



Explicit and Implicit Attitude Tests Examining Attitude Towards Obese People Among Undergraduate Psychology Students

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Foreword

Submitted in partial fulfilment of the requirements of the BSc Psychology degree, Reykjavik University, this thesis is presented in the style of an article for submission to a peer-reviewed journal.

Abstract – English

Studies examining attitudes towards obese people have mainly focused on conscious or explicit attitudes which may be biased by social desirability. Therefore, the present study examined both explicit and implicit, that are considered to be unconscious, attitudes towards obese individuals. A sample of 46 undergraduate psychology students participated in the study. The results showed that there is a negative bias towards obese individuals with 73% participants demonstrating strong, moderate or slight implicit bias of which 33% showed strong bias. There was a small, but significant correlation between implicit and explicit measures of attitudes. As hypothesized social desirability was associated with explicit attitudes but counter to hypothesis social desirability was also associated with implicit attitudes. Lastly, women and younger participants had more negative explicit attitudes but no difference was found on implicit attitudes. The findings demonstrate that there is a negative bias towards obese individuals as assessed with both implicit and explicit attitude measures. As these negative biases can severely affect quality of life among obese individuals educational interventions are needed to address and correct these anti-fat biases.

Keywords: implicit, explicit, obesity, attitude, socially desirable responding.

Abstract – Icelandic

Rannsóknir sem skoðað hafa viðhorf til offeitra einstaklinga hafa aðallega sett áherslu á bein (e. *explicit*), meðvituð, viðhorf sem geta verið fyrir áhrifum af félagslega æskilegri svörun. Þar af leiðandi skoðaði þessi rannsókn bæði bein og óbein (e. *implicit*) viðhorf, sem eru talin vera ómeðvituð, til offeitra einstaklinga. Þátttakendur voru 46 sálfræðinemendur í grunnnámi við Háskólann í Reykjavík. Eins og sett var fram í tilgátu þá voru tengsl á milli félagslega æskilegrar svörunar og beinna viðhorfa, en þvert á móti við aðra tilgátuna þá voru einnig tengsl á milli félagslega æskilegrar svörunar og óbeinna viðhorfa. Síðast en ekki síst, konur og yngri þátttakendur höfðu neikvæðari bein viðhorf en sama er ekki hægt að segja um óbein viðhorf. Niðurstöður gáfu í skyn neikvæð viðhorf til offeitra einstaklinga, sem mæld voru með beinum og óbeinum mælingum. Vegna þess að þessi neikvæðu viðhorf geta haft mikil áhrif á lífsgæði offeitra einstaklinga er þörf á menntunar inngripum til þess að undirstrika og leiðrétta þessi neikvæðu viðhorf.

Explicit and Implicit Attitude Tests Examining Attitude Towards Obese People Among Undergraduate Psychology Students

Overweight individuals are faced with ubiquitous anti-fat bias which contributes to the fact that prejudice, negative stereotyping and discrimination exists among the general public (R. M. Puhl & Heuer, 2009). Weight bias are the false beliefs that all overweight or obese individuals share the same personality characteristics that are stereotyped, for instance the idea that obese individuals are lazy (R. Puhl & Brownell, 2001). This can affect the emotional and psychological well-being of overweight individuals and can result in reduced self-esteem, negative body image, anxiety, and depression (Grilo, Wilfley, Brownell, & Rodin, 1994; Haines, Neumark-Sztainer, Wall, & Story, 2007; Hayran, Akan, Özkan, & Kocaoglu, 2013). Experiencing weight bias might impact peoples beliefs and views of themselves and can even contribute to unhealthy eating, therefore enhancing overweight and obesity (Major, Hunger, Bunyan, & Miller, 2014; Schvey, Puhl, & Brownell, 2011). This is a rising problem worldwide due to the fact that obesity has more than doubled universally since 1890 (“WHO | Obesity and overweight,” n.d.). Weight bias is widespread and studies have shown that it is common in public places, employment settings, schools, healthcare settings, and even the media promotes weight bias (R. Puhl & Brownell, 2001; Wise, Harris, & Olver, 2014). For instance, television programs frequently ridicule overweight individuals and characterize them as being underemployed, greedy and lazy (Greenberg, Eastin, Hofschire, Lachlan, & Brownell, 2003). A study by Brewis and Wutich (2012) examined the difference in views towards obesity between US undergraduates and Paraguayans. US undergraduates are more exposed to media and for that reason they experience more anti-fat bias. This study examined participants willingness to make trade-offs against

obesity and results showed that U.S. undergraduates were willing to make very serious trade-offs to avoid being obese. The appalling results from this study indicated that twenty-two percent of US undergraduates would be willing to be severely depressed rather than to be obese and that 6.3% would be willing to be blind to avoid being obese. Paraguayans were less willing for trade-offs regarding obesity and said they were only willing to be divorced. Due to these facts, researchers have been interested in assessing stigmatizing attitudes towards obese individuals (Brochu, Pearl, Puhl, & Brownell, 2014; Pearl, Puhl, & Brownell, 2012).

