# Tartu Ülikool Psühholoogia osakond

# ISIKSUS JA MINA-HOIAKUD – ÜKSMEEL ENESE JA TEISTE HINNANGUTE VAHEL

# Tuuli Ruus

Juhendaja: Jüri Allik

Läbiv pealkiri: üksmeel hinnangutes

# SISUKORD

SISUKORD	2
KOKKUVÕTE	3
ABSTRACT	4
SISSEJUHATUS	5
Mõisted	6
Töö eesmärgid	8
TULEMUSED	9
Isiksusejooned ja mina-hoiakud	9
Nõustumine isiksuse ja mina-hoiakute hinnangute vahel	10
Hinnatava inimese omadused	10
Isiksuseomaduse eripärad	11
Hindaja kasutuses olev informatsioon	12
Enda ja teiste hinnangute seosed erinevates suhetes	14
JÄRELDUSED	15
TÄNUSÕNAD	16
VIITED	167
LISA	20

# KOKKUVÕTE

Isiksusetesti NESKA ja Mina-hoiakute skaala mina-vormi täitsid 101 inimest (81 naist ja 20 meest). Iga mina-isikut hindas kaks teda tundvat inimest samade skaalade tema-vormis. Kooskõlas vaadeldavuse efektiga, oli üksmeel isiksuseomaduste puhul suurem kui mina-hoiakute puhul. Vaimne-mina ja Inimesetundmine ei saavutanud statistilist seost hindajate vahel. Inimese enda hinnangud osutusid olulisimaks hindajatevahelise nõustumise ja kokkulangevuse ennustajaks. Tutvus mõjutas hinnangute üksmeelsust koos teabe rohkuse ja suhte laadiga. Käitumises raskemini jälgitavate omaduste puhul on tutvusel olulisem roll.

#### **ABSTRACT**

Self-ratings on the Big Five and the Self-Attitude Scale (SAS) were obtained from one hundred and one individuals (81 women and 20 men). Each subject ("target-person") was estimated by two judges/observers who were recruited from peers and/or family members of the subject. Consistent with the trait visibility effect, the Big Five scales yielded higher self-other agreement than did the SAS scales. Spiritual Self and Comprehension of Others failed to reach any statistically significant level of self-other agreement. The self-other agreement can be reliably predicted from target's own judgments rather than from observer-ratings. Individuals who, in their own opinion, had clearer self-concepts and were not too worried about the others' opinions, were also in better agreement about their basic personality traits with the two observers. Cross-sample comparisons indicated, that agreement was higher in the married sample than in the other 3 groups (peers, relatives and co-workers).

#### **SISSEJUHATUS**

Lähtudes Cooley (1902) peegelmina teooriast areneb inimese mina-kontseptsioon vastavalt sellele, kuidas me arvame, et teised meid näevad. Selle teooria kohaselt kujuneb arvamus oma "minast" teiste inimeste hinnangute põhjal. Inimene hindab pidevalt teisi, et mõista, mida neilt oodata ja teised hindavad omakorda teda. Vastastikuse hindamise korral kerkib üles küsimus hinnangute täpsusest. Kuivõrd on üldse võimalik teise inimese hoiakute ja isiksuse mõistmine? Kuivõrd teame enesestki? Kas teised arvavad meist samamoodi nagu me ise?

Rahvapsühholoogia järgi on meie teadmine oma vaimuseisunditest vahetu ja meie teadmine teise isiku vaimuseisunditest järelduslik ning kaudne (Mölder, 1996). Mölderi arvates tervemõistuslik usk teadmise vahetusse võib tuleneda asjaolust, et esimese isiku puhul osa taustateadmistest, mille alusel vaimusündmusi omistatakse, moodustab kolmandatele isikutele mittekättesaadav kogemussisu. Samas lisab ta, et see episteemilise autoriteedi omistamine, mis kuulub rahvapsühholoogiasse, ei ole absoluutse autoriteedi omistamine – me lepime sellega, et teised aeg-ajalt meie uskumusi korrigeerivad.

Sotsiaal- ja isiksusepsühholoogid on alates 1940ndatest aastatest rohkearvulistes töödes uurinud, kuidas inimesed hindavad üksteise käitumist ja isiksust. Sotsiaalpsühholoogiline traditsioon on keskendunud suures osas enese ja teiste hindamise vigadele, lähtudes eeldusest, et inimese hinnangud on alati vigased või kallutatud (*biased*). Isiksuse uurijad, kes reeglina pole nii pessimistlikud inimese hindamisvõime suhtes, on püüdnud määratleda, kelle arvamused ja millistel tingimustel on kõige täpsemad käitumise ennustamisel. Sealjuures on leitud, et vahel on inimene iseenda hindamisel tõesti ebatäpsem kui teised hindajad (John & Robins, 1994). Mitmes uurimuses (Kolar jt. 1996; Hofstee, 1994) väidetakse üheks eneseesituse ekslikkuse oletatavaks põhjustajaks inimeste kalduvust end isiksuseküsimustikele vastates ebarealistlikult heas valguses esitleda.

Psühholoogias pikka aega valitsenud tendents pidada enesetaju ja -hinnanguid ebaadekvaatseteks on nüüdseks asendumas tasakaalustatuma suhtumisega. Funder ja Colvin (1997) seletavad enda ja teiste hinnangute erinevusi vaatekoha erinevuste kaudu. Nad ei kipu niivõrd ütlema, kellel on rohkem õigus, vaid toovad välja kogemuste erinevuse. Meile enestele on kättesaadav ning olulisem meie sisemised, privaatsed

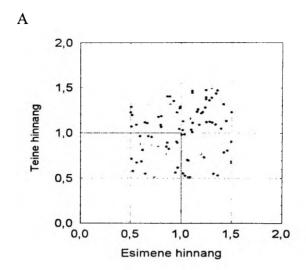
kogemused ja vaimne tegevus. Meid ümbritsevad inimesed peavad omadusi käitumisest välja lugema ja seetõttu on neile nähtavamad ja ilmselt ka tähtsamad meie sotsiaalses käitumises avalduvad jooned nagu jutukus, sarmikus ja kehtestavus. Sellega seletavad Funder ja Colvin (1997), miks enda arvamuste keskmine tulemus (testi skooride puhul) on kõrgem privaatsemate teemade puhul (nt. emotsionaalne stabiilsus) ja teiste poolt antud hinnangud on avalikemate teemade (nt. seltsivus) puhul eneseesitusest kõrgemad.

#### Mõisted

Enese ia hinnangute vastavusest rääkides tuleb seoses kasutatava võrdlusmeetodiga eristada järgmisi mõisteid. Olukorras, kus hinnatakse inimese omadusi saab rääkida arvamuste ühtivusest ehk nõustumisest (interjudge agreement). Nõustumise alusmõisteks on hinnangute omavaheline seotus ehk kovariatsioon. Antud töös kasutan sellisel juhul sõnu nõustumine või üksmeel, mis väljendub selles, et inimese enda antud hinnangute põhjal on võimalik ennustada seda, kuidas on teised samu omadusi hinnanud. Kui on tegemist kahe välise hindaja arvamustevahelise seose vaatlemisega, võib kohata mõistet konsensus (consensus) ja selle tavaliseks mõõduks on korrelatsioon (Kenny, 1994; Kenny, Albright, Malloy, & Kashy, 1994). Teiseks suunaks on Funder'i ja Colvin'i (1997) järgi absoluutse nõustumise analüüs. Selle all mõtlevad nad väidetele antud keskmiste hinnangute või ka testi skooride keskmiste võrdlust alaskaalati. Antud töös nimetan seda meetodit arvamuste kokkulangevuse uurimiseks. Arvamuste kokkulangevus ja nendevaheline üksmeel on kaks üsnagi erinevat asja. Kui näiteks arvamused langevad kokku, ei tähenda see, et nad on kindlasti üksmeelsed. (Antud juhul ei ole juttu üksikisikute arvamustest, vaid seostest uuritava valimi hulgas.)

Järgnevailt joonistelt võib näha, kuidas mingi omaduse hinnangud võivad kahel erineval kombel suhtestuda.

Joonis 1



B

2,0

1,5

1,5

0,0

0,0

0,0

0,0

1,5

2,0

Esimene hinnang

Joonisel 1A on näidatud oletuslik juhtum, kus kahe antud hinnangu keskmised väärtused langevad kokku võrdudes ühega. Kuna hinnangud omavahel ei korreleeru, siis ei ole võimalik esimese hinnangu põhjal ennustada midagi kindlat teise hinnangu kohta. Seega on tegemist kokkulangevate hinnangutega, millel puudub vastajate omavaheline üksmeel.

Joonisel 1B kujutab aga vastupidist juhtumit. Kui esimese hinnangu (näiteks enesehinnang) keskmine on 1.0, siis teise hinnangu (näiteks teise hinnang inimesele) keskmine on 0.75. Seega on hinnangud mittekokkulangevad: esimene hinnang on oluliselt kõrgem kui teine hinnang. Samal ajal valitseb hindajate vahel üsna oluline üksmeel: esimese hinnangu põhjal võib küllalt suure usaldatavusega taastada teise hinnangu, kuigi üldtasemelt on see esimesest madalam ja sellega mittekokkulangev

Lisaks nõustumisele räägitakse ka hinnangute **täpsusest** (accuracy). Täpsusest saab kõnelda siis, kui on olemas hinnangutest sõltumatu ja "objektiivne" viis mingi omaduse mõõtmiseks või registreerimiseks või juhul kui on põhjust arvata, et üks hinnangutest on mingil põhjusel "objektiivsem"

Mõnes uurimuses (n. Borkenau ja Liebler, 1993) räägitakse küll arvamuste täpsusest, aga kui meetodiks on vaid arvamuste korreleerimine ja õigsuse kriteeriumiks kas enese või teise arvamus, siis ei saa ikkagi enamast kui nõustumisest kõnelda (Bernieri et al., 1994, McCrae, 1982; Paunonen, 1989). Nõustumine pole küllaldane täpsuse tunnistaja, on vaid tõenäolisem, et üksmeelsed hinnangud on "tõele" lähemal, kui omavahel lahknevad hinnangud. Ka Brown ja Dutton (1995) väidavad, et nõustumine ei pruugi tõendada inimeste arvamuste täpsust (nt. reliaablus pole valiidsus), aga mõnede sotsiaalselt defineeritud omaduste puhul (nt. atraktiivsus, populaarsus), võivad teiste arvamused olla täpsuse sobilikuks kriteeriumiks.

# Töö eesmärgid

Enese-esituse ja teiste hinnangute võrdleval uurimisel on enamasti piirdutud isiksusetestide või isiksuseomadustega. Teiste hinnangute võrdlemine enda omadega on juba iseenesest samm isiksuse täiuslikuma mõistmise poole, aga järgmine loogiline samm oleks mina (ingl.k. self) valdkonna põhjalikum kaasamine. Robins, Norem, ja Cheek (1999) on välja toonud mitmeid kaalukaid põhjendusi, miks mina teema peaks isiksuse uurijatele huvi pakkuma:

Mina loob silla indiviidi (ja tema isiksuseomaduste) ning kollektiivi (ja sellega seotud sotsiaalsete rollide) vahel. Inimese püsivad mõtete-, tunnete- ja käitumismustrid – ühesõnaga isiksus – mõjutab seda, kuidas inimesed endast mõtlevad. Isiksus vormib ka seda, milline suhtumine on inimesel iseendasse. Samas reguleerib mina ka käitumist ja kogemuse kasutamist. Ning kuna isiksust mõõdetakse valdavalt inimeste enda hinnangute kaudu, siis on ka väga oluline enesetaju sügavam tundmaõppimine, et arvestada võimalike vigade ja täpsuse tõenäosust määravate teguritega.

Niisiis oligi käesoleva uurimuse laiemaks eesmärgiks seni üllatavalt lahus seisnud isiksuse ja mina-teemade seoste ning enese ja teiste hinnangute üksmeelsuse mõjutajate uurimine.

Töö tulemused on esitatud kahel viisil: esiteks sellele sissejuhatusele järgnevas tulemuste esituses ja nende arutelus. Teiseks avaldamiseks esitatud artikli käsikirja kujul, mille üheks autoriks selle töö kirjutaja. Artikkel põhineb kolmel uurimusel, mille kõigi ettevalmistamisel, läbiviimisel ja andmete töötlemisel on selle töö autor osalenud. Minu otsene panus on kõige suurem kolmanda uurimuse juures, mille tarbeks ma kogusin ise andmed ja viisin läbi suurema osa töötlusest. Selle kolmanda uurimuse andmed ongi peamiseks aluseks käesolevale magistritööle.

#### **TULEMUSED**

# Isiksusejooned ja mina-hoiakud

Järgides mina-teoreetikute alustala William James'i (1890) käsitlust, mille kohaselt empiiriline mina koosneb materiaalsest, sotsiaalsest ja vaimsest komponendist, üritati luua võimalikult laiahaardeline mina-kontseptsiooni küsimustik (1. uurimus). Lisaks James'i poolt nimetatud teemadele olid skaala loomisel tekitatud väidete kogumikus esindatud veel mitmedki muud minaga seotud valdkonnad, millest lõplikku seitsmedimensioonilisse Mina-hoiakute skaalasse kuulusid vaimse mina, avaliku mina, füüsilise mina, eneseselgusetuse, inimesetundmise, seltskondlikkuse ja siiruse alaskaalad.

Kõik Mina-hoiakute skaala alaskaalad olid mõõdukalt seotud ühe või mitme Suure Viisiku teemaga (2. uurimus, tabel 4), mida mõõdeti isikuse lühiküsimustiku NESKA – Neurootilisus, Ekstravertsus, Sotsiaalsus, Kohusetunne/meelekindlus ja Avatus – abil. Avaliku mina, füüsilise mina ja eneseselgusetuse alaskaalad seostusid neurootilisusega. Kõrge neurootilisusega inimesed mõtlevad palju sellele, kuidas teised neid näevad. Inimesetundmise ning seltskondlikkuse alaskaalad korrelleerusid aga ekstravertsusega. Vaimne mina oli korrelleeritud avatusega ja siirus sotsiaalsusega. Shafer (2000) sai oma uurimuses väga sarnase seostemustri kuigi kasutas samade teemade puhul teisi skaalasid. Ka temal oli avatus oluliseks vaimse mina ennustajaks, mis näitavat, et avatud inimesed peavad tähtsaks, kes nad on ja on ka küllalt teadlikud oma sisemisest minast. Ja neurootilisuse seos enamuse enamuse mina-hoiakutega (ja ennustav jõud) näitab, et afektiivsusel on oluline mõju suurele osale enesekohastest mõtetest (Shafer, 2000).

Eneseselgusetus seostus ootuspäraselt ka eneseselgust mõõtva eestikeelse skaalaga.

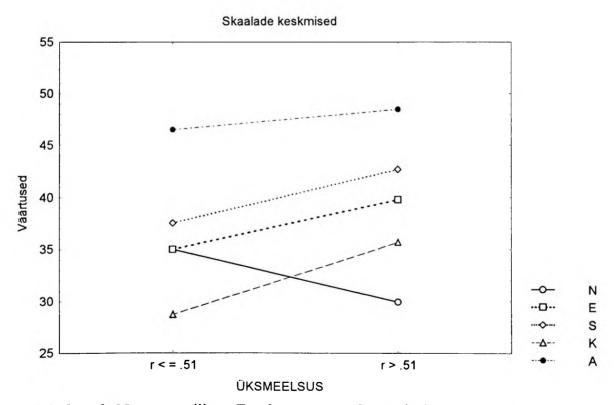
# Nõustumine isiksuse ja mina-hoiakute hinnangute vahel

Järgnevalt vaatlen seda, millised tegurid mõjutavad enda ja teiste poolt antud hinnangute kokkulangevuse astet.

#### Hinnatava inimese omadused

Üheks arvamuste ühildumise mõjuriks on hinnatava inimese arusaadavus ehk võime end mõistetavalt väljendada. Inimesed erinevad selle poolest, kuivõrd nende isiksuse kohta välise käitumise põhjal tehtud otsustused ühtivad endi hinnangutega. Kui inimese mõtted ja tunded väljenduvad selgelt on teda kergem hinnata kui neid, kes end tagasihoidlikumalt väljendavad (Borkenau ja Liebler, 1992; Ambady jt., 1995). Colvin (1993) vaatles üksmeelsemalt hinnatavate inimeste isiksuse struktuuri ja leidis, et nii nemad ise kui ka teised hindajad kirjeldavad neid ekstravertsete, sotsiaalsete, meelekindlate ning emotsionaalselt stabiilsetena. Uurides ka hinnanguid sellele isiksusestruktuurile selgus, et sellist omaduste kogumit peeti meeldivaks, sageli esinevaks ehk populatsioonis tavaliseks ning psühholoogilisele kohastumusele omaseks. Ka käesolevas uurimuses tuvastati üksmeelsemalt hinnatud inimestel sarnane isiksusestruktuur (joonis 2).

#### Joonis 2



Märkused: N - neurootilisus; E - ekstravertsus; S - sotsiaalsus; K - meelekindlus; A - avatus, skaalade keskmised erinevad statistiliselt oluliselt (va. avatuse skaala) p < .05.

Eelnevaga seostub regressioonanalüüsis saadud tulemus, et sotsiaalsusel oli määravaim roll hinnangute nõustumisele ja kokkulangevusele (3. uurimus, 3. joonis). Sotsiaalsus väljendab positiivset või negatiivset orientatsiooni teiste suhtes ja seeläbi mõjutab suhete soojust ja sügavust (Costa ja McCrae, 1992).

