with using swear words. Example questions include "How old were you when you said your first swear word," "Do you currently swear more than you did as a child," and "How often do you swear in public places (mall, grocery store, gym, etc.)."

Acceptable Use of Swear Words

Twenty items, developed for the proposed study, ask participants to rate how strongly they agree with using swear words in certain situations. Example items include "it is acceptable to swear when you are angry," "it is acceptable to swear in an educational setting," and "it is acceptable to swear when singing along to music." Response options range from 1 (*strongly disagree*) to 5 (*strongly agree*). The alpha reliability for the scale was .94.

Social Construction of Swear Words

Participants were given ten scenarios, developed for the current study, in which they were asked to determine if the use of a swear word occurred. Scenarios use substitution swear words (e.g., son of a biscuit) and socially determined curse words (e.g., mother fucker). An example scenario is

“Samantha is applying to graduate schools. Her grade point average is a 3.9 and her other application requirements are excellent. She has applied to two Universities and plans to start graduate school immediately after she graduates with her B.S. degree. Samantha does not have a backup plan to her graduate school plans. Today, she received letters from the two Universities she has applied to. She opens both of them at the same time, with anticipation. She has been rejected from both Universities. Samantha says, “Stupid fucking schools!!”

Responses were dichotomous, with four items being reverse coded. Alpha reliability including all ten items was .50, indicating low reliability. A factor analysis was then conducted to determine the number of components being measured by the ten items. Results indicated that seven of the ten items were measuring the same construct. Alpha reliability for those seven items was .83. The seven items were summed for a total social construction measure that was used in analysis.

Demographic Questionnaire

Participants were asked twelve questions that assess their age, race, ethnicity, gender, year in college, biological parents' current marital status, economic hardship while growing up, and current relationship status.

Procedure

The current study was submitted to the IRB for review. The IRB approved the study and considered it exempt. The approval letter can be found in Appendix A. The questionnaire was then entered into the Sona System at the University of Central Florida, which was used to collect data for the current study online.

All participants were recruited through psychology courses and received research credit or class extra credit for their participation. All participants read an explanation of research prior to completing the online questionnaire. Participants took on average 27.25 minutes to complete the questionnaire. Participants were first asked questions about their personality characteristics, religiosity, swearing exposure and history, opinions regarding swearing, followed by general demographic questions.

Preliminary analyses indicated that missing data for the current study was less than 3% of the missing total. Therefore, a simple mean substitution imputation method was used (Kline, 2005). This method involves replacing the missing data with the overall mean value for the variable. There is the possibility that replacing missing data in this manner can distort the distribution of the data. However, comparison of variable distributions before and after imputation indicated that this method had no detectable effect on the data. The new data set was used in analyses.

CHAPTER 3: RESULTS

Intercorrelations of Study Measures

Significant correlations between personality characteristics and the outcome variables are presented in Table 1. Impulsivity was positively correlated with personality characteristics of neuroticism and swearing acceptance. There was a significant negative correlation between the impulsivity of participants and their level of conscientiousness, agreeableness, social construction of swearing, and current amount of swearing. Conscientiousness was negatively correlated with neuroticism, swearing acceptance, and social construction of swearing. A positive relationship between agreeableness and current swearing was correlated with participants' conscientiousness. Neuroticism had a significant negative relationship with the participants' agreeableness and a positive correlation with swearing acceptance. Agreeableness was positively related to openness and the current amount of swearing done by the participants while negatively correlated to their swearing acceptance. Finally swearing acceptance had a positive relationship with the participants' openness but was negatively correlated with their amount of current swearing.

Correlations of swearing exposure, age at exposure, and outcome variables are presented in Table 2. Swearing acceptance was negatively correlated with the time participants first heard their friends, cousins, and neighbors swear. A positive relationship was found between swearing exposure and hearing their middle school staff swear for the first time with the participants' swearing acceptance. Social construction of swearing was positively correlated with first hearing their cousins swear, while a negative correlation was found with hearing elementary school staff swear. Current swearing and swearing exposure had a significant negative correlation while

hearing neighbors swear was positively related with current swearing. Swearing exposure was negatively correlated with participants hearing their friends swear but was positively correlated with hearing their elementary school staffs swear. A positive correlation was found with participants' hearing both their elementary and middle school staff swear. First hearing their cousin swear had a positive relationship with hearing their friends, peers that are not considered friends, and elementary school staff swear. Hearing their friends swear for the first time had a significant positive relationship with hearing peers not considered their friends swear for the first time. Finally, a significant positive relationship was found between hearing their elementary school staff swear and middle school staff swear.