A study by Tomiyama et al. (2015) showed that people that attended ObesityWeek 2013 in Atlanta, Georgia reported stronger general bad feeling towards fat people than thin people. They also described fat people as significantly more lazy, stupid and worthless compared to thin people. This is in consonance with other studies reporting that people consider obese people to be lazy and to lack willpower (Rukavina, Li, Shen, & Sun, 2010). Studies examining attitude towards obese people have in fact shown that people do hold relatively negative attitude towards obese people and have high levels of fat phobias (Soto, Lilia Armendariz-Anguiano, Bacardi-Gascon, & Jimenez Cruz, 2014). However, most of these studies only assessed explicit attitudes. Explicit attitudes are conscious evaluations that are commonly measured by self-reporting rating scales (Teachman, Gapinski, Brownell, Rawlins, & Jeyaram, 2003a). They are considered to be under high social control and are susceptible to cognitive distortions, such as social conformity (Schneider & Shiffrin, 1977). When applying a questionnaire, researchers trust that participants are responding in a truthful way even though participants may be answering in a self-deceived way or be faking their responses to conform to social acceptance (Huang,

Liao, & Sue-Hwang Chang, 1998). Given these problems in assessing explicit attitudes, investigators have increasingly focused on implicit attitudes.

Implicit attitudes are automatically stimulated responses to environmental stimuli which use less cognitive ability than explicit attitudes (Gawronski & Bodenhausen, 2006). They are more unconscious and more stable than explicit attitudes (Strack & Deutsch, 2004). Implicit measures have been considered to measure automatic attitudes that may occur unconsciously and are therefore less susceptible to socially desirable responding than explicit measures (Gawronski, Lebel, & Peters, 2007; Phelan et al., 2014). A relatively new and well accepted way to measure implicit bias is by using timed reaction time tests, such as the implicit association test (Greenwald, McGhee, & Schwartz, 1998). Many studies have shown that there is little or no association among implicit and explicit attitudes and implicit measures have been shown to produce higher levels of bias than explicit measures (Greenwald & Banaji, 1995; Hofmann, Gawronski, Gschwendner, Le, & Schmitt, 2005; Robertson & Vohora, 2008; Rudman, Ashmore, & Gary, 2001; Rukavina et al., 2010). However, most studies have focused on implicit and explicit attitudes towards sensitive minorities, for instance towards disabled people, and therefore little is known about the pervasiveness of implicit anti-fat biases or about the relations between implicit and explicit anti-fat attitudes (Teachman, Gapinski, Brownell, Rawlins, & Jeyaram, 2003). The few studies that have examined implicit and explicit weight bias have suggested that explicit anti-fat bias is relatively strong due to the fact that obesity is considered to be the persons own fault and that the individual should be able to prevent being obese (Teachman et al., 2003). Therefore, in contrast to studies examining the relationship among explicit and implicit bias in sensitive minority subjects, studies comparing explicit and implicit attitudes towards obese people have

shown that these two constructs do correlate, even though the correlation is small (Phelan et al., 2014).

Interestingly, it has been shown that increasing individuals awareness of their inconsistency between explicit and implicit attitudes may be an effective way of reducing stigma (Monteith, 1993). Thence, the examination of these two construct of attitudes towards obese individuals is important to promote well-being of people that are overweight by observing potential predictors.

Like elsewhere in the Western world, obesity is increasing in Iceland, but to-date no study has examined both implicit and explicit attitudes towards obese people among Icelanders. Therefore, the primary aim of the study was to examine and compare implicit and explicit attitudes towards obese people among Icelandic students. It was hypothesized that: 1) Icelandic psychology students will have a negative bias towards obese people, as assessed with implicit and explicit attitude tests; 2) That the correlation between implicit and explicit tests will be small or nonsignificant. Secondary aims were to examine if social desirability, gender and age contributed to the variability in these attitude measures. As mentioned above, social desirability has been found to affect responses to explicit attitude measures but should have no or small impact on responses to implicit attitude measures (Gawronski et al., 2007; Phelan et al., 2014; Schneider & Shiffrin, 1977). Studies have shown that women obtain more weight-bias than men, for the reason that they are more concerned with their weight than men (Rosen & Gross, 1987; Tiggemann & Rothblum, 1988). No studies have examined if age is predictive for implicit and explicit weight-bias, and for these reasons gender and age were the two other predictive variables that were investigated along with socially desirable responding.