Hinnangute üksmeelsust mõjutab ka inimese käitumise järjepidevus. Colvin (1993) on väitnud, et üksmeelsemalt hinnatud isikute käitumine on sidusamalt organiseeritud ning nad on kooskõlalised ja stabiilsed. Nende käitumine ei erine situatsiooniti olemuslikult ning inimesed, kes teavad neid erinevates olukordades, annavad siiski suhteliselt üksmeelseid hinnanguid. Ka Bem ja Allen (1974) leidsid, et enese ja teiste arvamuste ühtivus sõbralikkuse ja meelekindluse omaduste osas oli suurem end püsivateks pidanutel. Käesolevas töös osutus eneseselgusetus sotsiaalsuse järel teiseks olulisemaks nõustumise ennustajaks (3. uurimus, 3 joonis). Mina-hoiakute skaala eneseselgusetus oli statistiliselt oluliselt seotud neurootilisuse (r = .58, p = .000) ja Mina-kontseptsiooni selguse skaalaga (r = .59, p = .000) (2. uurimus, tabel 4). Järelikult väljenduvad madalas eneseselgusetuses selge minapilt ja stabiilsem käitumine, mis tagavadki üksmeelsemad hinnangud.

Nii et kõrvalistele hindajatele teeb ülesande lihtsamaks, kui hinnatav inimene annab endast lahkesti informatsiooni st. on väljenduslik ja seltsiv ning info ei ole seejuures vasturääkiv.

#### Isiksuseomaduse eripärad

Isiksuseomadustel on samuti omadused, millest sõltub kuidas inimesed neist mõtlevad ning neid hindavad. See aitab seletada, miks teatud isiksusejoonte hindamisel langevad erinevate hindajate arvamused suuremal määral kokku kui teiste omaduste korral ning miks teatud omaduste hinnangud on üksmeelsemad. Kuid mis annab mõnele omadusele eelise teiste omaduste ees? Gangestad jt. (1992) pakuvad kahte võimalikku põhjendust: Esiteks on oluline, et hinnatava inimese väljendustes oleks piisavalt märke, mille põhjal otsustada. Teiseks peavad hindajad suutma neid märke põhjendatult ja loogiliselt kasutada. Jälgitavamad on ekstravertsusele tähenduslikud omadused, mille puhul enese ja teiste hinnangud on kõige üksmeelsemad (John ja Robins, 1993; 1994; Kenny jt., 1994; Hase ja Goldberg, 1967; Funder ja Dobroth, 1987; Watson, 1989). Viiest isiksuse faktorist on nähtavuselt ja ka hinnangute üksmeelsuse poolest järgmised avatus ja meelekindlus (Norman ja Goldberg, 1966; Watson, 1989). Kõige vähem sarnanevad hinnangud sotsiaalsuse ja emotsionaalse stabiilsuse puhul. McCrae (1987) uurimuses saadud pingerea

erinevuseks on ekstravertsuse allajäämine avatusele, aga esikolmik on sarnane enamuste teistega: avatus- r=.57, ekstravertsus- r= 47, meelekindlus- r= 43

Antud uurimuses oli palutud ekspertide grupil kõiki väiteid hinnata käitumises väljendumise järgi (3. uurimus). Saadud tulemused toetavad omaduse jälgitavuse seost hinnangute üksmeelsusega. Neska ja Mina-hoiakute skaala väidete jälgitavuse eksperthinnangute korrelatsioon nõustumisega oli statistiliselt oluline: r (12) = 72, p = .008. Ekstravertsust ja suhtlemisvalmidust peeti kõige selgemini mõistetavaks ning nendel skaaladel saavutatigi suurim üksmeel (tabel 5). Kõige viletsamini käitumises avalduvaks peeti eneseselgusetust, inimesetundmist ja vaimset mina. Inimesetundmise ja vaimse mina skaaladel puuduski oluline seos eneseesitusega. Eneseselgusetuse oluline seos võis olla tingitud sellest, et hindamine ei osutunudki nii raskeks kui eksperthinnangutest võis järeldada. Nii inimese eneseesitusel (2. uurimus) kui enese ja teiste hinnangute võrdlusel seostus eneseselgusetus oluliselt ja negatiivselt meelekindlusega, mis võiski olla hindamise markeriks.

Veel eristatakse isiksuseomadusi neis sisalduva hinnangulisuse põhjal. Omadused pole inimeste jaoks samaväärsed. Sihikindlust peetakse valdavalt positiivseks omaduseks ja külmust teiste suhtes hinnatakse negatiivselt. John ja Robins (1993) on uurinud iseloomujoone hinnangulisuse mõju hindajate vahelisele nõustumisele ning leidnud, et mida hinnangulisem iseloomujoon, seda vähem langesid kokku enda ja teiste hinnangud. Hinnangulisus avaldas enam mõju enda ja teiste arvamuste kokkulangevusele. Kaaslaste arvamuste vahelist üksmeelsust joone hinnangulisus ei mõjutanud. Käesoleva uurimuse hinnangulisuse ekspertarvamustel puudus seos hindajate omavahelise nõustumisega. Kõige soovitavamaks peetud meelekindluse skaalal oli hinnangute vahel küll suurim lahknevus, aga huvitaval kombel oodatust vales suunas: enese antud hinnang oli teiste nägemusest statistiliselt oluliselt madalam (3. uurimus, joonis 2).

#### Hindaja kasutuses olev informatsioon

Informatsiooni hulga ja omapära olulisust isiksuse hindamisel ei taha vist keegi kahtluse alla seada. Funderi (1997) arvates tuleb eristada informatsiooni kvantiteeti ja kvaliteeti: hulga mõõduks on näiteks tutvusaeg, aga kvaliteet väljendub selle suhte laadis (n. töökaaslane, sugulane).

On üldiselt aktsepteeritav, et mida rohkem omame kellegi kohta teavet, seda paremini teda tunneme. Samas mõneti üllatuslikult on leitud, et isegi võõraste hindamisel on

jälgitavamate omaduste puhul arvamused üsnagi üksmeelsed (seos nõrk, aga oluline) (Albright, Kenny, & Malloy, 1988; Ambady, Hallahan, & Rosenthal, 1995; Borkenau & Liebler, 1992; Kenny, Horner, Kashy, & Chu, 1992; Levesque & Kenny, 1993; Watson, 1989). Enamasti on seosed olulised ekstravertsusele ja meelekindlusele tähenduslike iseloomujoonte või ekstravertsuse ja meelekindluse skaalade puhul. Võõraste hindamise katsetes on varieeritud ka informatsiooni laadi. Näiteks video on ilma hääleta st. informatsioon on visuaalne, vaadeldavas situatsioonis on inimene üksi või hoopis mitmekesi, situatsioonid on erinevad jne. Borkenau ja Liebler'i (1993) uurimusest selgus, et hindajad, kelle kasutuses oli vaid visuaalne informatsioon võõra inimese kohta, ei teinud selget vahet ekstravertsusel ja sotsiaalsusel nii nagu teevad tuttavad ja inimene ise. Seega, mida enam informatsiooni oli hindajal, seda vähem korrelleerusid erinevatele isiksuseomadustele antud hinnangud.

Suures hulgas uurimustes on informatsiooni koguse näitajaks võetud tutvusaeg ning leitud, et pikema tutvusajaga kaasnevad üksmeelsemad hinnangud (Funder ja Colvin, 1988; McCrae ja Costa, 1989; Paunonen, 1989; Borkenau ja Liebler, 1993). Kenny jt. (1994) 11 uurimuse ülevaatest selgus seevastu, et tutvusaja pikenemine ei muutnud hindajate arvamusi palju sarnasemaks, aga oli siiski statistiliselt oluline faktor. Suhteliselt lühike tutvusaeg tagas sarnased hinnangud ning väga pikk tutvus ei andnud erilisi eeliseid.

Käesolevas uurimuses oli välise hindaja valikukriteeriumiks vähemalt aastane tutvusaeg hinnatavaga. Hindajate tutvusaeg varieeruski aastast kuni hinnatavate elueani, kui hindajaks oli näiteks ema. Paraku tutvusaeg ei mõjutanud hindajatevahelist üksmeelsust ning kokkulangevust. Uuriti ka kohtumise sageduse seost üksmeelsuse ja kokkulangevusega ning leiti, et tihedamini kohtuvad (n. koos elavad) inimesed on ka arvamustes mõnevõrra üksmeelsemad (r = .25, p < .05).

Kuna antud töös tutvusaeg olulist mõju ei avaldanud, uuriti suhte laadi seost üksmeelsusega. Hindajad jaotati gruppidesse vastavalt nende märgitud seosele hinnatavaga. Kõige suurema grupi moodustasid sõbrad (N = 109), järgmise elukaaslased/abikaasad (N = 47), siis sugulased: õed-vennad, vanemad (N = 26) ja lõpuks ülejäänud (N = 20), kes eelnevatesse gruppidesse ei sobinud ja kelle ühiseks nimetajaks võiks tinglikult olla "suhe läbi sotsiaalse rolli" Need olid näiteks töökaaslased, ülemused ja ka ämmadäiad, keda tuntakse suhteliselt lühemat aega kui muid sugulasi. Enda ja teise hinnangute vaheliste seoste muster (Tabel 1) oli kooskõlas Watson, Hubbard, & Wiese (2000) väitega, et tutvus osutub iseäranis oluliseks sisemiste omaduste hindamisel.

Tabel 1

Enda ja teiste hinnangute seosed erinevates suhetes

Skaala	Sõbrad	Elukaaslased	Sugulased	Rollisuhe
	N=109	N=47	N=26	N=20
NESKA				
Neurootilisus	47	53	31	46
Ekstravertsus	66	68	70	69
Sotsiaalsus	47	46	47	37
Meelekindlus	48	66	49	43
Avatus	57	67	38	50
keskmine r	53	60	47	49
MHS e. SAS				
Vaimne mina	02	34	06	41
Avalik mina	24	53	23	24
Füüsiline mina	53	59	63	16
Eneseselgusetus	27	35	39	24
Inimesetundmine	26	16	24	52
Seltskondlikkus	58	69	48	58
Siirus	32	48	23	52
keskmine r	32	45	33	38

Märkus. Rasvaselt trükitud korrelatsioonid on statistiliselt olulised (p<0,05). Selguse ja parema loetavuse huvides on komakohad ära jäetud.

oli abikaasadevaheline Nende uurimuses üksmeel märgatavalt suurem sõpradevahelisest ja seda eriti negatiivsete emotsioonide hindamisel. Tabelis 1 on näha käesolevas uurimuses leitud seosed suhte liigiti ning need kinnitavad Watson'i jt. (2000) saadud tulemusi elukaaslaste ja sõprade hinnangute nõustumise kohta: elukaaslased olid kõigi hinnatavate omaduste suhtes üksmeelsemad kui sõbrad. Tõendust on leidnud ka Watson'i jt. (2000) väide, et tutvuse kvaliteet mõjutab just väliselt raskesti jälgitavate omaduste hindamist: abikaasade hinnangud vaimse mina alaskaalal on statistiliselt oluliselt üksmeelsed ja seos oluliselt erinev sõpradevahelisest (p < .05). Sugulaste ja rollisuhete grupid olid liiga väiksed, et olulisi järeldusi teha, aga seosemustrite võrdlusest võib teha tagasihoidlikke oletusi. Millest võis tuleneda, et üksmeel sugulaste vahel sõpradevahelisele alla jääb? Kuna mina-isikud olid valdavalt tudengid, siis on mõistetav, et nad kohtuvad sugulastega vähem ja pikk tutvusaeg üksi ei anna hindajale eelist. Mida aga oletada selle kohta, et rollisuhtes puudub seos füüsilise mina puhul, mida muidu üksmeelselt hinnatakse? Kas seda, et ülemuste ja ämmadega lihtsalt ei räägita enda kehaga seonduvatest teemadest?

Järgides varasemaid autoreid (Watson jt. 2000; Colvin & Funder, 1991; Funder, 1995) võib kokkuvõtvalt lausuda, et tutvus on mitmetahuline nähtus ja seda ei saa üksikuteks dimensioonideks lahutada.

# **JÄRELDUSED**

- 1. Loodud seitsmedimensiooniline Mina-hoiakute skaala sisaldab vaimse mina, avaliku mina, füüsilise mina, eneseselgusetuse, inimesetundmise, seltskondlikkuse ja siiruse alaskaalasid (1. uurimus).
- 2. Kõik Mina-hoiakute skaala alaskaalad olid mõõdukalt seotud mingi NESKA teemaga (2. uurimus). Avaliku mina, füüsilise mina ja eneseselgusetuse alaskaalad seostusid neurootilisusega. Kõrge neurootilisusega inimesed mõtlevad palju sellele, kuidas teised neid näevad. Inimesetundmise ning seltskondlikkuse alaskaalad korrelleerusid aga ekstravertsusega. Vaimne mina oli korrelleeritud avatusega ja siirus sotsiaalsusega. Eneseselgusetus seostus ootuspäraselt ka eneseselgusega (mõõdetuna eneseselguse skaala eestikeelse variandiga).
- 3. Inimese enda hinnangud osutusid olulisimaks hindajatevahelise nõustumise ja kokkulangevuse ennustajaks (3. uurimus).
- 4. Hinnatava omaduse jälgitavus käitumises seostus nõustumisega selle omaduse puhul. Hinnatava omaduse hinnangulisus mõju ei avaldanud (3. uurimus)
- 5. Tutvus mõjutab hinnangute üksmeelsust koos teabe rohkuse ja suhte laadiga. Käitumises raskemini jälgitavate omaduste puhul on tutvusel olulisem roll.

# TÄNUAVALDUSED

Ma olen väga tänulik kõigile neile inimestele, kes ei väsinud mind utsitamast ning vajalikul hetkel toeks olid. Need on mu armsad lähedased, mu kallid innustavad sõbrad ja psühholoogia osakonna pere.

Mul oli erakordne võimalus töötada koos särava teadlase Anu Realo'ga, kelle võimekus, eeskuju, abi ja sõprus selle töö üldse võimalikuks tegid. Samuti tänan südamest Monika Shmidt'i olulise panuse eest selles töös.

Sõnadest tuleb puudus, et tänada oma sedavõrd vaimustavat, tarka, julgustavat ja heatahtlikku juhendajat Jüri Allikut.

#### VIITED

- Albright, L., Kenny, D. A., & Malloy, T E. (1988). Consensus in personality judgments at zero acquaintance. *Journal of Personality and Social Psychology*, 55, 387-395.
- Ambady, N., Hallahan, M., & Rosenthal, R. (1995). On judging and being judged accurately in zero-acquaintance situations. *Journal of Personality and Social Psychology*, 69, 518-529.
- Bem, D. J., & Allen, A (1974). On predicting some of the people some of the time: The search for cross-situational consistencies in behavior. *Psychological Review*, 82, 505-520.
- Bernieri, F. J., Zuckerman, M., Koestner, R., & Rosenthal, R. (1994). Measuring person perception accuracy. Another look at self-other agreement. *Personality and Social Psychology Bulletin*, 4, 367-378.
- Borkenau, P., & Liebler, A. (1992). Trait inferences: Sources validity at zero acquaintance. *Journal of Personality and Social Psychology*, 62, 645-657.
- Borkenau, P., & Liebler, A. (1993). Consensus and self-other agreement for trait inferences from minimal information. *Journal of Personality*, 61, 477-496.
- Brown, J. D. & Dutton, K. A. (1995). Truth and consequences: The costs and benefits of accurate self-knowledge. *Personality and Social Psychology Bulletin*, 21, 1288-1296.
- Colvin, C. R. (1993). "Judgable" people: Personality, behaviour, and competing explanations. *Journal of Personality and Social Psychology*, 64, 861-873.
- Colvin, C. R., & Funder, D. C. (1991). Predicting personality and behaviour: A boundary on the acquaintanceship effect. *Journal of Personality and Social Psychology*, 60, 884-894.
  - Cooley, D. H. (1902). Human Nature and the Social Order. New York: Scribners.
- Costa, P. T., & McCrae, R. R. (1992b). Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI). Professional manual. Odessa, FL. Psychological Assessment Resources.
- Funder, D. C., Dobroth, K. M. (1987). Differences between traits: Properties associated with interjudge agreement. *Journal of Personality and Social Psychology*, 55, 409-418.

- Funder, D. C. (1995). On the accuracy of personality judgment: A realistic approach. Psychological Review, 102, 652-670.
- Funder, D. C., & Colvin, C. R. (1988). Friends and strangers: Acquaintanceship, agreement, and the accuracy of personality judgment. Journal of Personality and Social Psychology, 55, 149-158.
- Funder, D. C., & Colvin, C. R. (1997). Congruence of other's and self-judgements of personality. In R. Hogan, J. Johnson, & S. Briggs (Eds.), Handbook of personality psychology (pp. 617 – 647). San Diego: Academic Press.
- Hase, H. D., & Goldberg, L. R. (1967). Comparative validity of different strategies of constructing personality inventory scales. Psychological Bulletin, 67, 231-248.
- James, W (1890/1950). The principles of psychology. New York: Dover Publications, Inc.
- John, O. P., & Robins, R. W (1993). Determinants of interjudge agreement on personality traits: The Big Five domains, observability, evaluativeness, and the unique perspective of the self. Journal of Personality, 61.
- John, O. P., & Robins, R. W (1994). Accuracy and bias in self-perception: Individual differences in self-enhancement and the role of narcissism. Journal of Personality and Social Psychology, 66, 206-219.
- Kenny, D. A., Albright, L., Malloy, T. E., & Kashy, D. A. (1994). Consensus in interpersonal perception: Acquaintance and the Big Five. Psychological Bulletin, 116, 245-358.
- Kenny, D. A., Horner, C., Kashy, D. A., & Chu, L. (1992). Consensus at zero acquaintance: Replication, behavioral cues, and stability Journal of Personality and Social Psychology, 62, 88-97
- Levesque, M. J., & Kenny, D. A. (1993). Accuracy of behavioral predictions at zero acquaintance: A social relations analysis. Journal of Personality and Social Psychology, 65, 1178-1187.
- McCrae, R. R. (1982). Consensual validation of personality traits: Evidence from selfreports and ratings. Journal of Personality and Social Psychology, 43, 293-303.
- Mölder, B. (1996). Episteemiline autoriteetsus oma vaimuseisundite suhtes. Akadeemia, 8, 2060-2089.