Correlations of religiosity measures and outcome variables are presented in Table 3. Current swearing was negatively correlated with importance placed on religion, family's importance placed on religion, participants' view of God, and how often they read religious scriptures. The importance of religion to family while growing up was negatively correlated with how important religion was to the participant, their religious background, where they looked for guidance, their view with God, religious service attendance, and how often they read a religious scripture. Family attendance at religious meetings was negatively correlated with swearing acceptance, swearing exposure, importance placed on religion, family's level of importance placed on religion, religious background, view of God, and how often they prayed and read scriptures. A positive correlation was found between participants' currently attending religious meetings and family's religious meeting attendance. In general, religious importance was positively correlated with participant's exposure to swearing with their immediate family members (e.g., mother, father, and grandparents). Swearing acceptance was negative correlated

with how often participants' families took part in religious activities growing up and was also positively correlated with how important religion is the participant, their family, and religious affiliation. While not depicted in the table, being of Hispanic origin had a positive correlation with religious affiliation while coming of white background and had a negative correlation with religious affiliation.

Correlations of demographic variables and outcome variables are presented in Table 4. Swearing acceptance was found to be negatively correlated with participants' current amount of swearing, age, and gender (females). Being an international student was positively correlated with swearing acceptance. Finally, a negative correlation was found between being an international student, current amount of swearing, gender (females), and age.

How were participants exposed to swearing?

Table 5 depicts who participants regularly heard swear while growing up. Participants reported that they heard their mothers swear the most (65%). Teachers and principals in middle school had the least amount of exposure for swearing (.3%). The rest of the exposure responses for immediate family ranged at low percentages with siblings (7%), fathers (5%), grandparents (4%), aunts and uncles (3%) and cousins (1%).

Age varied across the board in terms of when participants first said a swear word. Forty six percent reported never swearing as child, but when asked how frequently they currently swear, participants reported several times a day, 55% ($n = 419$). The most common exposure to swear words prior to five years old was in elementary school (76%). The second highest exposure prior to age five was reported with the participants' grandparents (30%) and then middle school (27%). Age at swearing exposures can be found in Table 6.

What are the swearing habits of emerging adults?

As expected, swearing publicly and privately were inversely related, with 40% of participants claiming they seldom or never swear in public but swore several times a day in private, 50% ($n = 384$). Swearing with peers, as compared with family members, had an inverse relationship as well, with 56% reporting that they swear with their peers several times daily and 58% of participants reported that they seldom or never swear in front of their family. Descriptive statistics can be found in Table 7.

A series of univariate analyses were conducted to determine if there were significantly different swearing habits among the participants based on gender, age, or race. Results indicated a main effect of age, $F(4, 762) = 1.82, p < .01$, in that younger participants were more accepting of the use of swear words than older participants. There was also a main effect for race, $F(4, 762) = 2.71, p < .05$. Participants who identified themselves as *other* for race were more accepting of the use of swear words, followed closely by those who identified themselves as *American Indian or Alaska Native*. Results also indicated an interaction effect of gender and race, $F(3, 762) = 4.39, p < .01$, and an interaction effect of gender, age, and race, $F(11, 762) = 2.35, p < .01$. Males aged 23 who identified their race as *other* were the most accepting of the use of swear words compared to all other males ($M = 91, SD = 13.87$). Female's aged 38 and White were the most accepting of the use of swear words compared to all other females ($M = 73, SD = 9.81$). Descriptive statistics can be found in Tables 8 and 9.

Additional univariate analyses were conducted to determine if there were significant differences in participants' social construction of the use of swear words based on gender, age,

and race. Results did not indicate any main or interaction effects for the social construction of swear words.

Univariate analyses were also conducted to determine if there were significant differences in the swearing history of participants based on gender, age, and race. A main effect of age, $F(25, 762) = 2.27, p < .001$, and an interaction effect of race and gender, $F(3, 762) = 2.83, p < .05$, were found for families' view of swearing. Younger participants and White males reported that their families viewed swearing as less negative than older participants and participants from other racial backgrounds. Descriptive statistics can be found in Table 10.