Method

Participants

Participants were 46 undergraduate psychology students attending Reykjavík University, Iceland, in the spring of 2015. The total sample consisted of six men and forty women ranging in age from 19 to 37 ($M = 23.17$, $SD = 3.5$). Majority of participants were first or second-year students ($N = 44$), while two participants were third-year students.

Measures

Explicit attitude was assessed with the Attitude Toward Obese Persons scale (ATOP) (David B. Allison Ph. D, 2006), which was translated into Icelandic by the researchers. The scale measures people's stereotypical attitudes toward obese individuals and consists of 20 statements, such as "Obese people are as happy as non-obese people". Participants were asked to rate the statements from -3 to +3 regarding their level of agreement (+3) or disagreement (-3). High total score on the ATOP scale represents a positive attitude towards obese persons. Internal reliability of the scale was good, $\alpha = .84$.

Socially desirable responds were assessed by an Icelandic translation of the shortened Marlowe-Crowne Social Desirability Scale (MCSD), where respondents answer 13 true or false questions such as "There have been times when I was quite jealous of the good fortune of others" (Reynolds, 1982). High score on MCSD indicates concerns regarding, or need, for social approval. Internal reliability of the scale was acceptable, $\alpha = .66$.

Implicit Association Test (IAT), available on implicit.harvard.edu, was used to assess individuals' implicit attitudes, which are unconscious beliefs and perceptions that people have ("Project implicit social attitudes," 2011). The Weight Attitude

Implicit Association Test (WA-IAT) was used to assess implicit attitudes towards obese individuals. The computerized version of the IAT was used where participants categorize stimulus, that can be either words or pictures, in two different categories that appear on each upper corner of the computer. To begin with, there are only two words in each corner of the computer and test takers sort pictures in the categories. In the WA-IAT the words on the corner are 'fat' and 'thin' and participants sort stimulus, that are pictures of either fat or thin persons, in these categories. This is the first trial. If an error is made, the participant is required to fix the error by sorting the picture into the right category. In the next trial words appear on the middle of the screen, where the pictures were before, and participants are asked to rate the word as 'positive' or 'negative'. After that, the categories change to 'fat and bad words' and 'thin and good words'. Then the categories change so that 'fat and good words' are grouped together and 'thin and bad words' are grouped together. The test taker only uses two keys on the keyboard to group the stimulus in the categories, the key 'e' for the left category and 'i' for the right one. Participants should categorize the words as fast as they can and then reaction time is calculated for all of the trials and average mean between 'fat and bad words' and 'thin and good words' and vice versa is calculated and the resulting is referred to as the IAT effect. The larger the IAT effect the more biased the test taker is against fat people. On the Harvard University website, where the test was taken, the results ranged from 'strong automatic preference for thin people compared to fat people' to 'strong automatic preference for fat people compared to thin people'.

As a part of another study participants also completed the Attitudes Toward Disabled Person scale, Anti-Fat Attitudes Scale and the Disability Implicit Association.

Procedure

Two courses, in the undergraduate psychology department at Reykjavik University, offered students' course credits for participating in third year students' BSc thesis studies. An e-mail was sent to the students where the study was described and interested participants were asked to reply to the e-mail. Interested students received a confirmation e-mail with the location of the study and a link to a document where they could select a time-slot most suitable for them. Two participants could register at the same time and each session was about one hour. The study was almost invariably conducted in a research lab where with minimum external disturbance, however sometimes it was conducted in a classroom due to other studies being conducted at the same time.

To begin with the participants came in and sat down at a table. The study was explained and participants received a two-digit number, which they entered when answering the questionnaires to ensure their anonymity. Participants also received a consent form (see appendix A) which included description of the study and their right to withdraw from the study at any time without having to explain why. After they had read and signed the consent, one of the two researchers drew a ticket that indicated whether participants should start with the implicit or explicit attitude test. The implicit Association Test (IAT) was administered on the computer. First participants read detailed information about the task in English, after which they started the task. Researchers asked participants to raise their hand once they had completed the test and participants then completed the explicit attitude tests on the computer and answered some background questions as well. After they had completed the questions they were thanked for their participation.

