

# [Relationships between psychopathy and impulsivity among psychology students](https://assignbuster.com/relationships-between-psychopathy-and-impulsivity-among-psychology-students/)

Over the past 50 or so years, the concept of psychopathy has been a commonly misconceived term. Societal views on this disorder have been heavily influenced through portrayals of psychopaths in a variety of books, films and new articles. Popular films such as Silence of The Lambs and American Psycho have helped feed this misconception. The term psychopath conjures up images of violent serial killers such as Ted Bundy and Hannibal Lecter, and a large proportion of the population falsely believe these individuals to be the only accurate portrayals of psychopaths (Bartol, 1999). The fact of the matter is though, this common perception is a myth, most psychopaths aren’t in fact serial killers. While it is true that a few serial killers possess psychopathic traits, it is certainly not true that all psychopaths are violent people. It is only a small number that ever turn violent and an even smaller few that ever reach the violence exhibited by a serial killer (Lilienfeld & Arkowitz, 2007).

Because of the complex nature of psychopathy, there is no easy way to define it. According to one such view (Hart & Dempster, 1997), psychopathy is a specific form of personality disorder with a distinctive set of social, affective, and behavioural traits. Socially, psychopaths are conventionally grandiose, arrogant, superficial and manipulative. Affectively, they are short tempered, unable to form close bonds with others, and lacking in guilt, remorse and anxiety. Behaviourally, they are irresponsible and impulsive. As is the case with most personality disorders, psychopathy is said to have an early childhood onset and goes on to develop and persist well into adulthood. At the present time, there is no known effective treatment for it (Hart et al. 1997).

There are two subtypes of psychopathy – primary and secondary. According to Karpman (1948), primary psychopaths hold the traits of being callous, manipulative, fearless, selfish, and presumably only engage in such conduct because they have little care of others. Secondary psychopaths on the other hand, are impulsive and experience considerable anger, distress and anxiety. They usually only engage in antisocial behaviour as a reaction to emotional stress, which is sometimes referred to as being “ crimes of passion” (Sellbom, Ben-Porath, Lilienfeld, Patrick, & Graham, 2005). This therefore leads to psychopaths – particularly secondary ones- being identified as having extreme impulsivity (Levenson et al., 1995).

As a result of disagreements in literature, there are varying interpretations on how to define impulsivity. Moeller, Barratt, Dougherty, Schmitz & Swann (2001) break it down into three possible definitions. Firstly, acting swiftly without forethought or conscious judgement. Secondly, behaviour without adequate thought. And thirdly, acting with less forethought or conscious judgment than most individuals would do with similar ability and knowledge (Moeller et al., 2001, p. 1784). All these definitions hold true and so impulsivity can be seen as a combination of all of them. Further, impulsivity can be separated into three main components – Motor attraction, attention and lack of planning (Moeller et al., 2001).

In order to measure our two variables – impulsivity and psychopathy – we will be using two self-report scales which have been well developed and researhed. Because of the nature of this research, it is more practicle to allow particupants to self evaluate through a questionaire instead of interviewing each participant individually. The Barratt Impulsivity Scale (BIS) will be used as a measure of impulsivity among our participants. Initally developed in 1959 by Ernest Barratt, the BIS is a 30 item self-report tool used to assess the personality and behavioural construct of impuslivity (Patton, Barratt, & Stanford, 1995). The original version was developed as part of a larger attempt to relate anxiety and impulsivenss to psychomotor efficeincy (Barratt, 1959). A later review of impulsive items revealed that impulsivness was a much more complex construct than first thought, and so Barratt reconstructed the scale to measure three subtraits. He labelled these subtraits cognitive impulsiveness, motor impulsiveness and nonplanning impulsiveness (Patton et al., 1995).