Univariate analyses were also conducted to determine how often participants swore. A main effect was found with the factor of race, $F(4, 762) = 3.18, p < .01$, and gender, $F(1, 762) = 9.57, p < .01$. A significant main effect was found between the participants' amount of swearing in private and gender, $F(1, 762) = 5.00, p = .03$. A significant interaction was found if participants swear at home or in private with race and gender, $F(3, 762) = 3.79, p < .01$. Also a three way interaction of gender, race, and age, $F(11, 762) = 2.21, p = .01$, was found with participants frequency of swearing in private. Descriptive statistics can be found in Tables 11 and 12.

Additional univariate analyses found that the amount of swearing in public places participants reported had a significant interaction effect for race and gender, $F(3, 762) = 4.59, p < .01$. Descriptive statistics can be found in Table 13. There was a significant main effect for gender, $F(1, 762) = 4.91, p < .05$, for swearing more now than as a child, with males ($M = 2.89, SE = .12$) swearing more than females ($M = 2.7, SE = .15$). Also, the results indicated that females ($M = 2.77, SE = .13$) are more likely to swear in private than males ($M = 2.72, SE = .16$).

What factors are associated with the use of swear words?

Six linear regression analyses were conducted to determine how gender, personality characteristics, religiosity, and exposure to swear words while growing up combine to best predict the use of swear words, the acceptability of swear words, the social construction of the use of swear words, how often one publicly and privately swears, frequency at which one swears in front of family, and families' views on swearing.

The first linear regression analysis was conducted to determine if how often one swears in public could be explained by age, gender, race, extraversion, neuroticism, agreeableness, openness, conscientiousness, impulsive behavior, and religiosity. Importance of religion contributed significantly to how often a participant swore, $t(16,746) = 1.97, p .05$. Regression results can be seen in Table 14.

The second linear regression analysis was conducted to determine if how often one swears at home could be explained by age, gender, race, extraversion, neuroticism, agreeableness, openness, conscientiousness, impulsive behavior, and religiosity. The overall model was significant, $F(16, 746) = 2.75, p < .001$. Extroversion contributed significantly to participants swearing in private, $t(16, 746) = 2.278, p = .02$, as did being exposed to swearing through their mother, $t(16,746) = 2.55, p = .01$, and exposure to swearing from actors or actresses in movies, $t(16,746) = -2.57, p = .01$. Regression results can be seen in Table 15.

The third linear regression analysis was conducted to determine if how often participants swore around their family could be explained by age, gender, race, extraversion, neuroticism, agreeableness, openness, conscientiousness, impulsive behavior, and religiosity. The overall model was significant, $F(16, 746) = 8.94, p < .001$. Race contributed significantly to participants

swearing in front of family, $t(16, 746) = -2.08, p = .04$, as did openness, $t(16, 746) = 2.69, p = .01$, how important religion was to them, $t(16, 746) = 5.65, p < .001$, exposure to swear words from their mother, $t(16, 746) = 3.25, p = .01$, and celebrities on television, $t(16, 746) = 3.24, p = .01$. Regression statistics can be seen in Table 16.

The fourth linear regression analysis was conducted to determine if overall family view of swearing could be explained by age, gender, race, extraversion, neuroticism, agreeableness, openness, conscientiousness, impulsive behavior, and religiosity. The overall model was significant, $F(16, 746) = 16.71, p < .001$. Gender contributed significantly to participants' family view of swearing, $t(16, 746) = -2.1, p = .04$, as did age, $t(16, 746) = -3.14, p < .01$, openness, $t(16, 746) = 2.09, p = .04$, impulsivity, $t(16, 746) = 2.93, p < .01$, how important religion was to them, $t(16, 746) = 5.34, p = .001$, exposure to swear words from their mother, $t(16, 746) = 5.54, p < .001$, celebrities on television, $t(16, 746) = 2.07, p < .04$, and actors and actresses, $t(16, 746) = -2.01, p = .04$. Regression statistics can be seen in Table 17.