Statistical Analysis

The data was collected via the online survey program *SurveyMonkey* (Survey Monkey, n.d.) and SPSS was used for data processing. The relationship between the explicit and implicit measures were examined with Pearson product-moment correlation coefficient and to investigate the effect of socially desirable responding, age and gender an hierarchical multiple regression model was conducted.

Results

Descriptive and Correlational analysis

The mean, standard deviation and correlation for the attitude measures, social desirability and age are provided in Table 1. The mean of the implicit attitude, as measured by the Implicit Association test, indicates that participants had a moderate automatic preference for thin people compared to fat people which represents a bias against obese people.

An examination of correlations showed a significant relationship between implicit attitude and explicit attitude, indicating that more implicit bias was related to more negative explicit attitude. Interestingly, both implicit and explicit attitudes were significantly correlated with social desirability, which indicated that both implicit attitudes and explicit attitudes were susceptible to social desirability.

The correlation between explicit attitude and age was significant and indicated that older participants held more positive explicit attitude than younger participants.

Table 1

Means, Standard Deviations, and Intercorrelations for Implicit, Explicit Measures

Variable	Mean	SD	1	2	3	4	5
(1) Implicit Attitude	2.42	1.28					
(2) Explicit Attitude	72.30	18.46	.366*				
(3) Social Desirability	5.74	2.18	.338*	.373*			
(4) Age	23.17	3.49	.007	.366*	.249		

*p<.05

**p<.01

Table 2 summarizes the percentage of participants agreeing and disagreeing with the statements on the explicit attitude measure. Both positive and negative attitudes were reported. It can be seen that majority, or 78.3% of the participants agreed that obese people are as happy as non-obese people while 67.4% agreed that they were more self-conscious, almost half agreed that severely obese people were ugly and 65.2% disagreed that obese people were as sexually attractive as non-obese people.

Table 2.

*Percentage of participants agreeing and disagreeing with statements on the Attitude**Towards Obese Person Scale*

	Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
Obese people are as happy as non-obese people.	8.7	4.3	8.7	34.8	32.6	10.9
Most obese people feel that they are not as good as other people.	32.6	17.4	8.7	26.1	15.2	0
Most obese people	17.4	4.3	10.9	37.0	26.1	4.3

are more self-conscious than other people.

Obese workers cannot be as successful as other workers.	45.7	15.2	13.0	17.4	4.3	4.3
Most non-obese people would not want to marry anyone who is obese.	17.4	19.6	6.5	28.3	26.1	2.2
Severely obese people are usually untidy.	28.3	15.2	10.9	21.7	19.6	4.3
Obese people are usually sociable.	4.3	2.2	19.6	26.1	45.7	2.2
Most obese people are not dissatisfied with themselves.	8.7	23.9	8.7	43.5	13.0	2.2
Obese people are just as self-confident as other people.	17.4	21.7	4.3	28.3	23.9	4.3
Most people feel uncomfortable when they associate with obese people.	39.1	10.9	15.2	21.7	6.5	6.5
Obese people are often less aggressive than non-obese people.	39.1	15.2	6.5	34.8	2.2	2.2
Most obese people have different personalities than non-obese people.	63.0	13.0	6.5	15.2	2.2	0.0
Very few obese people are ashamed of their weight.	26.1	26.1	15.2	30.4	2.2	0.0
Most obese people resent normal weight	41.3	32.6	4.3	19.6	2.2	0.0

people.

Obese people are more emotional than non-obese people.	39.1	26.1	8.7	19.6	6.5	0.0
Obese people should not expect to lead normal lives.	50.0	17.4	6.5	13.0	13.0	0.0
Obese people are just as healthy as non-obese people.	32.6	32.6	8.7	13.0	10.9	2.2
Obese people are just as sexually attractive as non-obese people.	32.6	21.7	10.9	19.6	13.0	2.2
Obese people tend to have family problems.	32.6	17.4	10.9	26.1	10.9	2.2
One of the worst things that could happen to a person would be for him to become obese.	50.0	21.7	10.9	17.4	0.0	0.0

The results for implicit attitudes are shown in Figure 1. Strong, moderate or slight implicit bias was demonstrated by little over 73% of the participant, with 33% showing strong bias. Around 30% showed no bias regarding either fat people or thin people and a little over 4% showed pro-fat bias.