Paunonen, S. V (1989). Consensus in personality judgments: Moderating effects of target-rater acquaintanceship and behavior observability. Journal of Personality and Social Psychology, 56, 823-833.

Robins, R. W., Norem, J. K., & Cheek, J. M. (1999). Naturalizing the self. In L. A. Pervin & O. P John (Eds.), Handbook of personality: Theory and research (2<sup>nd</sup> Ed., pp. 443-447). New York: Guilford Press.

Shafer, A. B. (2000). Relation of the Big Five to biodata and aspects of the self. Personality and Individual Differences, 28, 1017-1035.

Watson, D (1989). Strangers' ratings of the five robust personality factors: Evidence of a surprising convergence with self-report. Journal of Personality and Social Psychology, *57*, 120-128.

Watson, D., Hubbard, B., & Wiese, D. (2000). Self-other agreement in personality and affectivity: The role of acquaintanceship, trait visibility, and assumed similarity. Journal of Personality and Social Psychology, 78, 546-558.

# LISA

Running head	SELE-A	TTITIDES	AND	<b>PERSONALITY</b>	TRAITS
ixummie ncau.	OLLI-F		$\Delta \mathbf{U}$	ILICOUNTILI	TIVALID

Self-Attitudes and Their Relation to Personality Traits

Anu Realo, Jüri Allik, Tuuli Ruus, & Monika Schmidt

Department of Psychology

University of Tartu, Tartu, Estonia

Keywords: self-attitudes, personality traits, self-other agreement and self-other difference, basic tendency vs characteristic adaptation

#### Abstract

Three studies examined self-attitudes and their relation to personality traits. Study 1 demonstrated that the self-concept laying beyond self-esteem is far from being an unidimensional construct. The results revealed the existence of seven replicable and relatively stable dimensions focusing around the themes of spiritual, public and physical selves, selfobscurity, sincerity/genuineness, comprehension of others, and social comfort. To measure the aforementioned seven domains of self, the Self-Attitude Scale (SAS) was created consisting of seven 7-item subscales, each tapping some specific aspect of the global concept of self. The results of Study 2 showed that all seven SAS subscales were moderately related to a specific domain of the Big Five NEO-PI. Yet, none of the subscales of the SAS, except Social Comfort, were clearly redundant with regard to the five basic personality traits. Study 3 showed that contrary to the Big Five scales, relatively poor self-other agreement was found for the SAS scales. Spiritual Self and Comprehension of Others failed to reach any statistically significant level of self-other agreement. The self-other agreement can be reliably predicted from target's own judgments rather than from observer-ratings. Individuals who, in their own opinion, had clearer self-concepts and were not too worried about the others' opinions, were also in better agreement about their basic personality traits with the two observers. Analogously, self-other differences were significantly modulated by individual's own judgments about their self-occupation or self-scrutinization. The question how could one determine whether a given attribute is a basic tendency (personality trait) or a characteristic adaptation is discussed.

# Self-Attitudes and Their Relation to Personality Traits

Self-concept consists of knowledge, attitudes, and evaluations of self, ranging from particular episodic recollections of a personal history to more permanent gender, ethnic, and professional identities. In short, self-concept is what a person thinks and feels about their mental activities, physical body, interpersonal relations, and behavior (cf. James, 1890/1950). Although there can be only one "I" who can ask what is "me," researchers generally agree that self-concept is not a single monolithic entity. It is more likely that a person has a plural and diverse repertoire of mental representations of oneself. Besides the evaluative component, selfconcept contains many different representations that mediate and organize cognitive, affective, motivational, and interpersonal processes (Markus & Wurf, 1987). Some of these representations (e.g., demographic characteristics) tend to be relatively stable and constantly accessible while many other self-representations are more temporary and depend on individual's mood, motivation and prevailing environmental conditions (Showers, Abramson, & Hogan, 1998). Contingent on these circumstances, one particular subset of selfrepresentations is activated and becomes accessible in working memory at a given moment and will be replaced by another subset when these circumstances are changed. Accordingly, selfconcept appears to be a multifaceted, hierarchically organized, and dynamic entity (Markus & Wurf, 1987).

As it was noticed by Markus and Wurf (1987), the most dramatic change in research of self-concept during the last few decades has been the shift from efforts to describe the specific content of self ("I am an oboist" or "I am an Estonian," for instance) to identify more abstract and structural features of self-concept. Even though most of the basic terminology regarding self was introduced already by William James (James, 1890), the last few decades have witnessed an increased interest in studying structural aspects of self-concept such as potentiality (Markus & Nurius, 1986), accessibility (Markus & Wurf, 1987), complexity (Linville, 1985, 1987), clarity (Campbell, 1990; Campbell et al., 1996), and connectedness (Pearson et al., 1998), to name a few examples. Furthermore, the distinctions between independent-interdependent (Markus & Kitayama, 1991) and interrelated-isolated (Niedenthal & Beike, 1997) selves have become rather popular topics in research on self-concept, both across and within cultures.

# Measurement of Self-Concept

One of the main reasons for successful development of empirical personality research during the last decades has been the development of the NEO Personality Inventory (NEO-PI. NEO-FFI, and NEO-PI-R; (Costa & McCrae, 1985; Costa & McCrae, 1989), which has been jointly administered with almost every other currently available personality questionnaire and inventory. As a result of this systematic work, a seemingly endless variety of personality traits has been dramatically reduced by determining their unique place within a conceptual space defined by the NEO-PI five major dimensions (John, 1990). Consequently, the Five-Factor Model (FFM) has become a norm against which different personality trait taxonomies are tested--the existence of the common frame of reference has really transformed "the present Babel into a community that speaks a common language" (John, 1990, p. 66). Compared with such progress in personality research, empirical studies of self-concept have noticeably lagged behind in the general pace of psychometric investigations. Although the number of instruments for measuring self-concept is respectably large (see Keith & Bracken, 1996 for a review), there is no consensus with regard to basic characteristics or dimensions that are necessary to describe self-concept. Moreover, it is still unclear how various instruments intending to measure self-concept are related to one another. As it was noticed recently by Robins, Norem, and Cheek (1999): "In contrast to traditional personality theories, the vast majority of contemporary theories and models of the self address a specific process or structure and do not attempt to integrate the self into a broader conception of psychological functioning. These limited-domain theories and models have proliferated rapidly over the past few decades" (pp. 444-445).

Development of the multifaceted hierarchical models for describing the evaluative perception of self has been a notable accomplishment in the study of self-concept (Bracken, 1996; Bracken & Howell, 1991; Byrne & Shavelson, 1996; Fleming & Courtney, 1984; Marsh & Shavelson, 1985; Shavelson, Hubner, & Stanton, 1976). According to these models, the global unitary self-esteem forms only an apex of the hierarchical self-concept. Moving from the top to the bottom of such hierarchical structure, self-concept becomes increasingly differentiated. Although there is no full agreement among the researchers which categories are obligatory for specific self-evaluations, most of the existing models seem to agree on the inevitability of the separate facets for academic, social, physical, and family-related self-

concepts (Hattie, 1992). Yet, although self-esteem is an important aspect of self, it does not exhaust the whole content of self-concept.

So far, numerous attempts to develop sufficiently general instruments to encompass the whole range of self-concept beyond self-esteem have been only partly successful. For example, one of the most popular instruments, the Tennessee Self-Concept Scale (TSCS; (Fitts, 1965), was developed on the basis of theoretical considerations of self as a multidimensional construct that manifests corresponding to three internal and five external frames of reference. Unfortunately, the emphasis on multiple dimensions of self was not supported by adequate statistical procedures. As a result, many subscales of the TSCS along with the general factorial structure of the scale were not supported very well psychometrically (Boyle & Larson, 1981, Lang & Vernon, 1977; Marsh & Richards, 1988). Most importantly, the structure of the TSCS appeared to be clearly unidimensional, therefore in obvious contradiction with its proclaimed multidimensional nature (Bolton, 1979).

In addition to the attempts to develop multidimensional (omnibus) instruments to measure self-concept (e.g., Jensen, Huber, Cundick, & Carlson, 1991), many distinct scales have been designed to assess only one or a few specific aspects. However, several multi-faceted scales, these instruments have often failed to measure the intended construct. For example, there seem to be dispositional differences in the degree a person focuses on personal (private selfconsciousness) and social (public self-consciousness) aspects of one's self. However, the use of the Self-Consciousness Scale (Fenigstein, Scheier, & Buss, 1975), developed to measure private and public aspects of self-consciousness as well as social anxiety, has disclosed some discrepancies between the original interpretation of the construct of self-consciousness and the actual content of the Self-Consciousness Scale subscales (Abrams, 1988; Realo & Allik 1998; Zuckerman, Kuhlman, Joireman, Teta, & Kraft, 1993). The Social Anxiety subscale, for instance, appeared to be a near perfect indicator of Extraversion as measured by the NEO-PI (Costa & McCrae, 1989). The Public Self-Consciousness subscale, in its turn, was very strongly related to the NEO-PI Neuroticism, suggesting that it might well measure the experience of negative affect just as much as it measures the general awareness of oneself as of a social and public object (Realo & Allik, 1998). Analogously, several studies exploring the internal structure of the Self-Monitoring Scale (Snyder, 1974)--designed to measure the monitoring of one's own verbal or non-verbal self-presentation--have shown that the underlying construct of the scale is not unidimensional but rather consists of at least two distinct factors, Other-Directedness and Public-Performing or Acting (Briggs & Cheek, 1988; Briggs, Cheek, & Buss, 1980). As both of these factors have been found to be strongly related to two major personality dimensions, Surgency (Extraversion) and Agreeableness, their unique contribution to the description of the self-related information might also be questioned (Briggs & Cheek, 1988).

It is our opinion that the main weaknesses of the psychometrical studies of self-concept are not problems relating to particular instruments but lack of clear understanding how these numerous measures relate to each other and how they jointly cover the whole area of self-concept. Due to lack of knowledge about the general structure of self, relationships between relatively recently elaborated structural aspects of self-concept, such as complexity (Linville, 1985, 1987) and clarity (Campbell, 1990; Campbell et al., 1996), for instance, to previously developed self-concept measures have remained uncertain. Another serious shortcoming, obviously related to the first one, is the lack of systematic work in establishing relationships between the measures of self-concept and personality models.

# Relationships between Self-Concept and Personality Traits

It is hard to draw a sharp line between self and personality, especially as the main source of information about both self-concept and personality often lies in self-report questionnaires. Indeed, many almost identical items can be found in self-concept and personality inventories whereas validity of both self-concept and personality questionnaires depends on degree to which people can report accurately and adequately on their thoughts, feelings, and behavior (cf. Robins et al., 1999). The only remarkable difference between the two types of measures is perhaps the fact that personality assessments typically avoid evaluation on a continuum from good to bad, whereas self-concept measures often ask to evaluate oneself in relation to the others (e.g., "I am able to do things as well as most other people") (Ackerman, 1997). Personality psychology has focused on the study of enduring, generalized, and consistent patterns of thoughts, feelings, and actions that could be used for distinguishing one person from another. Analogously, self-concept is usually described (besides its dynamic nature) as a stable, generalized, and average view of self (Markus & Wurf, 1987). Thus, personality traits can manifest not only in attitudes, habits, and overt behavioral acts but also in enduring and consistent patterns of thoughts and feelings about one's self. Consecutively, in addition to many other things, a person can think and feel about their own personality traits.

One possible way to distinguish between personality traits and self-concept has been proposed by the five-factor theory of personality (McCrae & Costa, 1996). According to this

approach, it is possible to discriminate basic tendencies from characteristic adaptations. Personality traits, limited in their number, form one major division of the biologically based basic tendencies being hypothetical constructs that cannot be directly observed (McCrae & Costa, 1995). They can be described as abstract and lasting dispositions to think, feel, and behave in a certain way. In turn, characteristic adaptations are acquired skills, habits, attitudes, and relationships that result from the interaction between individual and environment. Over time, these specific adaptations are less stable than personality traits, as they must adjust in response to changes in social and physical environment. Except in case of maladjustment, these specific patterns of thoughts, feelings, and behaviors serve the purpose of adaptation: a person specifically adapts to requirements of the environment in accordance with their dispositions. In this perspective, self-concept is just another specialized subset of characteristic adaptations, with the main purpose of supplying an individual with some kind of sense of coherence and to organize the individual's cognitive, affective, motivational, and interpersonal processes (McCrae & Costa, 1996). Thus, it is possible that underlying personality dispositions manifest in self-concept exactly as they manifest in other forms of characteristic adaptations, not necessarily directed toward self.

It is also possible that self-concept is essentially related to how individuals see themselves along major personality dimensions like Extraversion, Neuroticism or Openness to Experience. According to this interpretation, self-concept is a thematic variation of basic personality traits and can be comprehensively described by the same set of personality dispositions (McCrae & Costa, 1982). Indeed, one of the most popular methods for measuring self-concept--Qsorting--is practically indistinguishable from traditional personality measures. The California Q-sort ratings have demonstrated a relatively good agreement between self-ratings given by a person about her- or himself and the ratings given by several other people familiar with this person. Both types of ratings have been found to converge on a five-factor solution which is interpretable in terms of the Big Five personality traits (McCrae, Costa, & Busch, 1986). It was also the NEO-PI-R authors deliberate intention to include the Self-Consciousness subscale (N4) as an indicator of Neuroticism (Costa & McCrae, 1992) in their NEO Personality Inventory. To a certain extent, this theoretical position resembles a view that was popular about thirty years ago and was perhaps dominating among the researchers of personality at that time: "To conceptualize perceptual behavior, defensive behavior, expressive behavior, motivations, and cognitions, for example, as manifestations of self-concept does not add anything to our description or explanation of the behavior in question. That is, to say that

a given behavior is a manifestation of self does not seem to lead to any different and more accurate prediction of behavior" (Byrne, 1966 pp. 434-435).

Another approach to self and personality stresses the uniqueness of self-concept and its independent role in determining one's behavior. According to this view, an individual's beliefs about one's self and abilities considerably affect one's behavior (Bandura, 1977). In particular, on numerous occasions, asking people to forecast their success in a certain task predicts their real performance better than merely observing the antecedents of these acts. Self-efficacy judgments, whether accurate or inaccurate, has been found to influence the choice of activities and environmental settings (Bandura, 1982). Beyond specific efficacy expectations, people also develop more general beliefs about their overall abilities to behave effectively and control events in their environment (Rotter, 1966). A central thesis of this approach seems to be a conviction that self-concept cannot be dissolved in personality traits, not at least without a considerable loss of information. As it was cogently said by Robins and colleagues (1999): "our understanding of many personality processes would be impoverished without the concept of self' (p. 467). In support of this view it has been claimed that indicators of self-concept, such as the level of self-consciousness or self-monitoring, and personality measures are only moderately correlated, thereby indicating that self-concept is relatively independent of personality (Carver & Glass, 1976; Snyder, 1980). In fact, this claim still needs to be supported by exhaustive and systematic studies of the self-concept measures and their relation to personality scales.

Returning to the beginning of this section, that is, to the five-factor theory of personality (McCrae & Costa, 1996), a practical question arises: how could one determine whether a given attribute is a <u>basic tendency</u> (personality trait) or a <u>characteristic adaptation</u> (e.g., an aspect of self-concept)? Although there is no simple rule, several features may be helpful in deciding which of these two alternatives seems to be more valid.

(1) In general, personality traits tend to have more long-term stability than characteristic adaptations. In a six-year longitudinal study of Neuroticism, Extraversion, and Openness, for instance, test-retest correlations ranged from .68 to .83, respectively (Costa & McCrae, 1988). Self-concept, on the other hand, appears to depend more heavily on individual's momentary motivational state and on prevailing social conditions (Markus & Wurf, 1987). Indeed, the test-retest correlation of the Rosenberg Self-Esteem Scale score has been found to be about .5 (McCarthy & Hoge, 1984), which is less than what is considered typical for basic personality traits.

- (2) Behavior genetic studies have consistently reported that each of the Big Five basic personality dispositions is strongly heritable with estimates of genetic contribution to phenotypic variance of the Big Five traits ranging from 40% to 60% (Jang, Livesly, & Vernon, 1996; Loehlin, 1992; Riemann, 1997). Most of the current models of self, however, rather stress its social character: self-schemas or generalizations about self are derived from an individual's past social experience (Oyserman & Markus, 1993). Only recent behavioral genetic studies have shown that approximately 30% of individual differences in the Piers-Harris Children's Self-Concept Scale is associated with genetic factors, with the remaining variability explained by predominantly nonshared environmental factors and measurement error (Hur, McGue, & Iacono, 1998). In spite of these relatively large estimates of heritability, not all aspects of self-concept have been found to be associated with genetic factors equally strongly It has been shown, for instance, that heritability of general self-worth, morality, and friendship as measured by the Self-Perception Profile for Adolescents, is relatively modest or nonsignificant (McGuire, Neiderhiser, Hetherington, & Plomin, 1994).
- (3) Basic dispositions are less vulnerable to situational factors or experimental manipulation than characteristic adaptations. Among primary motives of the development of the Self-Consciousness Scale (Fenigstein et al., 1975) were the effects of the external stimuli that directed attention either toward the self (mirrors or cameras) or moved attention away from the self (several external distractions). For example, it was demonstrated that the content and structure of self-concept can change with stress and mood (Showers et al., 1998), whereas the basic personality traits, on the contrary, are believed to be relatively immune to various environmental and situational changes (McCrae & Costa, 1982).
- (4) There appears to be accumulating evidence showing that basic personality traits are transcultural. In particular, the five-factor personality model measured by the NEO-PI-R has been shown to be universal across a number of languages and cultures, including languages from five distinct language families (McCrae & Costa, 1997). In contrast to this, it is often claimed that people in different cultures view and construe their selves in strikingly different ways (Markus & Kitayama, 1991). People in predominantly collectivist cultures (e.g., Asia, South-America) tend to have an interdependent self, viewing the self as intertwined with others whereas people in individualist cultures (e.g., the United States, Western Europe) mainly hold the Western, independent view of self. Mean global self-esteem scores tend to be considerably higher in individualist countries than in collectivistic countries (Campbell et al., 1996; Feather & McKee, 1993;).