The fifth linear regression analysis was conducted to determine how overall swearing acceptance could be explained by age, gender, race, extraversion, neuroticism, agreeableness, openness, conscientiousness, impulsive behavior, and religiosity. The overall model was significant, $F(16, 746) = 27.86, p < .001$. Gender contributed significantly to participants' swearing acceptance, $t(16, 746) = -3.42, p = .001$, as did age, $t(16, 746) = -3.31, p = .001$, agreeableness, $t(16, 746) = -3.30, p = .001$, openness, $t(16, 746) = 2.48, p = .01$, conscientious, $t(16, 746) = -2.59, p < .01$, impulsivity, $t(16, 746) = 3.17, p < .01$, religious importance, $t(16, 746) = 7.13, p < .001$, mother exposure, $t(16, 746) = 5.64, p < .001$, celebrity exposure $t(16,$

746) = -2.06, $p < .05$, actor and actress exposure $t(16, 746) = 2.18$, $p < .05$, and music exposure $t(16, 746) = 3.04$, $p < .01$. Regression statistics can be seen in Table 18.

The sixth linear regression analysis was conducted to determine how overall social construction of swearing could be explained by age, gender, race, extraversion, neuroticism, agreeableness, openness, conscientiousness, impulsive behavior, and religiosity. The overall model was significant, $F(16, 746) = 2.00$, $p = .01$. Conscientiousness significantly contributed to the participants' social construction of swear words, $t(16, 746) = -2.02$, $p < .05$, as did impulsivity, $t(16, 746) = -2.34$, $p < .05$. Regression data can be found in Table 19.

CHAPTER 4: DISCUSSION

Results of the Current Study

The results of the study indicated that over half of the participants reported their mothers to be the highest source of exposure to swear words over external variables such as the media influences. These results did not support the first initial hypothesis that exposure first happens from an external source (mass media outlets) rather than a familiar source (family member). Also, the most common exposure to swear words prior to five years old was in elementary school. The majority of participants reported almost always swearing several times daily, especially among peers. These results go against Janschewitz's (2008) results in which the conclusion was that taboo words were said less frequently than emotionally neutral words, though the researchers did relate their results to demand characteristics. These findings support Jay's earlier results that participants reported learning to swear from peers and people in their social circle, not through various forms of media, such as television (Jay et al., 2006).

Impulsivity was positively correlated with personality characteristics of neuroticism and swearing acceptance, and swearing acceptance had a positive relationship with the participants' openness. These results support the second hypothesis that extroverted personality types would be more likely to engage in the use of profanity, since impulsivity and neuroticism are common characteristics of extroverts. These results support Janschewitz's (2008) research that swearing has been positively correlated with Type A personalities. Research conducted by Jay (2009) on the use of profanity coinciding with one's level of control can be supported from this study's results since impulsivity had a positive correlation with extroverted characteristics.

Over half of the participants reported that they said their first swear word with peers and friends and currently swear daily among peers as well. These results support Baruch and Jenkins (2007) claim that profanity can be used in social situations among peers and in a joking manner. The regressions indicated that religious importance was a good predictor for how often participants reported swearing in public. Also, swearing in private seemed to be related to extroversion of the participants, if they were exposed to swearing by their mother and exposure to swear words from actors and actresses. Younger participants reported more swearing acceptance than older participants as well. Swearing in front of family seemed to be predicted by one's race, openness, exposure to swearing from the mother, and religious importance. Predictors for swearing acceptance were openness of the participants, religious importance, mother exposure to swearing, music and television exposure to swearing, how much they agreed with the use of swearing, their consciousness at the time, and impulsivity.

Religious importance seemed to be the strongest predictor of different levels of swearing in the linear regression analyses. Also swearing acceptance was negatively correlated with how often participants' families took part in religious activities growing up. This may be due to religion constraints on social acceptable behavior since the more involved one is in his or her beliefs the more negatively their view on swearing will be impacted.

Significance of Current Study

The current study is significant considering the application of the results provide the scientific community with data that measures the harmfulness of swearing and the amount and frequency of swear words said by individuals. Outside of the scientific community these results

could be used to inform disputes in situations in which swearing is *assumed* to be harmful such as the media, music, or advertisements (Jay & Janschewitz, 2012).