The second scale to be used is the Levenson Self-Report Psychopathy Scale (LSRPS; Levenson et al., 1995). Developed by Levenson et al., the 30 item scale was designed to assess the two forms of psychopathy recognised in literature and their relationships with prosocial and antisocial behaviours. The psychopathy assessment items were designed in such a way to produce similar results to the Hare Psychopathy Checklist (PCL-R; Harpur, Hare & Hakstian et al., 1989, cited in Levenson et al., 1995), a very effective scale designed for the identification of psychopaths on the basis of accrued information and clinical interviews. Within the 30 items of the LSRPS, a proportion is broken down into identifying the two subtypes of psychopathy. The primary psychopathy items were created to assess a selfish, uncaring, and manipulative attitude towards others, whilst the secondary psychopathy items were designed to assess impulsivity and self-destructive lifestyle choice. These items were phrased in such a way so as to not influence the response of the participant, e. g. “ I quickly lose interest in tasks I start” (Levenson et al., 1995).

Although unarguably important, the conceptual association between impulsive behaviour and psychopathy has proven to be naively simplified, especially when dealing with antisocial and aggressive behaviour. People without knowledge in the field frequently and naively assume that there is a simple and direct link between psychopathy and criminal behaviour. The extreme view of this is that all psychopaths commit crimes, and that anyone who consistently engages in antisocial behaviour must in fact be a psychopath. This is most definitely not the case (Berrios, Hart, & Hare, 1996, cited in Hart et al., 1997, p. 219).

The aim of this study is to investigate the relationship between psychopathy and impulsivity. Psychopathy will be broken down into its primary and secondary variations so as to compare and contrast the correlations (Karpman, 1948). A number of past studies have looked into and examined the relationship between psychopathy and various other human attributes, and there has been a general consensus in finding positive relationships. For example, Herpetz et al. (2001) conducted a study to investigate the relationship between psychopaths, patients with Borderline Personality Disorder (BPD), and responsiveness to both pleasant and unpleasant stimuli. Included in the study were twenty-five psychopaths as defined by the PCL-R, 18 subjects with BPD, as well as 24 control subjects. Using Electrodermal response as a measure of responsiveness, Herpetz et al. found that psychopaths were a lot less responsive to both the pleasant and unpleasant stimuli, with a high percentage showing no startle reflex at all. Subjects with BPD on the other hand, showed normal levels of responsiveness, which was close to that of the controls. This therefore indicated that there was a positive relationship between psychopathy and fearlessness. The psychopath participants showed little reaction to the stimuli and so were unfazed by what they saw; they showed no sign of fear in a situation where a reasonable human being instinctively would (Herpetz et al., 2001).

123456This distinct fact of lack of fear could be interpreted to be linked to impulsivity. If a psychopath acts without thinking, then they are likely to have very little fear of what they are doing, of getting caught, and of the moral implications of their actions. Therefore if there is a positive relationship between lack of fear and psychopathy, then there is also likely to be a positive correlation between impulsivity and psychopathy. This being said, psychopathy and impulsivity are both multi-faced constructs, and theory suggests that there would be differences in the relationships between the primary and secondary variants of psychopathy (Ray, Poythress, Weir, & Rickelm, 2009).

Another relevant study has been done by Levenson et al. (1995) using a sample of 487 university students. This study developed the LSRPS in order to assess the correlations of both primary and secondary psychopathy with various psychopathic attributes. These attributes included Stress reaction, harm avoidance, disinhibition, boredom susceptibility, experience seeking, thrill and adventure seeking and antisocial action. Of importance to our study are the correlations with stress reaction. Levenson et al. (1995) found there to be a positive but weak correlation between primary psychopathy and stress reaction (with a correlation value of . 09), and a much stronger moderate correlation between secondary psychopathy and stress reaction (with a correlation value of . 41). Having strong negative reactions to stress will generally lead to impulsive behaviour by the individual as they are placed under emotional distress (Levenson et al., 1995). This link between stress reaction and impulsive behaviour is important because it means we are able to relate the findings to our study. We would consequently expect to find a similar relationship in our study between psychopathy and impulsivity.