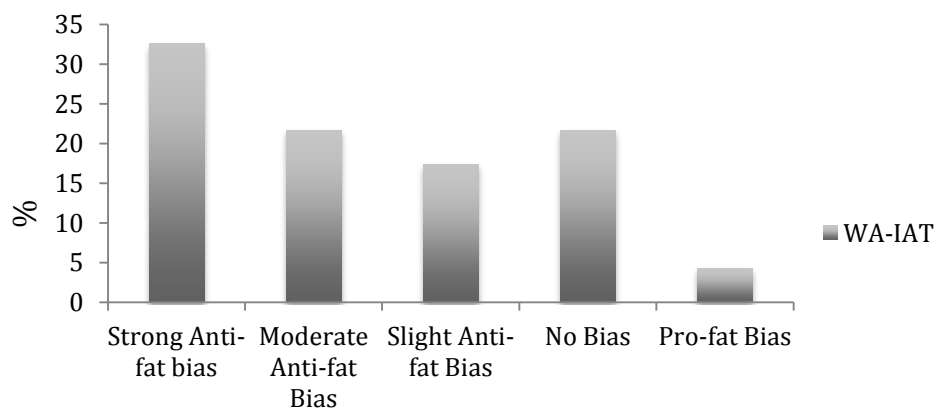


Figure 1. Distribution of implicit weight bias among participants

Predictors of Implicit and Explicit attitudes

Two hierarchical regression models were calculated to examine to what extent age, gender and social desirability contributed to the variance in explicit and implicit attitudes. As can be seen in table 3, the overall model for explicit attitude, inclusive of age, gender and social desirability, explained almost 28% of the variance in explicit attitude ($\Delta R^2 = .27.8$). This model was a significant predictor for explicit attitude, $F(3, 42) = 5.382, p < .01$. Social desirability alone explained 13.9% of the variance in the model, which was significant, $R^2 = .14, F(1, 44) = 7.102, p < .05$. However, the addition of age and gender on step 2 accounted for an additional 14% of the variance in explicit attitude ($R^2\text{Change} = 13.9, p < .05$). Gender had the highest Beta-value ($\beta = .285, p < .05$), indicating that it had the most impact on the explicit measures, followed by social desirability.

Table 3. *Hierarchical regression analysis for explicit attitude, where social desirability, gender and age were included as predictors.*

	b	SE B	β	p
Step 1				
Constant	54.14	7.38		.000
Social Desirability	3.17	1.19	.373	.011
Step 2				
Constant	2.44	19.78		.903
Social Desirability	2.05	1.18	.241	.090
Gender	15.46	7.37	.285	.042
Age	1.25	.718	.238	.086

Note. $R^2 = .14$ for Step 1; $\Delta R^2 = .28$ for Step 2 ($ps < .05$)

As shown in Table 4 identical analysis was conducted for implicit attitude. The combined effects of age, gender and social desirability accounted for 13% of the total variance for implicit attitudes ($\Delta R^2 = .13$), however this was not significant, $F(3,$

41) = 2.068, $p=.12$. When looked at social desirability alone, it accounted for 11% of the total variance in implicit attitude and was a significant predictor of implicit attitude, $F(1, 43) = 5.530$, $p<.05$. The addition of age and gender explained an extra 1.7% of the variance in implicit attitudes ($R^2\text{Change} = .017$). Social desirability had the highest Beta-value of the three variables observed, $\beta=.332$, $p<.05$.

Table 4. *Hierarchical regression analysis for implicit attitude, where social desirability, gender and age were used as predictors.*

	b	SE B	β	p
Step 1				
Constant	1.28	.52		.019
Social Desirability	.20	.09	.338	.023
Step 2				
Constant	1.29	1.53		.403
Social Desirability	.20	.091	.332	.037
Gender	.413	.571	.109	.473
Age	-.03	.056	-.091	.551

Note. $R^2 = .11$ for Step 1; $\Delta R^2 = .13$ for Step 2 ($ps=.665$)

Discussion

The primary aim of the study was to examine the relationship between implicit and explicit attitudes towards obese individuals as well as to explore if social desirability, age and gender contributed to the variability in implicit and explicit attitudes. The result indicated that Icelandic psychology undergraduate students, particularly women and younger people, show ant-fat bias as assessed with both implicit and explicit attitude tests. There was a modest correlation between implicit attitude and explicit attitude measures and social desirability affected responses to both attitude measures.

Unfortunately there are no norms available for the explicit attitude measures that would indicate the level of anti-fat bias in this sample. However, given that the mean was 72.3, where the highest positive attitude score on the scale is 120, one can assume that this reflects moderate anti-fat bias. Examination of the individual items showed that majority of the participants, or over 50%, considered obese people more self-conscious than others and that most non-obese people would not want to marry anyone who is obese. Also, almost half thought that severely obese individual were untidy. These findings suggest that there is a considerable negative attitudes towards obese individuals among Icelandic psychology students.