- (5) There seems to be a good congruence between the others' and self-judgments of basic personality traits (Funder & Colvin, 1997). The self-other agreement has reached correlations of .40 and higher across all five major personality traits (McCrae, 1982) both within and across cultures (Albright et al., 1997) with some personality attributes being judged better and more accurately than the others. Yet, a person may have some advantages of making accurate judgments of their self compared to the others. For example, external judges (acquaintances or parents) are not very accurate in their judgments about how often the judged person fantasizes (Funder, Kolar, & Blackman, 1995). Therefore, it is logical to expect that on average, self-concept instruments may demonstrate lower self-other agreement than personality questionnaires.
- (6) Some individual characteristics are more visible (i.e., they are subjectively more visible in the meaning that it is easier to imagine behaviors that would confirm or disconfirm these individual characteristics) than the others. For example, personality characteristics related to Extraversion are by definition on public display whereas characteristics of Neuroticism are more private and less observable. Nevertheless, all basic personality traits are relatively well observable because they are most salient and socially relevant in human transactions (Goldberg, 1993). Following the idea introduced in the previous section, one could anticipate that characteristic adaptations, especially related to self-concept, are not as easily observable as the basic tendencies.
- (7) Finally, the term metatrait represents the quality of possessing <u>versus</u> not possessing a particular trait which can be estimated on the basis of the inter-item variability on the trait scale to operationalize the construct (Baumeister & Tice, 1988). Metatraits have both person-specific and trait-specific dimensions (Baumeister, 1991). People who respond consistently to the items on a personality scale can be considered more traited than people who respond quite differently to different items. Analogously, some personality scales can be considered more traited than others on the basis of how uniform and consistent people's averaged responses are with respect to these traits. It is reasonable to expect that basic tendencies have a higher degree of traitedness than characteristic adaptations.

# Aims of the Study

Despite the progress achieved in the measurement of specific aspects of self-concept (such as self-concept clarity, complexity, and self-esteem, for instance), the entire conceptual space of self has remained relatively unexamined and insufficiently understood. In this situation, an

exploratory approach to scale construction is perhaps the best research strategy (Ozer & Reise, 1994). Following the idea that self-concept is a "relatively stable set of self-attitudes reflecting both a description and an evaluation of one's own behavior and attributes" (Piers, 1984, p. 1), the first aim of our study was to develop a multidimensional scale that would sufficiently cover a broad area of self-concept. We started our project by developing an extensive pool of items. Next, on the basis of this item-pool,. The third step was a construction of scales for measuring these major domains--we assumed that, altogether, these dimensions provide a sufficiently broad and inclusive map of the conceptual territory related to self (Study 1). At this point, it is essential to emphasize that we were quite aware of the fact that these dimensions neither exhausted nor explained the whole conceptual territory of self. Our hope was that the dimensions would convey enough substantial information about the important aspects of self thereby providing a useful starting point for subsequent explorations.

The second goal of our study was to explore relations between self-attitudes and major personality dimensions. The projection of the self-concept domains into personality space would provide an estimate as to the extent various themes used to describe self-concept could be explained by general personality dispositions (Study 2). Following the idea that positive and negative affect form a temperamental basis for the two most salient personality dimensions, Neuroticism and Extraversion (McCrae & Costa, 1992; Tellegen, 1985), the relation of self-attitudes to self-related affect was examined. With an aim to specify how self-attitudes are related to the existing well-known measures of self, we studied relations between self-attitudes and several other self-related constructs including self-concept clarity and self-esteem.

Our third aim was to elaborate a set of empirical criteria on the basis of which it would be possible to decide whether and to what extent a certain measured attribute could be conceptualized as a characteristic adaptation or a basic tendency. On that purpose, we tested the applicability of several procedures to distinguish between personality traits and major domains of self-attitudes such as long-term stability (Study 1) but also self-other agreement, self-other difference, observability, and metatraitedness (Study 3). Following the theoretical propositions and empirical findings introduced in previous sections, we expected that the aforementioned aspects of self-concept, that are not direct manifestations of the basic personality dispositions, would demonstrate lower long-term stability, self-other agreement, and higher self-other difference than major personality domains. Also, we expected self-attitudes to be less observable and to exhibit less traitedness compared to basic personality traits.

# Study 1

# Method

# **Participants**

Altogether, 1313 individuals living in Estonia participated in this study. Due to the missing data, only 1159 (818 woman and 340 men, 1 unspecified) were included in the further analyses. Their age ranged from 14 to 81 with the mean age 25.0 years ( $\underline{SD} = 10.6$ ). The majority of the participants were undergraduate students either of the University of Tartu or the Estonian Business School majoring in various subjects. The sample also included a considerable number of individuals with different socio-economical and educational background who volunteered to participate.

#### Measures

Development of the Self-Attitude Scale. Since there is no consensus among researchers which dimensions and properties are necessary for defining self-concept, we adopted an exploratory approach to scale construction. The development of the Self-Attitude Scale (SAS) began by creating a sufficiently large and diverse pool of items that would cover a wide range of topics related to self-concept. The initial item-pool of 200 items was composed on the basis of various empirical and theoretical approaches to self. The choice of items was guided by two general principles: First, we tried to avoid questions about specific content of self, focusing on more abstract and structural features of self-concept. Second, in order to diminish the strength of the general evaluative dimension, we excluded typical self-esteem items (Rosenberg, 1965) that ask for person's overall evaluation of their worthiness as a human being.

The following sources or ideas served as a basis for compilement of the initial item-pool:

- (1) Translations or thematical variations of the items of the Self-Consciousness Scale (Fenigstein et al., 1975) and the Self-Monitoring Scale (Snyder, 1974). In total there were 24 items related to private self-consciousness and 16 items related to public self-consciousness. Seventeen items covered the theme of social anxiety and 44 items different aspects of self-monitoring;
- (2) Thirty-three items were inspired by James' concept of three major constituents of the self--material, social, and spiritual (James, 1890/1950)--represented by 12, 8, and 11 items, respectively. Examples of these items are as follows: "I know every birthmark on my body," "I often think of the others' opinions about me," and "My inner life is important to me."

- (3) According to the cognitive-experiental self-theory (Epstein, 1990; Epstein, Pacini, Denes-Raj, & Heier, 1996), there are two parallel modes of organizing experience and directing behavior: a rational system and an experiental system. The experiental system is assumed to be automatic, preconscious, primarily nonverbal and intimately associated with affects. In order to test the relative dominance of the intuitive-experiental system, 13 items were developed to measure person's obscure feelings or this unexplained "something" that could also organize behavior (e.g., "Sometimes I feel like something is directing my behavior"). Such self-obscurity appears to be an opposite of what is usually conceptualized as self-concept clarity (Campbell, 1990) or ego-resilience (Block & Block, 1980).
- (4) Fourteen items were developed to test the importance and strength of the theme of guilt or Superego in self-related thoughts ("I frequently feel guilty" or "I often think about the rightness of my deeds;" cf. Cattell's (1965) guilt proneness);
- (5) Following the theories of possible selves (Markus & Nurius, 1986) and self-discrepancy (Higgins, 1987), 23 items were generated to measure both the multiplicity of selves ("I feel that I have many different persons inside myself") and the strength of selves a person ought not become ("I feel myself a person whom I despise to be");
- (6) Eleven items were created to tap various forms of Ego control (cf. Block & Block, 1980) and self-regulation ("I'm not in control of my feelings" and "I cannot concentrate on one thought for a long time");
- (7) Development of twelve items was motivated by theoretical approaches of self-awareness and the theory of mind approach (Gopnick, 1983). Items like "I have no difficulties to check my train of thought" or "Frequently, I'm not sure whether I'm happy or sad" were composed to test the ability of self-reflection and self-knowledge.
- (8) Weary and Edwards (1994) demonstrated that there are individual differences in the extent to which people feel uncertain about their ability to identify and understand causal conditions for social events including other person's emotions, thoughts and behaviors. Individuals' subjective view of their own ability to comprehend thoughts and behavior of others or to adopt the point of view of other people was tested with 16 items ("Usually, I know beforehand what my conversation partner is going to say" or "It's easy to detect if somebody is pretending").

Respondents were asked to indicate their agreement with the items on a 5-point Likert-type scale anchored by 0 (absolutely wrong) and 4 (absolutely right).

# Procedure

Data were collected during 1994-1998. Participants completed the tests either during lecture time, in small group sessions, or in private. To examine a long-term stability of self-attitudes, 61 participants (53 females and 8 males) were re-tested in a time interval of 3.6 years. During the first administration of the scale, all participants (mean age = 20.3, <u>SD</u> = 2.3) were undergraduate students of psychology at the University of Tartu.

# Results

# Internal Structure of the Self-Attitude Scale

To reduce the vast range of information to a graspable set of meaningful dimensions as well as discover what kind of underlying structure the sample data may possess, the initial pool of items was scrutinized using diverse classification methods such as component, factor, and cluster analyses. Resulting from a range of procedures, seven dominant, replicable, and relatively independent dimensions emerged focusing around the following themes: spiritual and public self, physical self, self-obscurity, comprehension of others, social comfort, and sincerity-genuineness. It is remarkable that several other themes represented in our item-pool (e.g., monitoring of one's own verbal or non-verbal self-presentation) failed to form independent factors. On the basis of various classification analyses, a total of 49 items (seven for each dimension) were selected from the initial item-pool as the most salient representatives of these seven dimensions (the English translations of the items of the Self-Attitude Scale are given in Appendix).

A principal-components analysis of 49 items followed by a varimax rotation was used to determine factor structure. Although nine factors had eigenvalues above 1 (Kaiser, 1960 criterion) both the scree test (Cattell, 1966) and the parallel analysis (Horn, 1965; see also Zwick & Velicer, 1986) suggested that 7 factors should be retained accounting for 46.8% of the total variance. The seven-factor solution yielded also the best simple factor structure--all items, except three (#25, #27, and #49) loaded above |.30| only on one, appropriate factor. The varimax-rotated principal components are presented in Table 1. The seven-factor structure appeared to be the best approximation to the data also then the principal component analyses with varimax rotation were undertaken separately on sub-samples of males ( $\underline{n} = 340$ ) and females ( $\underline{n} = 818$ ). In women's sample, all items except one (#25) had their factor loadings

above | .30 | only on one factor whereas in men's sample seven items had secondary loadings (#9, #11, #25, #27, #29, #40) on other factors than intended.

Insert Table 1 about here

In order to test the stability of the seven-factor structure of the 49 items, several analyses were undertaken. First, different procedures were used for extracting factors from the correlation matrix. When a principal factor analysis (communalities = multiple  $\mathbb{R}^2$ ) with varimax rotation was used to summarize the data set, for instance, the seven-factor solution resulted in all items, except two (#25 and #27), loading above 30 only on one factor. The seven-factor structure also remained practically invariant across other communality estimates (iterated communalities, maximum likelihood factors, and principal axis method) and methods of rotation (varimax, biquartimax, quartimax, and equamax). Second, results of an exploratory principal-components analysis based on polychoric correlations (PRELIS 2.30; Jöreskog, Sörbom, du Toit, & du Toit, 1999) were almost identical to the factor structure extracted on the basis of Pearson correlations--the Tucker's coefficients of congruence between the corresponding factors were all around .999 Third, to examine the stability of the dimensionality, a split-sample strategy was adopted (Everett, 1983). For this reason, the total sample was split randomly into two approximately equal halves and the principal-components analyses followed by varimax rotation was performed separately on two sub-samples. Using the same criteria as described in the previous sections, seven factors were retained in both subsamples. The seven-factor models also provided the best possible simple structures in both sub-samples: all items, except #27 in the first sub-sample and items #49, #25, #27, and #40 in the second sub-sample, loaded greater than | .30 | only on one appropriate factor. Next, the Tucker's coefficients of congruence were computed between the two seven-factor structures-the congruence coefficients for the seven factors were all in range from .95 to .98. As factor congruence coefficients exceeding .90 are usually taken for evidence that a factor has been replicated, these relatively high values indicated that the seven-factor structure was very similar in two sub-groups and thus, could be considered quite stable and reliable.

# Insert Table 2 about here

To measure the aforementioned seven domains of self, new subscales were constructed on the basis of the seven-factor structure of 49 items. More specifically, the subscales were formed of seven items that significantly loaded together on one factor. Consequently, the Self-Attitude Scale (SAS) was created consisting of seven 7-item subscales, each tapping some specific aspect of the global concept of self (see Appendix). Considering the content of the items, the subscales were named as Spiritual Self (SpiS), Public Self (PubS), Physical Self (PhyS), Self-Obscurity (SObs), Comprehension of Others (CmpO), Social Comfort (SoCmf); and Genuineness (Gen). Table 2 presents the mean scores, standard deviations, reliability and stability coefficients of the subscales. All seven scales showed satisfactory internal reliabilities-Cronbach alphas ranged from .67 (Gen) to .83 (SObs). Five of seven long-term stability coefficients were above .60 peaking with the maximum stability of 72 for Public Self over a 3.6-year period during early adulthood (university students). Two scales--Spiritual Self and Social Comfort--exhibited relatively low long-term stability with respective coefficients of .40 and .44.

As can be seen in Table 2, significant gender differences existed for almost each scale, except for the Comprehension of Others and the Social Comfort subscales, with females scoring higher than males on the Spiritual and Public Self as well as on the Self-Obscurity and Genuineness subscales. Men had higher scores than women only on the Physical Self subscale.

Description of the Self-Attitudes Scale (SAS) Subscales

Generally, our data seem to support three constituents of the empirical self described by William James (1890/1950): the material self (including one's body), the spiritual self (one's private subjective state of consciousness), and the social self (as one is perceived by others). The Physical Self subscale seems to measure one's feelings of satisfaction with one's body and physical appearance (cf. Stein, 1996). The Spiritual Self subscale assesses the tendency to focus on one's inner thoughts and feelings whereas the Public Self could be characterized as measuring the general awareness of oneself as a social and public object. Operationally, the two subscales are relatively close to the <u>PrivSC</u> and <u>PubSC</u> subscales of the Self-Consciousness Scale (Fenigstein et al., 1975) and its Estonian version (Realo & Allik, 1998), sharing a number of identical items. Previous analyses have revealed that the <u>PrivSC</u> scale is

actually composed of two different factors-internal state awareness and self-reflectiveness (Burnkrant & Page, 1984; Creed & Funder, 1998). Our data seems to support this distinction as the Spiritual Self subscale was exclusively made of the items relevant to self-reflectiveness and propensity to ruminate about oneself. The Self-Obscurity subscale that appears to tap the construct of self-concept clarity as elaborated by Campbell and colleagues (Campbell, 1990; Campbell et al., 1996), measures the extent to which the contents of an individual's self are obscure and undefined. The Comprehension of Others subscale assesses the tendency to understand the behavior and thoughts of others, to read the other's minds. This scale seems to be related to the Faith in Intuition Scale developed by Epstein and his colleagues (Epstein et al., 1996) and to Causal Uncertainty Scale (Edwards, Weary, & Reich, 1998; Weary & Edwards, 1994). The Social Comfort subscale reflects feelings of personal comfort and easiness in the presence of others in various social settings and/or new situations. Five of the seven items on this scale are identical to the SAnx of the Self-Consciousness Scale (Fenigstein et al., 1975). In our previous study, contrary to the intention of the authors of the Self-Consciousness Scale, the SAnx appeared to be almost a perfect indicator of Extraversion (Realo & Allik, 1998). The Genuineness subscale describes the tendency to conduct oneself in a sincere manner and expose "true feelings" in interpersonal settings. The tendency to express accurately one's true emotional state is one of the principal aspects of the self-monitoring concept (Snyder, 1974). Factor analytic studies of the Self-Monitoring scale revealed the existence of several factors, one of which was characterized as the other-directed selfpresentation factor (cf. Briggs et al., 1980).

Insert Table 3 about here

The correlations between the seven SAS subscales are shown in Table 3 Although the approximation with the seven orthogonal factors was relatively good, the existence of substantial correlations between the subscales suggested that the dimensions are not completely independent from one another. Indeed, a hierarchical factor analysis of oblique factors showed that there were at least two general secondary factors that affected various domains of self-attitudes measured by the 49 items.