There therefore seems to be sufficient evidence to suggest that impulsive behaviour is related to both primary and secondary psychopathy. The purpose of this investigation is to replicate previous studies such as Levenson et al.’s (1995) and investigate whether or not this statement is true. Based on these past findings, it is expected that there will positive correlation between impulsivity (measured with the 30-item Barratt Impulsivity Scale (BIS)) and both primary and secondary psychopathy (measured using the 26-item Levenson’s Self-Report Scale (LSRPS)). It is also expected that there to be a substantially stronger relationship with secondary psychopathy, i. e. a moderate correlation between secondary psychopathy and impulsivity and a weak correlation between primary psychopathy and impulsivity.

Method

## Design

A correlational design was used, with the target variables being impulsivity, primary psychopathy and secondary psychopathy. These variables were measured with the Barratt Impulsivity Scale (Patton et al., 1995) and the Levenson Self-Report Psychopathy Scale (Levenson et al., 1995).

## Participants

Participants were 210 first year psychology students at Victoria University of Wellington. For taking part they received one hour worth of credit towards their research participation course requirement. The participants were made up of 148 females and 62 males. Ethics approval was granted by the university ethics committee prior to commencing the research and all participants signed a written consent form.

## Materials/Apparatus

The Barratt Impulsivity Scale (Patton et al., 1995) and Levenson’s Self-Report Psychopathy scale (Levenson et al., 1995) were administered to participants via a computer based online survey. The Barratt Impulsivity Scale is a 30-item scale which asks people how frequently (rarely/never, occasionally, often, almost always/always) they do or think a range of things. An example of one of the statements is “ I buy things on impulse”. The instructions given to the participants were as follows: “ People differ in the ways they act and think in different situations. This is a test to measure some of the ways in which you act and think. Read each statement and select the appropriate option on the right side of this page. Do not spend too much time on any statement. Answer quickly and honestly.” Once the results were collected, participants were given an impulsivity score ranging from 1 (low impulsivity) to 4 (high impulsivity), calculated from the average of all the impulsivity items.

The Levenson Self-Report Psychopathy scale (LSRPS) is a 26-item scale which asked participants the extent to which certain statements were true to them. A 7 point likert scale was used, ranging from 1 (not true), to 7 (very true). Two scores were then calculated by averaging the scale items that measured the two variants of psychopathy – secondary and primary. (The 26 items consisted of 16 primary related statements and 10 secondary). The scores therefore ranged from 1 to 7, with 7 showing high levels of psychopathic traits. The instructions given to the participants were as follows: “ Below is a set of statements that could be used to describe you. Please read each one carefully, and select the option which represents the extent to which these statements are true for you. Like opinions, some of these statements may seem contradictory – this is not a trick – it’s the way the world is. There are no trick questions or right or wrong answers – just give your opinion”.

## Procedure

Participants were informed of the opportunity to complete the survey during their first two hour Psychology laboratory. They were given the incentive of receiving one hour worth of research credit towards which they need for their PSYC121 course requirements. There were around 16 participants in this particular room. During the second half of the laboratory (with all participants seated at individual workstations/computers), the tutor in charge gave the participants clear instructions on how to access the online survey and then gave them a very brief explanation on what to do. The participants were then required to read through the ethics form and then give their consent to doing the survey. Once everyone had given their consent, the participants all had one hour to complete the survey. Individual participants then finished at their own pace and were debriefed on their way out.

## Results

Means and standard deviations for the Barratt Impulsivity Scale (BIS) (Patton et al., 1995) were calculated and showed an overall moderate score (M= 2. 24, SD= 0. 33), indicating an overall moderate impulsivity level. Means and standard deviations for the Levenson Self-Report Psychopathy Scale (LSRPS) (Levenson et al., 1995) were also calculated for both the primary and secondary variations of psychopathy. Primary psychopathy showed an overall low score (M= 2. 58, SD= 0. 87), indicating low levels of primary psychopathy traits. Secondary psychopathy also showed a similar – although slightly higher – score (M= 3. 12, SD= 0. 84), indicating an overall low level of secondary psychopathy traits.