The results for implicit attitudes showed that participants had negative attitudes towards fat people with over 70% of the participants demonstrating anti-fat bias, which is consistent with a study by Phelan et al. (2014) that showed that 64% of medical students had an implicit anti-fat bias.

A small ($r=.37$) but significant correlation was found between the explicit and implicit attitude constructs, which is inconsistent with several studies that have shown that these measures do not correlate (Greenwald & Banaji, 1995; Hofmann et al., 2005; Robertson & Vohora, 2008; Rudman et al., 2001; Rukavina et al., 2010). However, these studies have all been examining the relationship among explicit and implicit bias in sensitive minority subjects but recent studies comparing explicit and implicit attitudes towards obese people have shown that these two constructs do correlate, even though the correlation is small (Phelan et al., 2014).

Consistent with hypothesis the results showed that social desirability was significantly correlated with explicit attitudes accounting for 14% of the variability in this measure. This finding is consistent with other studies that have shown that explicit attitudes are susceptible to socially desirable responding (Huang et al., 1998;

Schneider & Shiffrin, 1977). On the other hand, counter to hypothesis social desirability was also significantly correlated with implicit attitude and explained 11% of the total variance in implicit attitude. This is surprising as other studies that have shown that implicit attitude are not susceptible to social desirability (Gawronski et al., 2007; Phelan et al., 2014). However, studies have shown that if people are made aware of the inconsistency between their explicit and implicit attitude, it might contribute to reducing negative weight-bias (Monteith, 1993).

The present study is not without its limitations. First, the participants sample was quite small and limited to undergraduate psychology students, therefore the findings may not be generalizable to other populations. Also, there were only six male participants and one of the purpose was to examine if gender was related to implicit and explicit attitudes. Furthermore, the difference of the location of the study might have contributed to some bias. It would have been better if the study could always have been conducted in the same place.

One of the biggest strengths to this study was that it used both implicit and explicit tests to examine attitude towards obese individuals as well as controlling for social desirability. This allows comparison of these two constructs as well as detection of the difference between attitudes that are conscious and unconscious.

To further understanding of this topic, an interesting avenue for future research would be to examine predictions of social desirability on explicit and implicit attitudes towards obese individuals with a larger sample that is more representative of the general public.

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Appendix A

Participant Information Sheet (Icelandic version)

Upplýst samþykki fyrir þátttöku í vísindarannsókn

Titill rannsókna: Implicit And Explicit Attitude Tests Examining Attitude Towards Obese Individuals

Þér er boðið að taka þátt í þessari rannsókn. Áður en þú tekur ákvörðun er mikilvægt að þú skiljir hvers vegna þessi rannsókn verður framkvæmd og hvert er innihald hennar. Þetta upplýsingablað upplýsir þig um tilgang, áhættu og ávinning af rannsókninni. Ef þú ákveður að taka þátt verður þú beðin/n um að skrifa undir upplýst samþykki. Ef spurningar vakna varðandi rannsóknina þá væri okkur sönn ánægja að gefa þér frekari útskýringar. Þér er velkomið að taka þér eins mikinn tíma og þú þarft til þess að lesa þessar upplýsingar. Þú ættir aðeins að samþykkja þátttöku þegar þér finnst þú skilja til hvers er ætlast af þér og þú hefur fengið nægan tíma til að íhuga ákvörðun þína. Takk fyrir að lesa þetta.

Tilgangur rannsóknarinnar

Tilgangur rannsóknarinnar er að skoða breytileika á viðhorfi á minnihlutahópum og mun á mismunandi prófum. Þér hefur verið boðið að taka þátt í eftirfarandi rannsókn vegna þess að þú leggur stund á sálfræðináms við Háskólann í Reykjavík. Rannsókn þessi mun að meðaltali taka um 60 mínútur.

Þátttaka

Verð ég að taka þátt?

Það er þinn valkostur að ákvarða hvort þú takir þátt eða ekki. Ef þú ákveður að taka þátt færð þú eintak af upplýsingablaðinu og ert beðin/n um að skrifa undir upplýst samþykki. Ef þú ákveður að taka þátt er þér þó leyfilegt að hætta við hvenær sem er án þess að gefa upp ástæðu. Ákvörðun um að hætta hvenær sem er, eða sú ákvörðun að taka ekki þátt mun ekki hafa áhrif á rétt þinn á einn eða annan hátt.