Figure 1 presents the complete structure of the varimax-rotated factors, for all analyses from one to seven factors. Factors are identified by their hierarchical level (1 through 7) and

by their order at a given level of hierarchy. The figures show the correlations of the factor scores at each level with those immediate above and below them (correlations below | 45 | are omitted). It is remarkable that the Comprehension of Others subscale emerged at the second level (2/2), immediately after the first unrotated principal component (FUPC) and remained unconnected to the other scales at all following levels. In contrast, the Social Comfort factor emerged as the last factor (7/7) at the lowest level of the seven-factor solution. Although the both the scales--Comprehension of Others and Social Comfort--remained clearly separated from the other remaining five scales, their isolation may be caused by differing reasons. The detachment of the Comprehension of Others scale may be caused by the fact that a person's beliefs about their ability to understand behavior and thoughts of others or to read other's minds is due to efficacy expectations rather than specific attitudes related to the core of selfconcept. The Social Comfort scale, measuring feelings of personal comfort and easiness in the presence of others, may represent the personality trait Extraversion to a greater extent than a specific attitude towards a person's own self. The remaining five scales formed a hierarchical structure which at the three-factor level was split into two branches being thereby in accordance with a classic distinction between the self-as-perceiver (the "I") and the self-asobject of perception (the "Me"). Indeed, two subscales of the SAS (SpiS and PubS) correspond to the first category (self-awareness) and the other three subscales--Self-Obscurity, Genuineness, and Physical Self-to the second class (self-representations) of selfphenomena.

Insert Figure 1 about here

## Discussion of Study 1

Study 1 demonstrates that the self-concept laying beyond self-esteem is far from being an unidimensional construct. The results revealed the existence of seven replicable and relatively stable dimensions focusing around the themes of spiritual, public and physical selves, self-obscurity, sincerity/genuineness, comprehension of others, and social comfort. These seven themes seemed not to be statistical artifacts, as the seven-factor structure of the scale proved to be highly stable and reliable across various analyses. It is quite remarkable, however, that several thematic groups of items included in the initial item-pool such as self-monitoring or internal state awareness failed to form independent factors. Even supposing that to some

extent this could be caused by the selection of the items in our initial item-pool, it is certainly not the case regarding the self-monitoring theme which was represented by a respectable amount of items. It is more likely that the failure of the visible appearance of the themes of the Self-Monitoring Scale in our scale was due to the lack of unique contribution to the description of the self-related information (Briggs & Cheek, 1988). However, the fact that these and several other constructs did not emerge as coherent domains in our research does not mean that such processes do not exist--it rather indicates that lay-persons are not able to discriminate these aspects of self-concept from the others.

Yet, five subscales of the SAS were unquestionably related to self as having deep roots in earlier research on self-concept. In particular, two of these themes--Spiritual Self and Public Self--were very close if not identical to the two Self-Consciousness Scales (Fenigstein et al., 1975). The Self-Obscurity subscale appeared to be almost an inverted replica of the Self-Concept Clarity Scale (Campbell, 1990; Campbell et al., 1996) and Physical Self had a strong resemblance to many scales focused on physical appearance and/or body image (e.g., Stein, 1996). Although we are not aware of any instrument corresponding exactly to the Genuineness scale, the concept of authentic and "true self" (as an opposite to acting and role-taking) is one of the subthemes of the Self-Monitoring Scale (Snyder, 1974). A group of items (e.g., "In different situations and with different people, I often act like very different persons" and "My behavior is usually an expression of my true inner feelings, attitudes, and beliefs") of the Self-Monitoring Scale form a factor which was named Other-directed self-presentation (Briggs et al., 1990).

Two scales--Comprehension of Others and Social Comfort--that remained separate from the other scales in the factor tree (Figure 1) apparently do not occupy a central position in the conceptual space of self. On one hand, a person's opinions about their ability to comprehend and understand psychological states of others are unlikely to locate in their core self-concept. On the other hand, feeling comfortable in various social settings appears to characterize a person's general tendency towards Extraversion rather than a specific attitude towards one's self. But besides these two scales, the SAS provides support to the main constituents of the empirical self--material, social, and spiritual--as proposed by William James (1890/1950) and elaborated by many contemporary researchers (cf. Lamphere & Leary, 1990). These three constituents, accompanied by themes of genuinity and self-obscurity, appear to form five distinct, yet not orthogonal, aspects of the self-concept. The intercorrelations and the step-by-step emergence of at least five scales from a common hierarchical tree shown in Figure 1

indicated that these themes were conceptually interrelated--being either opposed to one another or sharing some common abstract information. The first principal division into two branches corresponded well to the distinction between self-awareness and self-representations that could be labeled as the "I" consisting of Spiritual Self and Public Self and the "Me" consisting of Self-Obscurity, Genuineness, and Physical Self. The emergence of the Spiritual Self and Public Self scales together in one branch indicated that these two scales share a common content that could be described as a high level of self-consciousness or relatively frequent thinking about oneself.

#### Study 2

Having identified the existence of seven domains of self in Study 1, we proceeded with the second aim of our research and tried to locate the self-attitudes in a general network of major personality dimensions, self-related affect, and well-known self-related constructs such as self-esteem and self-concept clarity. To fulfill this purpose, different subsamples of the general population (as described in Study 1) were tested with four other instruments.

#### Method

## Measures and Participants

Personality traits. To examine the relations between the self-attitudes and personality dimensions, 986 subjects (691 females and 294 males, 1 unspecified) with mean age 24.5 (SD = 10.1) were asked to complete the Estonian version (Pulver, Allik, Pulkkinen, & Hämäläinen, 1995) of the NEO Personality Inventory (NEO-PI; Costa & McCrae, 1985). The Estonian NEO-PI is a 181-item questionnaire that measures five major dimensions of personality: Neuroticism (N), Extraversion (E), Openness to Experience (O), Conscientiousness (C), and Agreeableness (A).

Global self-esteem. The Estonian version (ERSES; Pullmann & Allik, 2000) of the Rosenberg Self-Esteem Scale (1965) was administered to 323 subjects (191 females and 132 males) with mean age 33.8 (SD = 15.0). The ERSES consists of 10 items and measures "global self-esteem understood as a person's overall evaluation of their worthiness as a human being" (Pullmann & Allik, 2000, p. 702).

<u>Self-concept clarity</u>. Two hundred and fifty-three participants (157 females and 96 males with mean age 33.4,  $\underline{SD} = 14.8$ ) completed the Estonian version of the Self-Concept Clarity Scale (ESCCS; Matto & Realo, in press) developed by Campbell and colleagues (1996). The ESCCS is a 12-item measure that is developed to assess "the extent to which the contents of

an individual's self-concept (e.g., perceived personal attributes) are clearly and confidently defined, internally consistent, and temporally stable" (Campbell et al., 1996, p. 141).

The participants were asked to respond to all five above-mentioned scale items on 5-point Likert scales anchored by <u>absolutely wrong</u> (0) and <u>absolutely right</u> (4).

Emotional experience. Four hundred and thirty-four individuals (329 females and 104 males, 1 unspecified) with mean age 20.5 ( $\underline{SD} = 3.3$ ) were asked to indicate to what extent they have experienced 10 positive and 10 negative emotions from the General Affect scales (Allik & Realo, 1997) during the past few weeks. The response format for this particular task consisted of a 5-point scale running from very often (4) to very rarely (0).

Insert Table 4 about here

### Results

## Correlations Between the Scales

Correlations of the SAS with all other scales used in this study are shown in Table 4.

Personality dimensions. Three of the SAS subscales (PubS, SObs, and PhyS) had their strongest correlations with the NEO-PI Neuroticism and two (CmpO and SoCmf) with Extraversion. Spiritual Self was most strongly correlated with the NEO-PI Openness and Genuineness with Agreeableness. In order to evaluate how much each of the SAS subscales contained information that could also be measured by the NEO-PI, a series of standard multiple regression analyses was conducted to predict the SAS scales from five NEO-PI dimensions. As Table 4 shows, 64% of variance of the Social Comfort scale could be predicted from the NEO-PI scores. All other six SAS subscales were much more independent from the personality measures: four scales had approximately 1/3 of the shared variance with the NEO-PI domains whereas two SAS subscales--Comprehension of Others and Physical Self--had only a negligible amount (14-16%) of variance that could be predicted from personality dimensions. It is clear that 64% represents a considerably big and 15% a relatively small amount of the shared variance. But what about intermediate values? In order to estimate the significance of the shared variance of the SAS and the NEO-PI scales, we ran a series of standard multiple regression analyses to predict each of the five personality dimensions from the remaining four factors. As the Big Five dimensions are supposedly orthogonal, the amount of variance each dimension shares with all others should be accidental. The predictability of the NEO-PI domains from the rest of four dimensions was the following: Neuroticism--40.2%, Extraversion--21.3%, Openness to Experience--12.4%, Conscientiousness--35.1%, and Agreeableness--20.6%. On average, 25.9% of each domain could be predicted by the other four dimensions.

General self-esteem and self-concept clarity. General self-esteem had the highest correlations with Self-Obscurity (-41), Physical Self (.36), and Social Comfort (.30) whereas the correlations with Spiritual Self and Genuineness scales were virtually zero. Similarly general self-esteem, self-concept clarity demonstrated the highest negative correlation with Self-Obscurity (-.59) being basically unrelated to Spiritual Self and Genuineness and also to Comprehension of Others. On average, the percentage of the total variance of the SAS subscales accounted by general self-esteem and self-concept clarity ranged from 1% (Gen) to 40% (SObs) with mean percentage of 12%.

<u>Self-rated affect</u>. In general, the two self-rated affectivity measures accounted for a relatively small proportion of the variance of the SAS subscales (typically less than 10%). The highest correlations were found between the General Positive Affect and Social Comfort (.37) and the General Negative Affect and Self-Obscurity (.33) subscales. Four SAS subscales (<u>PubS</u>, <u>PhyS</u>, <u>SObs</u>, and <u>SoCmf</u>) were significantly related to both Positive and Negative Affective Scales (with opposite signs). The Comprehension of Others scale had a small significant correlation (.16) only with General Positive Affect, and the Genuineness scale with General Negative Affect (-.18). Spiritual Self was not found to relate significantly to any affect scale.

## Discussion of Study 2

The results of Study 2 showed that all seven SAS subscales were moderately related to a specific domain of the NEO-PI--Spiritual Self to Openness; Public Self, Physical Self, and Self-Obscurity to Neuroticism; Social Comfort and Comprehension of Others to Extraversion; and Genuineness to Agreeableness. Yet, none of the subscales of the SAS, except Social Comfort, were clearly redundant with regard to the five basic personality traits. There is no doubt that most of the content (64%) of Social Comfort can be predicted from the five NEO-PI domains, primarily from Extraversion. On the other hand, two of the SAS subscales-Comprehension of Others and Physical Self--were virtually unrelated to major personality traits: only 14% and 16% of their variances could be predicted from the basic personality

domains. Between these two extremes, however, the percentages of shared variance between the SAS subscales and the NEO-PI domains ranged from 27% to 36%. Does the size of these percentages allow us to claim that the SAS subscales have no or very little unique contribution to that already described by the five personality traits? In order to answer this question, one has to determine a base level of accidental correlation, especially in the domain of individual differences as everything appears to be correlated with everything to a certain extent. Even two attributes that are considered independent in theory are often found to correlate in empirical research. Thus, although the NEO-PI is expected to measure five orthogonal personality dimensions, its domain scores are intercorrelated with one another. Therefore, we studied the relations between the NEO-PI domains using standard multiple regression analysis. More specifically, we calculated the percentage of variance of each domain that can be predicted from the remaining four domains. The mean percentage of the shared variance was 25.9% ranging from 12.4% (Openness) to 40.2% (Neuroticism). All the SAS scales, except Social Comfort, fell safely within this range. Thus, from the extent the five basic personality traits stand apart from one another, we can maintain that at least six of the seven SAS scales stand apart from the basic personality traits. This result does not support the idea that selfconcept is merely the way individuals see themselves along major personality dimensions. It is quite the opposite, our data seem to support the position that self-concept cannot be dissolved in personality traits, at least not without a considerable loss of information.

According to the temperamental interpretation of personality, certain personality dispositions represent innate neurologically based differential sensitivity to painful and pleasurable stimuli. Gray (1971) proposed that the behavior of extraverts, on one hand, is primarily regulated by rewards associated with positive affects. The behavior of neurotics, on the other hand, is predominantly controlled by the behavioral inhibition system associated with negative affects. Our results demonstrated relatively small correlations between the SAS subscales and the General Affect scales, indicating that on the self-report basis, self-attitudes are relatively independent of the basic temperament types. As expected, the strongest correlation (.37) was found between the Social Comfort and Positive Affect scales. All other correlations were relatively moderate which allow us to conclude that the content of the SAS scales cannot be exhaustively described by general behavioral dispositions.

The pattern of correlations between the SAS subscales and general self-esteem supported the idea that although self-esteem is an important facet of self, it does not cover the whole area of self-concept-general self-esteem demonstrated significant relationships with five of the seven SAS subscales (all but the <u>SpiS</u> and <u>Gen</u> scales). The finding that general self-esteem was related most strongly and negatively to Self-Obscurity is consistent with prior research (Baumgardner, 1990; Campbell, 1990; Campbell, Chew, & Scratchley, 1991, Campbell & Fehr, 1990; Campbell & Lavallee, 1993; Campbell et al., 1996; Matto & Realo, in press; Pullmann & Allik, 2000; Smith, Wethington, & Zhan, 1996) showing that people scoring higher on general self-esteem tend to have more positive and well-articulated self-concepts. The fact that self-esteem was strongly related to Physical Self and Social Comfort indicates that people with higher scores of self-esteem are more satisfied with their looks and their body and feel more comfortable and easy in the presence of others in diverse social settings. Because the Self-Obscurity subscale was designed to measure the extent to which the contents of self are obscure and undefined, it was not surprising that we found a significant negative correlation between the scores of Self-Obscurity and the ESCCS. Differing from self-esteem, self-concept clarity demonstrated a small positive correlation with Spiritual Self, indicating that people who tend to have more confused and hazey self-concepts are likely to pay more attention to their feelings and inner life.

## Study 3

The third aim of our study was to elaborate a set of empirical criteria on the basis of which it would be possible to decide whether and to what extent a certain measured attribute could be conceptualized as a characteristic adaptation or a basic tendency. To reach that aim, Study 3 was undertaken. In this study, we tested the applicability of three procedures to distinguish between personality traits and major domains of self-attitudes such as self-other agreement, self-other difference, observability, and metatraitedness.

First, we examined the congruence between others' judgments and self-judgments of self-attitudes (i.e., self-other agreement and self-other difference). We expected that several aspects of self (e.g., spiritual self) would be viewed differently from an external point of view than by self-judgments. Thereby demonstrating lower self-other agreement for self-attitudes more closely related to personality traits. Moderators that influence the discrepancy between self-reports and observer-ratings were also of interest. Secondly, we expected that the largest self-other discrepancy would be observed in attributes which are less expressed in people's overt behavior and/or not very easily observable from an external point of view. For that reason, we asked a group of "experts" to rate each item with regard to its observability in

people's behavior. Finally, a degree of metatraitedness of every scale was estimated assuming that the Big Five scales have a higher degree of traitedness than the SAS subscales.

#### Method

#### Measures

In addition to the SAS, an 80-item Big Five personality questionnaire that measuring five basic personality dimensions (16 items per each domain)--Neuroticism (N), Extraversion (E), Openness (O), Conscientiousness (C), and Agreeableness (A)--was used in this study. The scale was designed for the current project from a large pool of personality items. The subscales of the Big Five personality questionnaire have relatively high correlations with respective domains of the Estonian NEO-PI (Pulver et al., 1995). The Cronbach alphas of the subscales ranged from 76 (O) to .90 (N).

## **Participants**

One hundred and one individuals (81 women and 20 men) with an age range from 17 to 41 (mean age = 21.9 years, ( $\underline{SD}$  = 4.1) participated by filling in the SAS and the Big Five personality questionnaire. The majority of the participants were undergraduate and graduate students of the University of Tartu, but the sample also included a number of individuals with different socio-economical and educational background. Each subject ("target-person") was estimated by two judges/observers who were recruited from peers and/or family members of the subject. The mean age of these 202 judges (153 women and 49 men) was 26.0 years ( $\underline{SD}$  = 10.0). All individuals ( $\underline{N}$  = 303) volunteered to participate in this study and received no compensation for their involvement. Each target-person completed "self"-report forms of the SAS and the Big Five personality questionnaire, the two judges for each person completed the "other"-report forms of the two scales.

Twenty one experts (mainly graduate students and members of the staff of the Department of Psychology of the University of Tartu) were asked to rate each item of the two scales according to two different instructions. First, the experts were instructed to estimate to what extent a basic idea behind each item was exposed in people's behavior, i.e., how clearly the activity, process, feeling, attitude, or idea that the item supposedly measures was displayed in people's overt behavior ('observability'). The ratings were given on a 5-point scale running from is not displayed in overt behavior to is clearly displayed in overt behavior. Secondly, the experts were asked to indicate weather it is socially desirable/undesirable to agree/disagree with a given item ('desirability'). The ratings were given on a 5-point scale anchored by

undesirable (0) and desirable (4) with neutral (2) in the middle. All ratings were averaged to obtain a summary rating of the respective scale.

Insert Figure 2 about here

#### Results

### Self-Other Agreement and Self-Other Difference

Means and standard errors of the Big Five and the SAS scales, both for target-persons and observers, are shown in Figure 2. This plot shows the mean (filled circles for the target-person and unfilled squares for the average of two observers), the standard error is represented by the surrounding box and the "whiskers" represent a 95% confidence interval defined as the scale mean  $\pm$  1.96 times the scale standard error. In three cases, "whiskers" for the targets and observers did not overlap: on average, observers considered their targets more conscientious (C) and more socially comfortable (SoCmf) yet less focused on their inner thoughts and feelings (SpiS) than the targets thought of themselves.

Insert Table 5 about here

Intercorrelations between self-ratings (rows) and observer-ratings (columns) on the Big Five personality dimensions and the seven SAS scales are presented in Table 5. The self-other agreement was computed as a scale-by-scale zero-order correlation over all 101 target-observer pairs. In order to remove elevation effects, data was normalized both within raters (i.e., both targets and observers) and within scales before computing correlations (cf. Bernieri, Zuckerman, Koestner, & Rosenthal, 1994). As a result of this normalizing operation, the mean response for targets and observers, as well as for all scales, was set to zero. Thus, the effect of the shared response styles between observers and targets and the effect of the average profile similarity were both eliminated. However, these unbiased correlations were not remarkably different from the respective raw correlations.