Implications for Future Research

Future research investigating these relationships is needed to adequately determine the cause. Also mothers were the most dominate source of swearing exposure, which was likely due to the fact that infants spend a majority of their formative years with their mother's inevitably exposing them to swear words from their mothers before any other source. This is an interesting relationship since mothers reportedly tend to be the primary disciplinarian with verbal punishment (Baruch & Jenkins, 2007; Jay, King, & Duncan, 2006). Future research investigating the correlation of these two possible relationships is recommended.

Limitations of Current Study

Limitations of this study include a sample only take from a college campus. Though diverse in ethnicity, a varied academic and occupational background of participants might provide more holistic results. Another limitation was the use of online surveys and the social construction scale used in this study. The social construction scale developed for this particular study was weaker than desired, making measurements of social construction weak. The use of online surveys allows participants to choose answers without reading the question or randomly select answers at their discretion, which disrupts the results of the study. Overall, future research should include a sample of participants outside of the college community, possibly in person, and a stronger social construction scale.

APPENDIX A: APPROVAL OF EXEMPT HUMAN RESEARCH



University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Approval of Exempt Human Research

From: UCF Institutional Review Board #1
FWA00000351, IRB00001138

To: Chrysalis L. Wright and Co-PI: Jasmin H. Mokbel

Date: August 14, 2012

Dear Researcher:

On 8/14/2012, the IRB approved the following activity as human participant research that is exempt from regulation:

Type of Review: Exempt Determination
Project Title: Profanity's Relation to Personality and Impulsivity
Investigator: Chrysalis L. Wright
IRB Number: SBE-12-08585
Funding Agency:
Grant Title:
Research ID: N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 08/14/2012 01:12:25 PM EDT

A handwritten signature in black ink that reads "Joanne Muratori".

IRB Coordinator

APPENDIX B: TABLES

Table 1. *Correlations of Personality Characteristics and Outcome Variables*

Variable	1.	2.	3.	4.	5.	6.	7.	8.
1. Impulsivity		-.57**	.20**	-.36**	.00	.29**	-.08*	-.11**
2. Conscientiousness	-.57**		-.27**	.36**	.05	-.26**	-.00	.09**
3. Neuroticism	.20**	-.27**		-.29**	-.06	.10**	.00	.01
4. Agreeableness	-.36**	.36**	-.29**		.12**	-.25**	.04	.07*
5. Openness	.00	.05	-.06	.12**		.13**	-.00	.02
6. Swear Acceptance	.29**	-.26**	.10**	-.25**	.13**		.03	-.37**
7. Social Construction of Swearing	-.08*	-.00	.00	.04	-.00	.03		-.03
8. Current Swearing	-.11**	.09**	.01	.07*	.02	-.37**	-.03	

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 2. *Correlations of Swearing Exposure, Age at Exposure and Outcome Variables*

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1.Swear Acceptance		.03	-.37**	.34**	.00	-.10**	-.14**	.05	.11**	-.09**
2. Social Construction of Swearing	.03		-.03	-.04	.10**	.04	.04	-.13**	-.03	-.04
3.Current Swearing Exposure	-.37**	-.03		-.18**	-.03	-.03	-.02	.02	.00	.08*
4. Swearing Exposure	.34**	-.04	-.18**		-.01	-.06	-.11**	.22**	.34**	.00
5. First Heard Cousin Swear	.00	.10**	-.03	-.01		.17**	.25**	.08*	.06	.00
6. First Heard Friends Swear	-.10**	.04	-.03	-.06	.17**		.43**	-.03	-.00	.00
7. First Heard Peers Swear (Not Friends)	-.14**	.04	-.02	-.11**	.25**	.43**		-.04	-.06	-.00
8 First Heard Elementary Staff Swear	.05	-.13**	.02	.22**	.08*	-.03	-.04		.60**	.00
9. First Heard Middle School Staff Swear	.11**	-.03	.00	.34**	.06	-.00	-.06	.60**		.00
10. First Heard Neighbors Swear	-.09**	-.04	.08*	.00	.00	.00	-.00	.00	.00	