Correlation coefficients were computed between the scores of the BIS and the primary and secondary scores of the LSRPS. A significant positive correlation was found between impulsivity and primary psychopathy (r(208)=. 180, p=. 009), indicating a weak relationship. A significant positive correlation was also found between impulsivity and secondary psychopathy (r(208)=. 526, p <. 001), indicating a moderate relationship. Scores on both variations of psychopathy indicate increased BIS scores tends to show an increased LSRPS score. It was hypothesised that there would be a weak positive correlation between primary psychopathy and impulsivity. This is supported with the correlation value . 180. We also hypothesised there to be a moderate positive correlation between secondary psychopathy and impulsivity. Again, this was supported by our results with the correlation value of . 526. Therefore both of our hypotheses are supported.

## Discussion

This investigation was designed to examine the correlation between impulsivity and both the primary and secondary variations of psychopathy. The Barratt Impulsivity scale (BIS; Patton et al., 1995) and the Levenson Self-Report Psychopathy scale (LSRPS; Levenson et al., 1995) were used in processing the results of the sample of 210 first-year psychology students. It was found that the results did in fact support both of our initial hypotheses. On the basis of Hart et al. (1997) and other supporting literature, it was expected that there would be a weak positive correlation between impulsivity and primary psychopathy. There was also expected to be a moderate positive correlation between impulsivity and secondary psychopathy. Both of these expectations were met with the calculated results. These findings therefore support the theory that impulsivity is a contributing aspect of psychopathy.

From the data gathered it could be inferred that the greater the level of impulsiveness, the greater the level of psychopathy in the individual. However as evidenced through the inferential statistics, this positive relationship is much more evident with secondary psychopathy. Whilst both are significant correlations, there is a substantial difference between the two. The correlation between primary psychopathy and impulsivity is a fairly weak one at 0. 180, whilst secondary psychopathy has a substantially stronger correlation at 0. 526. Through these results we can clearly see that these two subtypes are in fact distinct from one another. This supports the literature of Levenson et al. (1995), in which it was stated that “ secondary psychopaths… are impulsive… and usually engage in antisocial behaviour as a reaction to emotional stress.”

Herpetz et al. (2001) study found that among an institutionalised population of psychopaths, individuals were a lot less responsive to both negative and positive stimuli when being compared with a control group. They were characterised by decreased electrodermal responsiveness, less facial expression, and the absence of startle reflexes. The lack of startle reflex in more than a third of the psychopaths underlined the significance of fearlessness in psychopathy. This supports the theory that psychopaths are characterised by a pronounced lack of fear towards aggressive and frightening events which normal people would have a strong reaction too (Herpetz et al., 2001). This lack of fear can be linked through to impulsivity. If a person has no fear, then they won’t bother thinking about the consequences of their actions, for they do not fear them. They are likely to act impulsively on the spur of the moment as they have no distress over what may happen in the future. Therefore in this sense, our findings using first-year psychology students have yielded similar conclusive results. We have found that impulsivity is most likely to be a big factor of psychopathy, much the same as Herpetz et al. (2001) found a similar link with fearlessness. There are however, some small yet significant differences between the two studies. Herpetz et al. (2001) investigation – which also used the BIS to measure impulsivity – had a mean BIS score of 2. 9328, which is comparable to our mean of 2. 2387. This difference is explainable as his study was based on an institutionalised population. The participants in our sample would have also been a lot younger, with the institutionalised sample having a mean age of 33. 8 years; this could have had an influence on the results. Nevertheless, our findings support those of Herpetz et al. to a significant extent, and so his findings can be used confidently to help explain and support our results.