As expected, the highest self-other agreement among the personality scales was observed in the case of Extraversion (.63) and lowest in the case of Agreeableness (.51). On the SAS

scales, however, only agreement on the Social Comfort scale exceeded .50 level. As for the four SAS scales (PubS, SObs, PhyS, and Gen), the self-other agreement was moderate, ranging from .35 to 48. On two SAS scales, Spiritual Self and Comprehension of Others, the agreement failed to reach any level of significance (p > .05). Quite surprisingly, the correlation between self and observer's judgments on Spiritual Self scale was plain zero. At this point, it is also important to note that the table of correlations (see Table 5) is not entirely symmetrical with respect to the main diagonal. For example, a person's own opinion of their Conscientiousness was highly correlated with observer's ratings of their Neuroticism (-.38) but not vice versa: an observer's rating of a target's Conscientiousness was not related to a target's own opinion about their emotional stability (-.09).

.....

## Insert Figure 3 about here

The self-other agreement can be assessed in two different ways. First, we computed the agreement measure as a mean difference between self-ratings and observer-ratings across all scales. Secondly, the congruence measure was computed as a correlation between self-judgments and the mean judgment of two observers over all items. Although formally these two measures are orthogonal (cf. Funder & Colvin, 1997), the correlation between the mean differences (agreement) and correlations (congruence) was statistically significant,  $\underline{r} = -.55$  (p < .001). In other words, higher mean differences between self-ratings and observer-ratings was related to lower correlations between self-other judgments.

In order to estimate which domains of personality traits or self-attitudes might be related to self-other disagreement, we predicted the mean self-other differences and correlations from the personality and self-attitude measures. Figure 3 shows four Pareto charts of the <u>t</u>-values associated with each predictor parameter for the self-ratings (left column) and observer-ratings (right column) and for both type of measures, agreement (upper row) and congruence (lower row). The inspection of these charts demonstrates that both self-other agreement measures (i.e., agreement and congruence) were better predicted from a target's own judgments of personality or self-attitudes--43% and 40% of the variance of the self-other agreement and congruence measures could be predicted from personality and self-attitude measures, respectively The observer-ratings can explain only 18% and 7% of the variance of the self-other agreement and congruence, respectively. Both the agreement and congruence

measures were best predicted by a target's own ratings of their Agreeableness. However, several domains of self-attitudes such as Spiritual Self and Public Self made a significant prediction to dependent variables. Those individuals who considered themselves comfortable in social situations, had a clear picture of themselves and were not too much concerned about the others' opinions, attained a better agreement both between their own ratings and the mean of two external judges and between the judges themselves.

## Expert Ratings of Observability and Desirability

Are some traits judged with better agreement than others? Indeed, the correlation between expert ratings of the Big Five and the SAS scales observability and the self-other agreement was significant:  $\underline{r}(12) = 72$ ,  $\underline{p} = 008$ . However, there was no statistically significant correlation between the expert ratings of social desirability and self-other agreement.

#### **Traitedness**

Finally, we attempted to evaluate all 12 scales used in this study--the Big Five and the SAS scales--on a dimension of traitedness. For that purpose, we ranked the 12 scales using five attributes: (1) Observability--expert ratings of the subjective visibility and judgeability of a given trait; (2) Self-other agreement--correlation between self-judgments and the mean judgment of two observers over all items; (3) Self-other difference--mean absolute difference between self- and observer-ratings of a given trait (please note that Figure 2 presents not the absolute but the mean signed differences); (4) Long-term test-retest stability--correlation between scores of the same test separated in time (Study 1); (5) Metatraitedness--average interitem variability of the scale, which is usually interpreted to represent the quality of possessing versus not possessing a particular trait (cf. Baumeister & Tice, 1988). These five independent rankings shown in Table 6 were reasonably consistent with the Cronbach alpha of .79. The 12 scales in Table 6 were arranged according to the sum of their ratings in the topdown direction. It is remarkable that personality scales (E and O) occupied two top positions and the SAS scales occupied the four lowest positions in this list. Two of the seven SAS scales--Genuineness and Social Comfort--behaved very similarly to typical personality scales whereas the Big Five Agreeableness, surprisingly, had attributes that made it more similar to characteristic adaptations (i.e., the SAS scales).

Insert Table 6 about here

## Discussion of Study 3

The results of this study showed that two lay-judges agree well both with each other and with the target person across all the Big Five personality dimensions. This implies that all five dispositions are exposed in social behavior as they were congruently judged both from the internal and external points of view. As mentioned earlier, the correlation between expertratings of observability and self-other agreement across both the Big Five and the SAS scales was highly significant.

Yet, contrary to the Big Five scales, relatively poor self-other agreement was found for the SAS scales. Spiritual Self and Comprehension of Others, failed to reach any statistically significant level of self-other agreement. In this respect, it is indicative that the observer-ratings of targets' spiritual selves were significantly correlated not with targets' own opinions about their spiritual selves but with their self-reported scores of Extraversion ( $\underline{r} = -.28$ ). In other words, external observers tended to interpret introvertedness as a tendency to focus on one's inner thoughts and feelings. Thus, there are some aspects of self-concept of which an individual's own perspective is considerably different from an observer's perspective. The observed asymmetry of the self-other correlation matrix provided further support to this idea.

Kolar, Funder, and Colvin (1996) have proposed that the most valid source for personality judgments may not be self-reports but the consensus of the judgment of knowledgeable others. This study indicated that the situation may be different when judgments are made about attributes that cannot be easily estimated on the basis of overt behavior. We studied potential sources of. We found that individuals who, according to their own opinion, were agreeable, fundamentally altruistic, sympathetic to other people and eager to help the others, held views about their personality and self which were more congruent with opinions of others (i.e., observer-ratings). Quite the opposite was true for individuals who viewed themselves as disagreeable and antagonistic. These individuals were also in lower agreement with the opinion of two judges. The same individuals, at least in their own opinion, had a relatively obscure self-concept and tended to feel comfortable and at ease in social situations. At the same time, external observations about the degree of agreeableness of those target persons were at the very bottom of the predictors list. Why does a person's own view of their personality and self predict self-other agreement but not a view of two external judges? One explanation for this discrepancy is acknowledgment of two separate sets of personality attributes--private and

public. As far as the relatively good self-other congruence is concerned, the Big Five personality traits seem to belong to the public domain. Simultaneously, there is a private part which is not easily accessed or observed from an external view point. An individual, however, is probably quite aware of those private aspects of personality which remain distinct from those aspects that are more publicly exposed. Our data did not support the view that the distinction between private and public coincides with "true" and "authentic," "faked" and "acted" selves as the Genuineness scale made no substantial contribution to the self-other agreement-difference prediction.

Returning to the question of how the basic tendencies can be operationally separated from the characteristic adaptations, we proposed an aggregate measure composed from five independent attributes (Table 6). According to this combined measure, all personality scales were found to be located in the upper part and the SAS scales in the lower part of the list. It was not a surprise that the NEO-PI Extraversion, which has been included in every major taxonomic scheme of personality traits (Watson & Clark, 1997) as a higher-order factor, occupied the top position on the traitedness rating. Due to the extremely high correlation with Extraversion, a relatively high position of Social Comfort in the traitedness list was also an expected result. The lowest position of the Self-Obscurity scale in the list was also anticipated: the extent to which self-beliefs are obscure and incomprehensibly defined is obviously not an attribute that remains stable in time, is easily observed in social settings or on which self-other agreement could be easily achieved. Analogously, the Spiritual Self scale obtained a relatively low position on the traitedness ranking. At this point, it is also important to notice that the low position of these two SAS scales (i.e., Self-Obscurity and Spiritual Self) in the traitedness list was not caused by their low internal reliability. Cronbach alpha for the Self-Obscurity Scale, for instance, was .82 which is high enough by itself but would raise as high as .91 if the number of the items in the scale (7) is increased to that of the personality questionnaire (16) under the assumption that after adding new items, the intercorrelations between the items remain the same.

#### General Discussion

An exploratory approach adopted as a research strategy for this study revealed that the conceptual territory of self beyond self-esteem is far from being unidimensional. There was nothing particularly surprising about the seven recurrent themes around which the items from the item-pool were grouped. All seven themes are quite well-known from previous empirical

and theoretical research on self and can be well interpreted in the Jamesian tradition. Three basic constituents of empirical self--spiritual, social, and material (physical)--in addition to the topics of clarity/obscurity, genuinity, and beliefs about one owns ability or self-efficacy to comprehend others--clearly emerged in our research. Yet, it was somewhat surprising that several well-known domains of self, from previous research literature, were represented in the initial item-pool but failed to form independent stable factors. For instance, although the appearance of Self-Obscurity (opposite to self-concept clarity) as a distinct factor was anticipated, it was very hard to foresee that the items reflecting themes of guilt, multiplicity of selves, self-regulation, and internal state awareness would fail in forming separate factors. A plausible explanation for such a result may lay in the initial selection of items in the item-pool which put those themes in a less favorable position compared to the others. Indeed, this may be true for some themes mentioned above but certainly not for all. For example, about 30 items describing various forms of internal state awareness failed to form a coherent independent factor. Obviously, such a result does not mean that items concerning the internal state awareness cannot form an independent factor in any other condition. It is quite likely that in a more homogeneous pool of items they may have enough unique variance to form an independent factor, with strength comparable to other factors. For example, there is an accumulating amount of evidence that private self-consciousness, as it is represented in the Self-Consciousness Scale (Fenigstein et al., 1975), is actually composed of two factors--selfreflectiveness and internal state of awareness (Burnkrant & Page, 1984; Piliavin & Charng, 1988). The Spiritual Self subscale were mainly related to self-examination and general selfconcern, this seem to support the distinction between self-reflectiveness and internal state awareness (cf. Creed & Funder, 1998).

Could self-attitudes be comprehensively described by basic personality dispositions? One of the main findings of this study is that several themes that are typically described as facets of self-concept belong in fact to the domain of personality. There have been several warning examples showing that many constructs developed for measuring the self-concept are inseparable from more conventional measures of personality For example, Briggs and Cheek (1988) noted that the latent variable tapped by the Self-Monitoring Scale "falls squarely into a long-studied region of the universe of personality variables, a region defined by the general notions of social surgency, exhibitionism, self-confidence, instrumentality, and extraversion /.../ General factor A of the Self-Monitoring Scale may have more to do with this domain of personality than with the core propositions of the self-monitoring construct as originally

articulated by Snyder" (p. 672). Our data seem to support this general conclusion. Only one of subthemes included in the Self-Monitoring Scale--other-directedness (i.e., Genuineness, in our terms)--emerged as a distinct factor in our research, yet showed strong relations with the NEO-PI Agreeableness. Other themes, such as public performing for instance, had not enough unique common variance to form a separate factor with strength comparable to the other themes. Another example is the Social Comfort scale consisting predominantly of items that initially belonged to SAnx subscale of the Self-Consciousness Scale (Fenigstein et al., 1975). As it was noticed above, the SAnx scale is almost a perfect indicator of Extraversion as defined by the NEO-PI and not of anxiety of appearance and performance in public as it was proposed by the authors of the Self-Consciousness Scale (Abrams, 1988; Realo & Allik, 1998; Zuckerman et al., 1993). Along with previous findings, our data demonstrated that the themes of shyness, avoiding other people, and feeling uncomfortable in the company of strangers are very good indicators of extraversion. Proceeding in this direction one may wonder if there is anything left that cannot be described in terms of the Big Five. One possible approach to this problem is a joint factor analysis of the NEO-PI and the SAS scales to determine whether the self-attitudes can be described by the Big Five factors or if there is anything supplementary to these factors. Unfortunately, this approach is less conclusive as it can be perceived at first glance. First, the NEO-PI and the SAS are not equally represented in terms of the items in subscales and therefore, the result may be a trivial consequence of this imbalance. Secondly and of more importance from the theoretical viewpoint, characteristic adaptations do not exist outside or beyond the basic tendencies but they are the concrete manifestations of the basic tendencies (McCrae & Costa, 1996). Therefore, it is even expected that most of the characteristic adaptations can be described in the framework of the Big Five, at least thematically. Although characteristic adaptations change over time in response to biological maturation and changes in environment, individuals react to these changes in their biological constitution and environment in accordance with their personality. All the SAS scales, except Comprehension of Others, can be more or less accurately placed within the conceptual space defined by the Big Five factors. In the joint factor analysis of the NEO-PI and the SAS scales only the Comprehension of Others scale systematically formed an isolated factor beyond factors defined by the Big Five. This does not mean, however, that the content of SAS is redundant and can be exhaustively described by the NEO-PI. As seen earlier, only one (SoCmf) of the seven SAS was clearly redundant with regard to the NEO-PI basic dimensions and can be dropped without a considerable loss of information. However, two other scales-Comprehension of Others and Physical Self--had minimum multiple correlation with the Big Five factors. It is known that various person descriptions such as attitudes, sex-linked and physical characteristics, are not very well captured by the Big Five factors (Saucier & Goldberg, 1998). This can be one of the reasons why the two scales--Comprehension of Others and Physical Self--were relatively independent from the NEO-PI. The four other SAS scales had approximately 1/3 of the shared variance with the Big Five factors. Although it may first seem a considerably big amount, it is still no more than each of the five personality dimensions (which are supposed to be independent) share with the four others. On the basis of this comparison we can conclude that most of the SAS scales have a content which is distinctive enough from the basic personality traits defined by the NEO Personality Inventory. This conclusion was also supported by the result according to which the self-other agreement in estimation of the basic personality attributes was considerably modulated by the self-attitudes (SpiS and PubS).

Having established that self-attitudes were not redundant with regard to basic personality dimensions, the next logical question is whether the self-attitudes are just variants of the personality themes that the Big Five fails to elaborate on, or, some sort of characteristic adaptations? One of the major aims of our study was to provide a mechanism to separate characteristic adaptations from basic tendencies. In the introductory section, we proposed eight criteria on the basis of which it would be possible to decide whether a measured feature is more like a basic trait or a characteristic adaptation. As there is really no clear-cut border between basic traits and characteristic adaptations, none of these criteria alone could provide indisputable evidence in favor of one or another alternative. Therefore, we decided to use an aggregate measure of five criteria to make the discrimination more reliable. Empirical findings confirmed our theoretical expectations, the border between personality and self-attitude scales is relatively undefined: some of the personality scales (e.g., Agreeableness) had properties that were more typical to a characteristic adaptation and some of the self-attitude scales (e.g., Gen) behaved as if they were basic tendencies. Nevertheless, the SAS and the NEO-PI scales tended to group at the opposite ends of the traitedness ranking. Yet, it is important to emphasize here, once more, that the lower position of the SAS scales on the traitedness ranking was not caused by their unreliability as measuring instruments. On average, they were no less reliable than personality scales.

Our data suggested that Agreeableness, despite summarizing specific tendencies and behaviors (e.g., being kind, modest, cooperative, compliant and altruistic), still behaves as a characteristic adaptation. Yet, the deviant position of Agreeableness in the traitedness rating was not a huge revelation. It has been noted already in earlier literature that agreeableness may be less salient as an individual difference than dimensions such as extraversion or openness. Assessment of agreeableness may be more affect-laden and more dispersed than other kinds of assessments (Graziano & Eisenberg, 1997). On the other hand, the SAS Genuineness subscale had properties resembling more of a basic tendency than a characteristic adaptation. The Genuineness scale was third in the traitedness ranking, coming before the three major personality domains, Conscientiousness, Neuroticism, and Agreeableness. One possible explanation for such finding could be that genuineness characterizes person's interpersonal tendencies rather than their self-concept. Indeed, individuals who are sincere and ingenuous are obviously less willing to manipulate and exploit others for their own egoistic purposes. In other words, the developed Genuineness scale can be also seen as an indicator of pro-social attitudes. Our empirical data seem to support this possibility: the correlation between Genuineness and the NEO-PI Agreeableness domain was high, r = 48. It is perhaps even more remarkable that in the revised version of the NEO-PI, that is in the NEO-PI-R, one of the newly construed Agreeableness facet scales (A2) was named Straightforwardness (Costa & McCrae, 1992). According to the NEO-PI-R manual, "straightforward individuals, that is, those individuals with high scores on this scale are frank, sincere, and ingenuous. Low scorers on this scale are more willing to manipulate others through flattery, craftiness, or deception. They view these tactics as necessary social skills and may regard more straightforward people as naïve" (p. 17). Even without direct evidence (the facet scales for Agreeableness domain including Straightforwardness were not yet developed for the NEO-PI), it is safe to claim that the SAS Genuineness and the NEO-PI-R Straightforwardness are basically measuring the same construct.

In addition to "in-between cases," there were prototypical examples of both basic tendencies and characteristic adaptations as located at the extreme poles of the traitedness rating. To the extent that Extraversion and Openness were exemplary basic tendencies, the four SAS scales--Self-Obscurity, Comprehension of Others, Spiritual Self, and Public Self—could be consider rather typical characteristic adaptations. According to the expert opinions, for example, the items of the Self-Obscurity scale were the least observable and the most difficult to judge from an external viewpoint. As confirmation to this evaluation, the largest

disparity between self-other opinions was also observed in the estimation of self-obscurity. However, this large self-other difference was not caused by the self-serving bias--on average, the mean scores of the observer and target-ratings of self-obscurity did not significantly differ from one another. After eliminating response-biases, there was a zero self-other agreement to the question how much the individual reflects or scrutinize about oneself (SpiS). It seems that individuals are not very confident about their own self-reflection as the long-term test-retest correlation ( $\underline{r} = .40$ ) was the lowest for the Spiritual Self. Although both the internal reliability ( $\alpha = .80$ ) and the test-retest correlation ( $\underline{r} = .63$ ) for the Comprehension of Others scale was relatively good, the scale scored at the bottom of the metatraitedness ranking. Thus, although the constructs of Spiritual Self and Comprehension of Others can be consistently and reliably measured, they remain somewhat hidden from external observers, can change over time and are not salient to external observer.