* p < .05, ** p < .01, *** p < .001

Table 3. *Correlations of Religiosity and Outcome Variables*

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. Swear Acceptance		.03	-.37**	.34**	.08*	-.22**	.46**	.41**	.27**	.34**	.23**	.41**
2. Social Construction of Swearing	.03		-.03	-.04	.00	.07*	.04	.01	-.02	-.00	.00	.03
3. Current Swearing	-.37**	-.03		-.18**	.02	.05	-.14**	-.16**	-.05	-.14**	-.00	-.14**
4. Swearing Exposure	.34**	-.04	-.18**		.02	-.08*	.15**	.09**	.06	.11**	.01	.10**
5. Current Attend Religious Meetings	.08*	.00	.02	.02		.07*	.01	.00	-.04	-.05	.03	.02
6. Family Attend Religious Meetings	-.22**	.07*	.05	-.08*	.07*		-.48**	-.42**	-	-.35**	-.33**	-.43**
7. Religion Importance	.46**	.04	-.14**	.15**	.01	-.48**		.74**	.59**	.53**	.59**	.74**
8. Family Religion Importance	.41**	.01	-.16**	.09**	.00	-.42**	.74**		.49**	.50**	.49**	.96**
9. Religious Background	.27**	-.02	-.05	.06	-.04	-.77**	.59**	.49**		.43**	.40**	.50**
10. View of God	.34**	-.00	-.14**	.11**	-.05	-.35**	.53**	.50**	.43**		.30**	.52**
11. Prayer Currency	.23**	.00	-.00	.01	.03	-.33**	.59**	.49**	.40**	.30**		.48**
12. Read Scriptures	.41**	.03	-.14**	.10**	.02	-.43**	.74**	.96**	.50**	.52**	.48**	

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 4. *Correlations of Demographic Variables and Outcome Variables*

Variable	1.	2.	3.	4.	5.	6.
1. Swear Acceptance		.03	-.37**	-.12**	-.13**	.09*
2. Social Construction of Swearing	.03		-.03	.02	.05	.09*
3. Current Swearing	-.37**	-.03		.12**	-.01	-.10**
4. Age	-.12**	.02	.12**		.00	-.01
5. Gender	-.13**	.05	-.01	.00		-.02
6. International	.09*	.09*	-.10**	-.01	-.02	

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 5. *Swearing Exposures*

Exposure Variable	<i>n</i>	%
1. Mother	492	64.5
2. Father	35	4.6
3. Sibling	53	6.9
4. Grandparent	29	3.8
5. Cousins	10	1.3
6. Aunts/Uncles	26	3.4
7. Friends	21	2.8
8. Partner	162	21.2
9. Peers (Not Friends)	42	5.5
10. Elementary School	240	31.5
11. Middle School	2	.3
12. High School	8	1.0
13. College	7	.9
14. Neighborhood	12	1.6
15. Television	19	2.5
16. Movies	81	10.6
17. Music Artists	101	13.2
18. Lyrics	199	26.1

Table 6. *Age at Exposure Prior to Age Five*

Age Variable	<i>n</i>	%
1. Mother	97	12.8
2. Father	116	15.2
3. Grandparent	228	30
4. Cousins	97	12.7
5. Aunts/Uncles	108	14.3
6. Friends	11	1.4
7. Peers (Not Friends)	11	1.5
8. Elementary School	579	75.9
9. Middle School	209	27.4
10. High School	78	10.2
11. Neighborhood	17	2.2
12. Television	18	2.4
13. Movies	23	2.9
14. Music Artists	35	4.5

Table 7. *Current Swearing Habits*

Swearing Habit Variable	<i>n</i>	%
Swear Several Times a Day	419	54.9
Seldom Swear or Never	110	14.4
Swear Once a Day	102	13.4
Once a Week	24	3.1
A Few Times a Week	82	10.7
A Few Times a Month	26	3.4
Seldom or Never Swear in Public	307	40.2
Swear in Private or at Home	384	50.3
Swear Among Peers Several Times a Day	425	55.7
Swear Around Family Seldom or Never	449	58.8
Swear When Expressing Emotion Several Times a Day	323	42.3

Table 8. *Swearing Acceptance for Race Difference*

Swearing Acceptance for Race Variables	<i>M</i>	<i>SD</i>
Black or African-American	49.83	2.86
White	54.99	1.67
American Indian or Alaska Native	56.00	9.81
Asian or Pacific Islander	51.25	3.09
Other	58.40	2.82