In comparing our study with past research, we have found that most of the available literature is based on samples from institutionalised populations. One could therefore expect there to be variations in the results of our study using a noninstitutionalized population of New Zealand university students. One example of research done using a noninstitutionalized population is the American study done by Levenson et al. (1955). Using similar methods to our own, Levenson et al. took a sample from the University of California involving 487 university students. The results found that primary psychopathy had a fairly high score of (M= 29. 13, SD= 6. 86), and that secondary psychopathy had a substantially lower score of (M= 19. 32, SD= 4. 06). It was found that there was a 0. 41 correlation between stress reaction and secondary psychopathy, whilst only a 0. 09 correlation with primary psychopath. This is a similar result to ours, and is significant to our study because although we measured impulsivity instead of stress reaction, there is a definite link between the two behaviours. One of the defining features of secondary psychopathy is that it is usually only triggered by emotionally stressful events. This negative stress reaction leads to highly impulsive behaviour by the individual, and thus serves as a link between the two terms (Levenson et al., 1995). Consequently, Levenson et al.’s findings help support our findings and attempt to help explain why we got the results we did.

The fact that impulsivity has been found to be a valid indicator of psychopathy (particularly secondary) illustrates that this can be used as an invaluable link in continuing to develop a better understanding of this disorder. It can help to distinguish people within our society who may show traits of being a psychopath, and in effect offer them the applicable help before it develops. An application of this study would be to survey a wide range of younger generations with a simple yet effective impulsivity test like the one used in this study. Using the BIS as a measurement, those participants who scored highly could then go on to take a further survey based on psychopathy using the LSRPS. Based on this, those who score highly could then be offered help so as they don’t develop these negative characteristics further on in life. With this in mind, perhaps a greater amount of people will be able to receive aid earlier on in life, and thus be able to live a more emotionally fulfilling life later on.

A limitation of this study is that there has been no consideration of age or sex in the analysis of the data. This data is exclusively based on the results of first-year university students, who tend to be in their late teens and early twenties. In previous research such as Herpetz et al. (2001), the mean age of participants was a lot older at 33. 8 years and was based solely on males. There may be differences between ages and sexes which are worth investigating. For example, Steinberg et al. (2008) conducted a study investigating the relationship between age and impulsivity. It was found that by using self-report scales like the BIS, that there was a linear decrease in BIS scores (and thus impulsivity) after the age of 10. This was explained in that we gain greater control over our impulses as we grow as older. Therefore, the younger you are, the more impulsive you are likely to be. This does not necessarily mean however, that there is a higher chance of being psychopathic.

Other limitations of this study are that the sample is not necessarily representative of the whole population. Firstly, the sample consisted of 148 females and 62 males. This is not a very good representation of the general population given that Statistics New Zealand reported a 1. 05 male to female sex ratio in 2006 (Statistics New Zealand, 2006). Secondly, a sample of university students does not represent the rest of the population. Most university students are likely to be well educated and come from a reasonable socio-economic background. In reality, this will not hold for the rest of the general population. The result of this is that our results could possibly have a sampling error; therefore the conclusions we have drawn may not be able to be applied to the whole population effectively. Despite this, our findings are still significant.

Future study in this area could further analyse the differences between genders. This could help to establish whether impulsiveness is in any way related to gender, and if so, why? Examining the gender split would also help to bring forward any differences in the relationship between impulsivity and psychopathy in men and woman. A future study could also apply the findings of this research to go on and investigate the relationship of impulsivity with another closely related antisocial personality disorder like sociopathy. This would enable a critical analysis to be made comparing and contrasting psychopathy and sociopathy.

This research aimed to investigate the correlation between psychopathy and impulsiveness. It was found that our initial hypotheses were in fact supported by our results. The hypotheses inferred that there was a positive relationship between the two variables. It also established that there was a difference in the relationships with regards to the primary and secondary variations of psychopathy; secondary psychopathy had a stronger relationship with impulsivity than primary psychopathy did. Although more research may be needed to be done in this area in order to verify these findings, it can be generally accepted that impulsive behaviour is a suitable indicator of psychopathy. There is therefore a justification for further research to be done in this area. This will lead to a better understanding of the complex nature of psychopathy and hopefully develop ways of dealing with it.