What are the main components of the self? Our results demonstrate that at the very general level, a variety of the layperson's statements about their self are organized around several dominant themes that can be identified with the constituents and categories introduced by William James (1890/1950). Three basic constituents of the self--private or spiritual, social, and material (physical)--were clearly distinguishable in our research. Two aspects of self--the self-as-perceiver (the "I") and the self-as-object (the "Me")--emerged in the hierarchical organization of self-related categories. Also, the basic distinction between private and public aspects of self--the perception of one's inner or subjective processes versus the image of oneself in the eyes of other people--was supported by our data. However, we are far from being confident that these are the basic categories around which the structure and content of self is organized. Although the segment of conceptual territory related to self explored in this study was very complex, it merely touched upon the complexity of issues surrounding theories of self-concept from the previous decades (cf. Robins et al., 1999). Many themes included into the initial pool of items failed to converge into a stable factor and were dropped out from the final list of themes. However, there is a lesson to be learned from this exploratory approach, that is, a plethora of topics in the initial item-pool does not necessarily result in the same number categories a layperson uses while thinking of oneself.

Recently, Robins with his colleagues (1999) asked explicitly a principal question: Why should personality psychologists care about the self? They provided several answers, to which we can add another one. As stressed by Robins and others (1999), personality is often

measured by self-reports, including the main tool of personality psychology--questionnaires. However, the validity of using self-reports obviously depends on the degree to which people can report accurately on their cognitive, affective, and behavioral tendencies. In this study we demonstrated not only that the self-other agreement about basic tendencies was considerably influenced by how a person evaluates themself on Agreeableness, but also by their attitudes towards the self. For example, individuals who, in their own opinion, had clearer self-concepts (SObs) and were not too worried about the others' opinions (PubS), were also in better agreement about their basic tendencies with the two observers. Analogously, self-other differences were significantly modulated by individual's own judgments about their self-occupation or self-scrutinization (SpiS). Therefore, it is perhaps beneficial to remember that there was a zero self-other agreement in the evaluation of Spiritual Self. Meaning that the self-representations that are impenetrable to external observation contain information that is vital for assessing personality

#### References

Abrams, D. (1988). Self-consciousness scales for adults and children: Reliability, validity, and theoretical significance. European Journal of Personality, 2, 11-37

Ackerman, P L. (1997). Personality, self-concept, interests, and intelligence: Which construct doesn't fit? Journal of Personality, 65, 171-204.

Albright, L., Malloy, T. E., Dong, Q., Kenny, D. A., Fang, X., Winquist, L., & Yu, D. (1997). Cross-cultural consensus in personality judgments. <u>Journal of Personality and Social Psychology</u>, 72, 558-69

Allik, J., & Realo, A. (1997). Emotional experience and its relation to the Five-Factor Model in Estonian. Journal of Personality, 65, 625-647

Bandura, A. (1977). Self-efficacy Toward a unified theory of behavioral change.

Psychological Review, 84, 191-215

Bandura, A. (1982). Self-efficacy mechanism in human agency <u>American Psychologist</u>, 37, 122-147

Baumeister, R. F (1991). On the stability of variability Retest reliability of metatraits.

Personality and Social Psychology Bulletin, 17, 633-639.

Baumeister, R. F., & Tice, D. M. (1988). Metatraits. <u>Journal of Personality</u>, <u>56</u>, 571-598. Baumgardner, A.H. (1990). To know oneself is to like oneself: Self-certainty and self-affect. <u>Journal of Personality and Social Psychology</u>, <u>58</u>, 1062-1072.

Bernieri, F. J., Zuckerman, M., Koestner, R., & Rosenthal, R. (1994). Measuring person perception accuracy: another look at self-other agreement. Personality and Social Psychology Bulletin. 20, 367-378.

Block, J. H., & Block, J. (1980). The role of ego-control and ego-resilience in the organization of behavior. In W. A. Collins (Ed.), Minnesota Symposium on Child Psychology (Vol. 13, pp. 39-101). Hillsdale, NJ: Erlbaum.

Bolton, B. (1979). The Tennessee Self-Concept Scale and the normal personality sphere (16PF). Journal of Personality Assessment, 43, 608-613.

Boyle, E. S., & Larson, P. C. (1981). Factor structure of the Tennessee Self-Concept Scale for an institutionalized, disabled population. Perceptual and Motor Skills, 52, 575-582.

Bracken, B. A. (1996). Clinical application of a context-dependent, multidimensional model of self-concept. In B. A. Bracken (Ed.), <u>Handbook of self-concept</u> (pp. 463-511). New York: John Wiley

Bracken, B. A., & Howell, K. K. (1991). Multidimensional self concept validation: A three-instrument investigation. Journal of Psychoeducational Assessment, 9, 319-328.

Briggs, S. R., & Cheek, J. M. (1988). On the nature of self-monitoring: Problems with assessment, problems with validity <u>Journal of Personality and Social Psychology</u>. 54, 663-678.

Briggs, S. R., Cheek, J. M., & Buss, A. H. (1980). An analysis of the Self-Monitoring Scale. <u>Journal of Personality and Social Psychology</u>, 38, 679-686.

Burnkrant, R. E., & Page, T. J. Jr. (1984). A modification of the Fenigstein, Scheier, and Buss Self-Consciousness Scale. <u>Journal of Personality Assessment</u>, 48, 629-637

Byrne, D (1966). An introduction to personality. A research approach. Englewood Cliffs, NJ. Prentice-Hall.

Byrne, B. M., & Shavelson, R. J. (1996). On the structure of social self-concept for pre-, early, and late adolescents: A test of the Shavelson, Hubner, and Stanton (1976) model.

<u>Journal of Personality and Social Psychology</u>, 70, 599-613.

Campbell, J. D. (1990). Self-esteem and clarity of the self-concept. <u>Journal of Personality</u> and <u>Social Psychology</u>, 59, 538-549.

Campbell, J. D., Chew, B., & Scratchley, L. S. (1991). Cognitive and emotional reaction to daily events: The effects of self-esteem and self-complexity. <u>Journal of Personality</u>, <u>59</u>, 473-505.

Campbell, J. D., & Fehr, B. (1990). Self-esteem and perceptions of conveyed impressions:

Is negative affectivity associated with greater realism? <u>Journal of Personality and Social</u>

Psychology, 58, 122-133

Campbell, J. D., & Lavallee, L. F (1993). Who am I? The role of self-concept confusion in understanding the behavior of people with low self-esteem. In R. F Baumeister (Ed.), Self-esteem: The puzzle of low self-regard (pp. 3-20). New York: Plenum.

Campbell, J. D., Trapnell, P. D., Heine, S. J., Katz, I., Lavallee, & Lehman, D. R. (1996).

Self-concept clarity: Measurement, personality correlates, and cultural boundaries. <u>Journal of</u>

Personality and Social Psychology, 70, 141-156.

Carver, C. S., & Glass, D. C. (1976). The Self-Consciousness Scale: A discriminant validity study. Journal of Personality Assessment, 40, 169-172.

Cattell, R. B. (1965). The scientific analysis of personality. Harmondsworth, Middlesex: Penguin Books.

Cattell, R. B. (1966). The scree test for the number of factors. <u>Multivariate Behavioral</u>

Research. 1, 245-276.

Costa, P. T., Jr., & McCrae, R. R. (1985). <u>The NEO Personality Inventory Manual.</u>

Odessa, FL. Psychological Assessment Resources.

Costa, P. T., Jr., & McCrae, R. R. (1988). Personality in adulthood: A six-year longitudinal study of self-reports and spouse ratings on the NEO Personality Inventory. Journal of Personality and Social Psychology, 54, 853-863.

Costa, P. T., Jr., & McCrae, R. R. (1989). <u>The NEO-PI/NEO-FFI Manual Supplement</u>. Odessa, FL. Psychological Assessment Resources.

Costa, P. T., Jr., & McCrae, R. R. (1992). <u>Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI)</u>. Professional manual. Odessa, FL. Psychological Assessment Resources.

Creed, A. T., & Funder, D. C. (1998). The two faces of private self-consciousness: Self-report, peer-report, and behavioral correlates. <u>European Journal of Personality</u>, 12, 411-431.

Edwards, J. A., Weary, G., & Reich, D. A. (1998). Casual uncertainty Factor structure and relation to the Big Five personality factors. <u>Personality and Social Psychology Bulletin</u>, 24, 451-462.

Epstein, S. (1990). Cognitive-experiental self-theory. In L. Pervin (Ed.), <u>Handbook of personality theory and research</u> (pp. 165-192). New York: Guilford Press.

Epstein, S., Pacini, R., Denes-Raj, V., & Heier, H. (1996). Individual differences in intuitive-experiental and analytic-rational thinking styles. <u>Journal of Personality and Social</u> Psychology, 71, 390-405.

Everett, J. E. (1983). Factor comparability as a means of determining the number of factors and their rotation. <u>Multivariate Behavioral Research</u>, 18, 197-218.

Feather, N. T., & McKee, I. R. (1993). Global self-esteem and attitudes toward the higher achiever for Australian and Japanese students. Social Psychology Quarterly, 56, 65-76.

Fenigstein, A., Scheier, M. F., & Buss, A. H. (1975). Public and private self-consciousness: Assessment and theory. <u>Journal of Consulting and Clinical Psychology</u>, 43, 522-527

Fitts, W. H. (1965). Manual for Tennessee Self Concept Scale. Los Angeles: Western Psychological Service.

Fleming, J. S., & Courtney, B. E. (1984). The dimensionality of self-esteem: II.

Hierarchical facet model for revised measurement scales. <u>Journal of Personality and Social</u>

Psychology, 46, 404-421.

Funder, D. C., & Colvin, C. R. (1997). Congruence of other's and self-judgements of personality. In R. Hogan, J. Johnson, & S. Briggs (Eds.), <u>Handbook of personality psychology</u> (pp. 617-647). San Diego: Academic Press.

Funder, D. C., Kolar, D. C., & Blackman, M. C. (1995). Agreement among judges of personality: interpersonal relations, similarity, and acquaintanceship. <u>Journal of Personality and Social Psychology</u>, 69, 656-672.

Goldberg, L. R. (1993). The structure of phenotypic personality traits. <u>American Psychologist</u>, 48, 26-34.

Gopnik, A. (1983). How we know our minds: The illusion of first-person knowledge of intentionality. Behavioral and Brain Sciences, 16, 1-14.

Gray, J. A.(1971). The psychophysiological basis of introversion-extraversion. <u>Behavior Research and Therapy</u>, 8, 249-266.

Graziano, W.G., & Eisenberg, N. (1997). Agreeableness: A dimension of personality. In R. Hogan, J. Johnson, & S. Briggs (Eds.), <u>Handbook of personality psychology</u> (pp. 795-824).

San Diego: Academic Press.

Hattie, J. (1992). Self-concept. Hillsdale, New Jersey Lawrence Erlbaum.

Higgins, E. T (1987). Self-discrepancy A theory relating self and affect. <u>Psychological Review</u>, 94, 319-340.

Horn, J. L. (1965). A rationale and test for the number of factors in factor analysis.

Psychometrika, 30, 179-185.

Hur, Y.-M., McGue, M., & Iacono, W. G. (1998). The structure of self-concept in female preadolescent twins: A behavioral genetic approach. <u>Journal of Personality and Social</u>

<u>Psychology, 74, 1069-1077</u>

James, W (1890/1950). The principles of psychology. New York: Dover Publications, Inc.

Jang, K. L., Livesley, W. J., & Vernon, P. A. (1996). Heritability of the big five personality dimensions and their facets: a twin study. Journal of Personality, 64, 577-591.

Jensen, L., Huber, C., Cundick, B., & Carlson, J. (1991). Development of a self-theory and measurement scale. Journal of Personality Assessment, 57, 521-530.

John, O. P (1990). The "Big Five" factor taxonomy: Dimensions of personality in the natural language and in questionnaires. In L.A.Pervin (Ed.), <u>Handbook of personality: Theory</u> and research (pp. 66-100). New York: The Guilford Press.

Jöreskog, K. G., Sörbom, D., du Toit, S., & du Toit, M. (1999). LISREL 8: New statistical features. Chicago, IL: Scientific Software International.

Kaiser, H. F (1960). The application of electronic computers to factor analysis. Educational and Psychological Measurement, 20, 141-151.

Kallasmaa, T., Allik, J., Realo, A., & McCrae, R. R. (in press). The Estonian version of the NEO-PI-R. An examination of universal and culture-specific aspects of the Five-Factor Model. European Journal of Personality.

Keith, L. K., & Bracken, B. A. (1996). Self-concept instrumentation: a historical and evaluative review In B. A. Bracken (Ed.), <u>Handbook of self-concept</u> (pp. 91-170). New York: John Wiley

Kolar, D. W., Funder, D. C., & Colvin, C. R. (1996). Comparing the accuracy of personality judgements by the self and knowledgeable others. <u>Journal of Personality</u>, 64, 311-337.

Lamphere, R. A., & Leary, M. R. (1990). Private and public self-processes: A return to James's constituents of the self. <u>Personality and Social Psychology Bulletin</u>, 16, 717-725.

Lang, R. J., & Vernon, P E. (1977). Dimensionality of the perceived self: the Tennessee Self Concept Scale. <u>British Journal of Social Clinical Psychology</u>, 16, 363-71.

Linville, P. W. (1985). Self-complexity and affective extremity. Don't put all of your eggs in one cognitive basket. <u>Social Cognition</u>, 3, 94-120.

Linville, P W (1987). Self-complexity as a cognitive buffer against stress-related illness and depression. <u>Journal of Personality and Social Psychology</u>, 52, 663-676.

Loehlin, J. C. (1992). <u>Genes and environment in personality development</u>. Newbury Park, CA. Sage.

Markus, H. R., & Kitayama, S. (1991). Culture and self: Implications for cognition, emotion, and motivation. <u>Psychological Review</u>, 98, 224-253.

Markus, H., & Nurius, P. S. (1986). Possible selves. <u>American Psychologist</u>, 41, 954-969. Markus, H., & Wurf, E. (1987). The dynamic self-concept: a social psychological perspective. Annual Review of Psychology, 38, 299-337

Marsh, H. W., & Richards, G. E. (1988). Tennessee Self Concept Scale: Reliability, internal structure, and construct validity. <u>Journal of Personality and Social Psychology</u>, 55, 612-624.

Marsh, H. W., & Shavelson, R. (1985). Self-concept: Its multifaceted, hierarchical structure. <u>Educational Psychologist</u>, 20, 107-123.

Matto, H., & Realo, A. (in press). The Estonian Self-Concept Clarity Scale: Psychometric properties and personality correlates. Personality and Individual Differences.

McCarthy, J. D., & Hoge, D R. (1984). The dynamics of self-esteem and delinquency.

American Journal of Sociology, 90, 396-410.

McCrae, R. R. (1982). Consensual validation of personality traits: Evidence from self-reports and ratings. <u>Journal of Personality and Social Psychology</u>, 43, 293-303

McCrae, R. R., & Costa, P. T., Jr. (1982). Self-concept and the stability of personality: Cross-sectional comparisons of self-reports and ratings. <u>Journal of Personality and Social Psychology</u>, 43, 1282-1292.

McCrae, R. R., & Costa, P. T., Jr. (1995). Trait explanations in personality psychology European Journal of Personality, 9, 231-252.

McCrae, R. R., & Costa, P. T., Jr. (1996). Towards a new generation of personality theories: Theoretical context for the Five-Factor Theory. In J. S. Wiggins (Ed.), <u>The Five-Factor Model of personality: Theoretical perspective</u> (pp. 51-87). New York: The Guilford Press.

McCrae, R. R., & Costa, P. T., Jr. (1997). Personality trait structure as a human universal.

American Psychologist, 52, 509-516.

McCrae, R. R., Costa, P. T., & Busch, C. M. (1986). Evaluating comprehensiveness in personality systems: The California Q -Set and the five-factor model. <u>Journal of Personality</u>, 54, 430-446.

McGuire, S., Neiderhiser, J. M. R. D., Hetherington, E. M. E., & Plomin, R. (1994).

Genetic and environmental influences on perception of self-worth and competence in adolescence: A study of twins, full siblings, and step siblings. Child Development, 65, 785-799.

Niedenthal, P. M., & Beike, D. R. (1997). Interrelated and isolated self-concepts.

Personality and Social Psychology Review, 1, 106-128.

Ozer, D. J., & Reise, S. P (1994). Personality assessment. <u>Annual Review of Psychology.</u> 45, 357-388.

Oyserman, D., & Markus, H. R. (1993). The sociocultural self. In J. Suls (Ed.),

Psychological perspectives on the self (Vol. 4: The self in social perspective, pp. 187-220).

Hillsdale, NJ: Erlbaum.

Pearson, J. L., Reinhart, M. A., Strommen, E. A., Donelson, E., Barnes, C., Blank, L., Cebollero, A. M., Cornwell, K., & Kamptner, N. L. (1998). Connected and separated selves:

Development of an inventory and initial validation. Journal of Personality, 71, 29-48.

Piers, E. V (1984). <u>Piers-Harris Children's Self-Concept Scale: Revised manual</u>. Los Angeles, CA. Western Psychological Services.

Piliavin, J. A., & Charng, H. (1988). What is the factorial structure of the private and public self-consciousness scales? <u>Personality and Social Psychology Bulletin</u>, 14, 587-595.