Table 9. *Swearing Acceptance Interaction for Race and Gender*

Male	<i>M</i>	<i>SD</i>
Black	48.99	4.68
White	60.82	2.65
American Indian/Alaska Native	56.00	9.81
Asian/Pacific Islander	47.36	4.46
Other	65.57	4.84
Female	<i>M</i>	<i>SD</i>
Black	50.48	3.55
White	50.53	2.15
American Indian/Alaska Native	-	-
Asian/Pacific Islander	54.48	4.28
Other	53.62	3.43

Table 10. *Family View of Swearing Interaction of Race and Gender*

Male		<i>M</i>	<i>SD</i>
	Black	2.63	1.22
	White	3.51	1.01
	American Indian/ Alaska Native	3.00	1.41
	Asian or Pacific Islander	2.13	1.36
	Other	3.33	1.12
Female		<i>M</i>	<i>SD</i>
	Black	2.77	1.08
	White	2.86	1.05
	American Indian/Alaska Native		
	Asian or Pacific Islander	3.02	1.05
	Other	3.16	.97

Table 11. *Swearing Amount Differences for Race*

Swearing Acceptance for Race Variables	<i>M</i>	<i>SE</i>
Black or African-American	2.59	.23
White	2.99	.13
American Indian or Alaska Native	3.50	.79
Asian or Pacific Islander	2.28	.25
Other	2.86	.23

Table 12. *Swearing in Private Interaction in Gender and Race*

Male		<i>M</i>	<i>SD</i>
	Black	2.40	1.46
	White	3.06	.98
	American	2.00	1.41
	Indian /Alaska Native		
	Asian or Pacific Islander	2.50	1.36
	Other	2.62	.90
Female		<i>M</i>	<i>SD</i>
	Black	2.67	1.28
	White	2.82	1.33
	American		
	Indian/Alaska Native		
	Asian or Pacific Islander	2.76	1.39
	Other	2.74	1.32

Table 13. *Swearing in Public Places*

Male		<i>M</i>	<i>SD</i>
	Black	2.85	1.65
	White	3.07	1.04
	American	3.00	.00
	Indian /Alaska Native		
	Asian or Pacific Islander	2.17	1.10
	Other	2.70	1.20
Female			
	Black	2.55	1.19
	White	3.08	1.41
	American		
	Indian/ Alaska Native		
	Asian or Pacific Islander	3.07	1.54
	Other	2.51	1.25

Table 14. *Regression Coefficients of Swearing in Public*

	How Often One Swears in Public
Gender	-.01
Race	.03
Age	-.01
Extroversion	.01
Neuroticism	.02
Agree	.00
Openness	-.06
Conscientiousness	.05
Impulse	-.06
Religious Importance	.09*
R^2	.02
F	1.37

* $p < .05$, ** $p < .01$, *** $p < .001$

Table15. *Regression Coefficients for Swearing in Private*

	Swearing in Private or Home
Gender	-.054
Race	.00
Age	-.06
Extroversion	.09 **
Neuroticism	.05
Agree	-.02
Openness	-.04
Conscientiousness	-.05
Impulse	.02
Take Part in Religious Activities	.01
Religious Importance	.04
Exposure from Mother	.12 **
Exposure from Celebrities on TV	.02
Exposure from Actors and Actresses	-.12 **
R^2	.06
F	2.75 ***

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 16. *Regression Coefficients for Swearing Around Family*

	Swearing In Front of Family Frequency
Gender	.01
Race	-.07*
Age	-.02
Extroversion	.06
Neuroticism	.03
Agree	-.04
Openness	.13**
Conscientiousness	-.04
Impulse	-.05
Take Part in Religious Activities	-.08
Religious Importance	.25***
Exposure from Mother	.14**
Exposure from Celebrities on TV	.11**
R^2	.16
F	8.94***

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 17. *Regression Coefficients for Family View of Swearing*

Family View of Swearing	
Gender	-.07*
Race	-.04
Age	-.10**
Extroversion	.00
Neuroticism	-.01
Agree	-.06
Openness	.09*
Conscientiousness	-.05
Impulse	.12**
Take Part in Religious Activities	.01
Religious Importance	.22***
Exposure from Mother	.23***
Exposure from Celebrities on TV	.07*
Exposure from Actors and Actresses	-.09*
R^2	.26
F	16.71

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 18. *Regression Coefficients for Swearing Acceptance*