Hvað felst í því að taka þátt?

Þú munt byrja á því að skrifa undir upplýst samþykki og þar á eftir munt þú taka þátt í tveimur prófum í gegnum netið. Því næst verður þú beðin/n um að svara nokkrum spurningalistum. Það er ætlast til þess að þú svarir bæði prófunum sem tekin eru á tölvu og einnig þeim spurningalistum sem lagðir verða fyrir. Það er engin hætta sem stafar af því að taka þátt.

Hve lengi mun rannsóknin standa yfir?

Rannsóknin mun standa yfir í um 60 mínútur. Eftir að þú hefur svarað prófunum sem tekin eru á tölvu og spurningalistunum þá hefur þú lokið þátttöku þinni við þessa rannsókn. Ekki verður aftur haft samband við þig vegna þessarar rannsóknar.

Hverjir eru hugsanlegir ávinningar þess að taka þátt?

Ef þú tekur þátt í þessari rannsókn þá gefst þér tækifæri til að sjá hvernig rannsókn fer fram sem mun vonandi nýtast þér í þínu eigin námi. Einnig færð þú þetta metið til einkunnar í námi þínu.

Hverjir eru hugsanlegir áhættuþættir þess að taka þátt?

Það er engin hugsanleg áhætta sem fylgir þátttöku í þessari rannsókn.

Hvað gerist við lok rannsóknarinnar?

Eftir að rannsókn er lokið mega þátttakendur hafa samband við rannsakendur ef einhverjar spurningar vakna og einnig til þess að fá upplýsingar um frekari niðurstöður rannsóknarinnar.

Hvað gerist ef ég skipti um skoðun varðandi þátttöku?

Þér er velkomið að skipta um skoðun hvenær sem þú vilt hvað varðar þátttöku í þessari rannsókn án þess að það hafi einhverjar afleiðingar.

Við hvern hef ég samband fyrir frekari upplýsingar?

Ef einhverjar spurningar vakna hvað varðar rannsóknarinnar þá getur þú haft samband við rannsakendur í gegnum eftirfarandi netföng; alda12@ru.is eða tinnas12@ru.is. Ef þú hefur einhverjar áhyggjur hvað varðar þessa rannsókn og vilt hafa samband við einhvern í trúnaði þá getur þú haft samband við forsvarsmenn sálfræðideildar Háskólans í Reykjavík.

Appendix B**Consent form (Icelandic Version)****Upplýst samþykki****Nafn þátttakanda:** _____**Titill rannsóknar:** _____**Nafn rannsakanda:** Alda Magnúsdóttir Jacobsen og Tinna Brá Sigurðardóttir

1. Ég samþykki að ég hafi lesið upplýsingablaðið og haft tækifæri til þess að spyrja spurninga. ☐
2. Ég er sátt/ur við og skil þær upplýsingar sem mér hafa verið gefnar og hef haft nægan tíma til þess að íhuga upplýsingarnar. ☐
3. Ég skil að þátttaka mín er valfrjáls og ég get hætt við hvenær sem ég vil án þess að gefa upp ástæðu. Einnig að það hafi ekki áhrif á lagaleg réttindi mín. ☐
4. Ég samþykki það að taka þátt í rannsókninni. ☐

_____	_____	_____
Nafn þátttakanda	Dagsetning	Undirskrift
_____	_____	_____
Rannsakandi	Dagsetning	Undirskrift

Appendix C

Marlowe-Crowne Social Desirability Scale in Icelandic

1. Hér fyrir neðan eru nokkrar staðhæfingar um persónuleg viðhorf og eiginleika.

Lestu hvert atriði og merktu við hvort þér finnst staðhæfingin vera sönn eða ósönn

hvað varðar þig persónulega. Merktu við það sem á við hverju sinni.