	Swearing Acceptance
Gender	-.11 ^{***}
Race	-.02
Age	-.09 ^{***}
Extroversion	.03
Neuroticism	.04
Agree	-.11 ^{***}
Openness	.10 ^{**}
Conscientiousness	-.09 ^{**}
Impulse	.12 ^{**}
Take Part in Religious Activities	.04
Religious Importance	.27 [*]
Exposure from Mother	.21 [*]
Exposure from Celebrities on TV	.03 [*]
Exposure from Actors and Actresses	-.08
Music Exposure	.10 ^{**}
R^2	.37
F	27.86 ^{***}

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 19. *Regression Coefficients for Social Construction*

	Social Construction
Gender	.06
Race	-.07
Age	.02
Extroversion	-.04
Neuroticism	.01
Agree	.05
Openness	-.02
Conscientiousness	-.09*
Impulse	-.11*
R^2	.04
F	2.00**

* $p < .05$, ** $p < .01$, *** $p < .001$

LIST OF REFERENCES

- Baruch, Y., & Jenkins, S. (2007). Swearing at work and permissive leadership culture: When anti-social becomes social and incivility is acceptable. *Leadership & Organization Development Journal*, 28(6), 492-507.
- Benet-Martinez, V., & John, O. P. (1998). Los Cinco Grandes across cultures and ethnic groups: Multitrait multimethod analyses of the Big Five in Spanish and English. *Journal of Personality and Social Psychology*, 75, 729-750.
- Goldberg, L. R. (1999). A broad-bandwidth, public domain, personality inventory measuring the lower-level facets of several five-factor models. In I. Mervielde, I. Deary, F. De Fruyt, & F. Ostendorf (Eds.), *Personality Psychology in Europe*, Vol. 7 (pp. 7-28). Tilburg, The Netherlands: Tilburg University Press.
- Janschewitz, K. (2008). Taboo, emotionally valenced, and emotionally neutral word norms. *Behavior Research Methods*, 40(4), 1065-1074. doi:10.3758/BRM.40.4.1065
- Jay, T. & Janschewitz, K. (2012). The Science of Swearing. *The Observer*, Vol. 25 (pp. 5-6).
- Jay, T. (2009). The utility and ubiquity of taboo words. *Perspectives on Psychological Science*, 4(2), 153-161.
- Jay, T., King, K., & Duncan, T. (2006). Memories of punishment for cursing. *Springer Science & Business Media Inc.*, 55, 123- 133.
- John, O. P., Donahue, E. M., & Kentle, R. L. (1991). The Big Five Inventory--Versions 4a and 54. Berkeley, CA: University of California, Berkeley, Institute of Personality and Social Research.

- John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative big-five trait taxonomy: history, measurement, and conceptual issues. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 114-158). New York, NY: Guilford Press.
- Kaye, B. K., & Sapolsky, B. S. (2009). Taboo or not taboo? That is the question: Offensive language on prime time broadcast and cable programming. *Journal of Broadcasting & Electronic Media*, 53(1), 22-37.
- Kline, R.B. (2005). *Principles and Practice of Structural Equation Modeling*. NY: The Guildford Press.
- McCroskey, J. (1984). Self-report measurement. In J. A. Daly and J. C. McCroskey (Eds.) *Avoiding communication: Shyness, reticence, and communication apprehension*. Beverly Hills, CA: Sage Publications.
- Patrick, G. W. (1901). The psychology of profanity. *Psychological Review*, 8(2), 113-127.
- Robbins, M. L., Focella, E. S., Kasle, S., López, A., Weihs, K. L., & Mehl, M. R. (2011). Naturalistically observed swearing, emotional support, and depressive symptoms in women coping with illness. *Health Psychology*, 30(6), 789-792.
- Siperstein, G. N., Pociask, S. E., & Collins, M. A. (2010). Sticks, stones, and stigma: A study of students' use of the derogatory term 'retard.' *Intellectual And Developmental Disabilities*, 48(2), 126-134.
- Stephens, R., & Umland, C. (2011). Swearing as a response to pain—effect of daily swearing frequency. *The Journal of Pain*, 12(12), 1274-1281. doi:10.1016/j.jpain.2011.09.004

Whiteside, S. P., & Lynam, D. R. (2001). The Five Factor Model and impulsivity: Using a structural model of personality to understand impulsivity. *Personality and Individual Differences, 30*(4), 669-689.