	Satt	Ósatt
1) Það er stundum erfitt fyrir mig að sinna vinnunni minni ef engin hvatning er til staðar.	<input type="checkbox"/>	<input type="checkbox"/>
2) Ég finn stundum til gremju þegar fæ mínu ekki framgengt.	<input type="checkbox"/>	<input type="checkbox"/>
3) Stöku sinnum hef ég gefist upp á að gera eitthvað þar sem ég taldi mig ekki hafa getuna til þess.	<input type="checkbox"/>	<input type="checkbox"/>
4) Það hafa komið tilfelli þar sem mig langar að gera uppreisn gegn yfirvöldum jafnvel þó ég vissi að þau höfðu rétt fyrir sér.	<input type="checkbox"/>	<input type="checkbox"/>
5) Sama við hvern ég tala þá er ég alltaf góður hlustandi.	<input type="checkbox"/>	<input type="checkbox"/>
6) Það hafa komið tilfelli þar sem ég notfærði mér einhvern.	<input type="checkbox"/>	<input type="checkbox"/>
7) Ég er alltaf tilbúin til að viðurkenna þegar ég geri mistök.	<input type="checkbox"/>	<input type="checkbox"/>
8) Stundum reyni ég að hefna mín í stað þess að fyrirgefa og gleyma.	<input type="checkbox"/>	<input type="checkbox"/>
9) Ég er alltaf kurteis, jafnvel við þá sem eru mér ósammála.	<input type="checkbox"/>	<input type="checkbox"/>
10) Ég hef aldrei fundið til gremju þegar einstaklingar lýsa hugmyndum sínum sem eru ólíkar mínum hugmyndum.	<input type="checkbox"/>	<input type="checkbox"/>
11) Það hafa komið tilfelli þar sem ég hef verið öfundsjúk/ur þegar öðrum gengur vel.	<input type="checkbox"/>	<input type="checkbox"/>

12) Ég er stundum ergileg/ur gagnvart þeim sem biðja mig um greiða. ☐ ☐

13) Ég hef aldrei sagt eitthvað vísvitandi til þess að skaða ☐ ☐

tilfinningar annarra.

Appendix D**Attitude Towards Obese Person Scale**

-3 Mjög ósammála

-2 Frekar ósammála

-1 Lítið ósammála

+3 Mjög sammála

+2 Frekar sammála

+2 Lítið sammála

1. ____ Offeitir einstaklingar eru jafn hamingjusamir og annað fólk
2. ____ Flestu offeitu fólki líður eins og það sé ekki jafn gott og annað fólk
3. ____ Flest offeitt fólk er meira meðvitað um sjálft sig en annað fólk
4. ____ Offeitt fólk getur ekki náð jafn miklum árangri í vinnu eins og annað fólk
5. ____ Flestir sem ekki eru offeitir væru á móti því að giftast offeittum einstaklingi
6. ____ Einstaklingar sem eru alvarlega offeitir eru oft óþrifalegir
7. ____ Offeitt fólk er yfirleitt félagslynt
8. ____ Flest offeitt fólk er ekki óánægt með sjálft sig
9. ____ Offeitt fólk er með jafn mikil sjálfsöryggi og annað fólk
10. ____ Flestum finnst óþægilegt að eiga í samskiptum við offeitt fólk
11. ____ Offeitt fólk er yfirleitt minna árásagjarnt en annað fólk
12. ____ Flest offeitt fólk eru með öðruvísi persónuleika en annað fólk
13. ____ Mjög fáir offeitir einstaklingar skammast sín fyrir þyngd sína
14. ____ Flest offeitt fólk lítur niður til einstaklinga í kjörþyngd
15. ____ Offeitt fólk er tilfinningaríkara en annað fólk
16. ____ Offeitt fólk ætti ekki að búast við að lifa eðlilegu lífi
17. ____ Offeitt fólk er alveg jafn heilbrigt og annað fólk
18. ____ Offeitt fólk er jafn kynferðislega aðlaðandi og annað fólk
19. ____ Offeitt fólk hefur tilhneigingu til þess að hafa fjölskylduvandamál
20. ____ Eitt af því versta sem getur komið fyrir einstakling er að hann verði offeitur

Appendix E**Summary Report for Participants**

12. maí, 2015

Kæri þátttakandi,

niðurstöður rannsóknarinnar sem þú tókst þátt í standa nú fyrir. Tilgangur rannsóknarinnar var að skoða bein (meðvituð) og óbein (ómeðvituð) viðhorf til offeitra einstaklinga og að athuga hvort félagslega æskileg svörun hafi áhrif á mælitækin. Niðurstöður leiddu í ljós að 73% þátttakanda sýndu neikvæð óbein viðhorf til offeitra. Það var lítil, en marktæk, fylgni á milli beinna og óbeinna viðhorfa. Félagslega æskileg svörun hafði áhrif á bæði bein og óbein viðhorf þátttakenda. Hafir þú einhverjar spurningar varðandi rannsóknina er þér velkomið að hafa samband í síma 698-6813 eða senda tölvupóst á netfangið tinnas12@ru.is. Ég vil þakka þér kærlega fyrir þátttöku þína í BSc verkefninu mínu.

Kær kveðja,

Tinna Brá Sigurðardóttir