Pullmann, H., & Allik, J. (2000). The Rosenberg Self-Esteem Scale: Its dimensionality, stability and personality correlates in Estonian. <u>Personality and Individual Differences</u>. 28, 701-715

Pulver, A., Allik, J., Pulkkinen, L., & Hämäläinen, M. (1995). A Big Five personality inventory in two non-Indo-European languages. <u>European Journal of Personality</u>, 9, 109-124.

Realo, A., & Allik, J. (1998). The Estonian Self-Consciousness scale and its relation to the Five-Factor Model of personality. Journal of Personality Assessment, 70, 109-124.

Riemann, R. A. A. S. J. (1997). Genetic and environmental influence on personality: A study of twins reared together using self- and peer report NEO-FFI scales. <u>Journal of</u>
Personality, 65, 449-475

Robins, R. W., Norem, J. K., & Cheek, J. M. (1999). Naturalizing the self. In L. A. Pervin & O. P John (Eds.), <u>Handbook of personality: Theory and research</u> (2<sup>nd</sup> Ed., pp. 443-477). New York: Guilford Press.

Rosenberg, M. (1965). Society and adolescent child. Princeton, NJ: Princeton University Press.

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. Psychological Monographs, 80 (1, Whole No. 609).

Saucier, G. & Goldberg, L.R. (1998). What is beyond the Big Five? <u>Journal of Personality</u>. 66, 495-524.

Shavelson, R. J., Hubner, J. J., & Stanton, G. C. (1976). Self-concept: Validation of construct interpretations. <u>Review of Educational Research</u>, 46, 407-441.

Showers, C. J., Abramson, L. Y., & Hogan, M. E. (1998). The dynamic self: How the content and structure of the self-concept change with mood. <u>Journal of Personality and Social</u>

Psychology, 75, 478-493.

Smith, M., Wethington, E., & Zhan, G. (1996). Self-concept clarity and preferred coping styles. <u>Journal of Personality</u>, 64, 407-434.

Snyder, M. (1974). Self-monitoring of expressive behavior. <u>Journal of Personality and Social Psychology</u>, 30, 526-537

Snyder, M. (1979). Self-monitoring process. In L. Berkowitz (Ed.), <u>Advances in experimental social psychology</u> (Vol. 12, pp. 86-131). San Diego, Ca: Academic Press.

Stein, R. J. (1996). Physical self-concept. In B. A. Bracken (Ed.), <u>Handbook of self-concept</u> (pp. 374-394). New York: John Wiley.

Tellegen, A. (1985). Structures of mood and personality and their relevance to assessing anxiety, with an emphasis on self-report. In A. H. Tuma & J. D. Maser (Eds.), <u>Anxiety and anxiety disorders (pp. 681-706)</u>. Hillsdale, NJ: Erlbaum.

Watson, D., & Clark, L. A. (1997). Extraversion and its positive emotional core. In R. Hogan, J. Johnson, & S. Briggs (Eds.), <u>Handbook of personality psychology</u> (pp. 767-793). San Diego: Academic Press.

Weary, G., & Edwards, J. A. (1994). Individual differences in casual uncertainty. <u>Journal</u> of Personality and Social Psychology, 67, 308-318.

Zuckerman, M., Kuhlman, D. M., Joireman, J., Teta, P., & Kraft, M. (1993). A comparison of three structural models for personality: The Big Three, the Big Five, and the Alternative Five. <u>Journal of Personality</u> and <u>Social Psychology</u>, 65, 757-768.

Zwick, W R., & Velicer, W F (1986). Comparison of five rules for determining the number of components to retain. <u>Psychological Bulletin</u>, 99, 432-442.

#### **Author Note**

Anu Realo, Jüri Allik, Tuuli Ruus, and Monika Schmidt, Department of Psychology, University of Tartu.

We thank Helle Pullmann and Hillar Matto for their help in this project and Jeannine Richards for her useful comments on earlier versions of this paper. Permission of the NEO-PI authors, Paul T. Costa, Jr. and Robert R. McCrae, and the Psychological Assessment Resources Inc. to use the NEO Personality Inventory in this study is gratefully acknowledged.

Correspondence concerning this article should be addressed to Anu Realo, Department of Psychology, University of Tartu, Tiigi 78, Tartu 50410, Estonia. E-mail: realo@psych.ut.ee.

Table 1

<u>Varimax-Rotated Seven-Factor Structure for the Self-Attitude Scale (SAS)</u>

	Factor loadings									
[tem	F1	F2	F3	F4	F5	F6	F7			
oiritual S	elf									
<b>#</b> 09	11	.06	14	11	27	.49	07			
<b>‡</b> 11	26	16	.24	05	.07	.58	00			
<b>#</b> 15	05	.10	.05	03	.01	76	.03			
<b>#</b> 16	- 14	.15	.24	01	08	.53	.09			
<b>#</b> 35	.06	06	06	.00	.00	.67	10			
¥38	.01	.08	10	02	.11	73	.08			
49	01	05	.30	03	01	.42	- 17			
blic Sel	f									
402	18	.02	71	17	.16	.14	12			
<del>\$</del> 08	.12	07	.67	.05	02	.13	.06			
#10	20	03	.54	- 11	.01	.01	22			
<b>#18</b>	03	.06	.75	09	.01	11	01			
‡25	22	.03	.48	33	13	16	.07			
27	27	06	.39	09	.08	.34	19			
32	.02	.06	71	.03	05	08	.12			

(Table 1 continues)

Table 1 (continued)

Physical	Self
,	

#20	12	04	06	.60	.02	.02	.13
#22	15	.09	16	.75	03	.00	.08
#26	.11	00	.00	.76	08	00	.05
#29	06	.02	.16	.37	05	.02	.29
#34	.11	.04	02	.70	.08	02	06
#47	.08	.01	- 15	.66	07	.03	.06
#48	.02	.03	08	.75	08	- 06	.09
Self-Obso	curity						
#01	64	.15	.06	07	.03	.02	- 11
#12	57	.00	.14	12	.09	.03	- 13
#21	70	00	.05	13	.10	.10	08
#23	69	.05	.00	07	.00	.13	00
#30	75	.06	02	03	.08	.04	.01
#31	78	.01	.10	11	.06	.03	11
#37	66	02	.02	05	02	02	03
Compreh	ension of O	thers					
#04	09	.70	.02	02	.06	.05	.08
#05	06	77	.01	01	.00	.04	.09
#07	- 10	.62	.06	.06	12	.01	.04
#13	06	.70	.02	02	.08	04	.08
#14	02	.72	.02	.05	01	.04	12

(Table 1 continues)

Table 1 (cor	ntinued)							
#39	.16	.55	03	.10	.07	.16	.28	
#42	01	.55	04	02	.06	.11	10	
Social Comf	fort							
#03	.05	.06	.02	.10	.08	.07	.66	
#06	.03	.11	.08	00	18	.06	.56	
#17	.06	.08	.05	.09	.03	.05	77	
#19	.07	01	.06	.06	.06	.09	.69	
#24	.03	.16	11	.01	- 12	.01	.61	
#28	10	.21	14	.10	.07	04	.59	
#46	12	.18	05	.07	- 11	05	.57	
Genuineness	S							
#33	.11	.07	10	06	42	.07	- 16	
#36	.12	.01	12	.08	69	07	05	
#40	.13	- 14	.02	.07	37	.26	18	
#41	.04	02	02	.05	50	.01	07	
#43	08	08	.05	.00	61	- 04	12	
#44	.02	16	01	.01	69	01	19	
#45	.05	10	.05	.05	69	01	.08	
Prp. Total	.08	.07	.06	.07	.05	.06	.07	

<u>Note</u>. N = 1159.

Table 2

Means, Standard Deviations, and Reliability Indices of the Self-Attitude Scale (SAS)

Subscales

	Ma	les	Fema	ales	To	tal <sup>a</sup>				
Subscales	<u>M</u>	SD	<u>M</u>	SD	M	SD	<u>t</u>	<u>df</u> p	$lpha_{ m c}^{ m a}$	$\alpha_{\scriptscriptstyle R}^{\;\; b}$
<u>SpiS</u>	15.9	5.1	18.7	5.0	17.9	5.2	-8.6	1151.000	74	.40
<u>PubS</u>	16.8	5.5	18.4	5.4	17.9	5.5	-4.6	1151.000	77	72
<u>PhyS</u>	21.2	4.8	19.6	6.0	20.1	5 7	4.5	1151.000	<b>7</b> 9	.67
SObs	10.5	6.3	12.7	6.2	12.1	6.3	-5.4	1151.000	.83	.60
<u>CmpO</u>	14.0	5.2	14.1	5.0	14.1	5.1	11	1151.914	.80	.63
SoCmf	16.4	5.6	16.3	5.4	16.4	5.5	.24	1151.810	79	.44
<u>Gen</u>	15.9	4.7	17.3	4.5	16.9	4.6	-4.5	1151.000	.67	.63

Note.  $\underline{df}$  = Degree of Freedom;  $\alpha_c$  = Cronbach Alpha;  $\alpha_R$  = Test-Retest Reliability;  $\underline{SpiS}$  = Spiritual Self;  $\underline{PubS}$  = Public Self;  $\underline{PhyS}$  = Physical Self;  $\underline{SObs}$  = Self-Obscurity;  $\underline{CmpO}$  = Comprehension of Others;  $\underline{SoCmf}$  = Social Comfort;  $\underline{Gen}$  = Genuineness.

 $<sup>^{</sup>a}$  N = 1159

 $<sup>\</sup>frac{b}{n} = 61$ 

Table 3

Intercorrelations of the Self-Attitude Scale (SAS) Subscales

Subscale	<u>SpiS</u>	<u>PubS</u>	<u>PhyS</u>	SObs	<u>CmpC</u>	SoCmf	<u>Gen</u>
<u>SpiS</u>	-						
<u>PubS</u>	.35***	-					
<u>PhyS</u>	04	24***	-				
SObs	.18***	.27***	25***	-			
<u>CmpO</u>	.17***	.05	.08**	.07*	-		
<u>SoCmf</u>	.07	02	.22***	- 17***	.32***	-	
<u>Gen</u>	.02	12***	10**	- 15***	08**	06	•

<u>Note</u>. <u>N</u> = 1159. <u>SpiS</u> = Spiritual Self; <u>PubS</u> = Public Self; <u>SObs</u> = Self-Obscurity; <u>CmpO</u> = Comprehension of Others; <u>SoCmf</u> = Social Comfort; <u>Gen</u> = Genuineness; <u>PhyS</u> = Physical Self.

 $<sup>^{***}</sup>$ p < .000  $^{**}$ p < .01  $^{*}$ p < .05

Correlations between the Self-Attitude Scale (SAS) and the Estonian Versions of the NEO

Personality Inventory (NEO-PI), the Rosenberg Self-Esteem Scale (ERSES), the Self-Concept

Clarity Scale (ESCCS), and the General Positive and Negative Affect Scales

Scale	<u>Spi</u>	S Pub	S Phy	S SO	bs <u>Cm</u>	pO So	Cmf Gen
NEO-PI <sup>2</sup>							
Neuroticism	18***	46***	37***	.58***	06 <sup>*</sup>	29***	25***
Extraversion	13***	.07*	.21***	08*	.33***	.80***	05
Openness	.63***	.02	.06	.15***	.23***	.25***	03
Conscientiousness	02	08*	.23***	39***	.11**	19***	.31***
Agreeableness	.06	06	.05	- 16***	04	03	48***
Multiple $\underline{\mathbb{R}^2}$	.32	.31	.16	.36	.14	.64	.27
GNA <sup>b</sup>	.09	.25***	26***	.33***	.01	- 18***	- 18***
GPA <sup>b</sup>	.09	- 10 <sup>*</sup>	.15**	- 10 <sup>*</sup>	.16**	.37***	.07
Multiple $\underline{\mathbb{R}^2}$	.02	.06	.08	11	.03	14	03
ERSES <sup>c</sup>	.01	23***	.36***	- 41***	.24***	.31***	.10
ESCCS <sup>d</sup>	.15*	29***	.25***	59***	.09	.22***	.12
Multiple $\underline{\mathbb{R}^2}$	.03	.11	15	.40	.05	.10	.01

Note.  $^a\underline{n} = 986$ ;  $^b\underline{n} = 434$ ;  $^c\underline{n} = 323$ ;  $^d\underline{n} = 253$ . SpiS = Spiritual Self; PubS = Public Self; PhyS = Physical Self; SObs = Self-Obscurity; CmpO = Comprehension of Others; SoCmf = Social Comfort; Gen = Genuineness; GNA = General Negative Affect Scale; GPA = General Positive Affect Scale; ERSES = Estonian version of the Rosenberg Self-Esteem Scale; ESCCS = Estonian Self-Concept Clarity Scale. \*\*\*p = .000 \*\*p = .01 \*p = .05

Table 5

Correlations between the Self- and Observer-Ratings of the Big Five Personality and the SelfAttitude Scale (SAS) Subscales and the Observability and Desirability Ratings

Scales	5	N*	E*	O*	C*	A* <u>S</u> r	oiS <sup>*</sup> Pub	S* Phy	<u>s</u> * <u>sob</u>	os* Cm	pO <sup>*</sup> SoC	Cmf Gen
N	.54	- 14	.23	09	03	12	19	22	- 15	.02	- 19	.15
E	24	.63	23	29	- 11	28	- 14	18	- 14	.02	.54	23
O	18	03	.52	22	20	.09	- 13	09	24	10	05	08
C	38	11	- 42	.54	17	12	13	.25	.32	18	13	11
A	04	24	- 16	05	.51	06	07	08	07	11	24	.20
<u>SpiS</u>	.07	22	04	08	17	.00	- 12	10	.06	.01	17	09
<u>PubS</u>	.09	09	22	.00	03	18	.35	23	03	.00	16	10
<u>PhyS</u>	14	- 11	- 17	04	16	16	17	.48	10	- 10	.01	04
<u>SObs</u>	05	21	- 16	.14	05	07	.08	.06	.37	- 16	23	09
<u>CmpO</u>	.01	04	- 12	23	- 19	- 12	07	- 11	09	19	12	09
SoCmf	29	.56	12	21	23	20	17	07	- 10	05	.56	31
<u>Gen</u>	.08	27	.04	01	.09	07	- 10	02	- 14	18	24	.36
Obs	2.	1 3.	.1 2.3	3 2.	7 2.0	1.3	2.6	2.2	1.0	1.2	3.2	2.1
Des	1.	1 2	.5 3.1	3.2	2 2.5	5 2.3	1.9	2.8	2.9	2.0	2.9	3.0

Note. Correlations p < .01 are shown in boldface. N = Neuroticism; E = Extraversion; O = Openness; C = Conscientiousness; A = Agreeableness; SpiS = Spiritual Self; PubS = Public Self; PhyS = Physical Self; SObs = Self-Obscurity; CmpO = Comprehension of Others; SoCmf = Social Comfort; Gen = Genuineness; Obs = Observability; Des = Desirability

<sup>\*</sup> Observer-Ratings.

Table 6

Ranking of Personality and Self-Attitude Scales by Five Criteria: Observability, Self-Other

Agreement and Difference, Long-Term Test-Retest Stability, and Metatraitedness

Scale	Observability	Self-other agreement	Self-other difference	$\alpha_{\scriptscriptstyle R}^{\;\;a}$	Meta- traitedness
E	2	1	3	4	3
О	5	3	2	1	4
Gen	7	4	4	8	1
C	3	5	11	5	2
<u>SoCmf</u>	1	2	7	11	6
N	8	6	6	6	5
<u>PhyS</u>	6	11	5	2	7
A	9	7	1	7	9
<u>PubS</u>	4	9	9	3	11
<u>SpiS</u>	10	12	8	12	8
<u>CmpO</u>	11	8	10	9	12
SObs	12	10	12	10	10

Note. α<sub>R</sub> = Long-Term Test-Retest Stability; N = Neuroticism; E = Extraversion; O =
 Openness; C = Conscientiousness; A = Agreeableness; SpiS = Spiritual Self; PubS = Public
 Self; SObs = Self-Obscurity; CmpO = Comprehension of Others; SoCmf = Social Comfort;
 Gen = Genuineness; PhyS = Physical Self.

<sup>&</sup>lt;sup>a</sup> Test-retest stability coefficients of the NEO-PI-R are taken from Kallasmaa, Allik, Realo, & McCrae (in press).

## Figure Captions

Figure 1. The seven-level hierarchical structure from the items of the Self-Attitude Scale. FUPC = first unrotated principal component; <u>CmpO</u> = Comprehension of Others; <u>SoCmf</u> = Social Comfort; <u>SObs</u> = Self-Obscurity; <u>Gen</u> = Genuineness; <u>PhyS</u> = Physical Self; <u>PubS</u> = Public Self; <u>SpiS</u> = Spiritual Self. Correlations below | 46 | are not shown.

Figure 2. Means and standard errors of the subscales of the Big Five questionnaire and the Self-Attitude Scale both for target-persons and observers. The mean is represented by filled circles for the target-person and unfilled squares for the average of two observers; the standard error is represented by the surrounding box and the "whiskers" represent a 95% confidence interval defined as the scale mean  $\pm$  1.96 times the scale standard error. N = Neuroticism; E = Extraversion; O = Openness; C = Conscientiousness; A = Agreeableness SpiS = Spiritual Self; PubS = Public Self; SObs = Self-Obscurity; CmpO = Comprehension of Others; SoCmf = Social Comfort; Gen = Genuineness; PhyS = Physical Self.

<u>Figure 3.</u> Self-other agreement and disagreement on the Self-Attitude Scale and the Big Five questionnaire scales predicted from "self"- and "other"-ratings.

Figure1

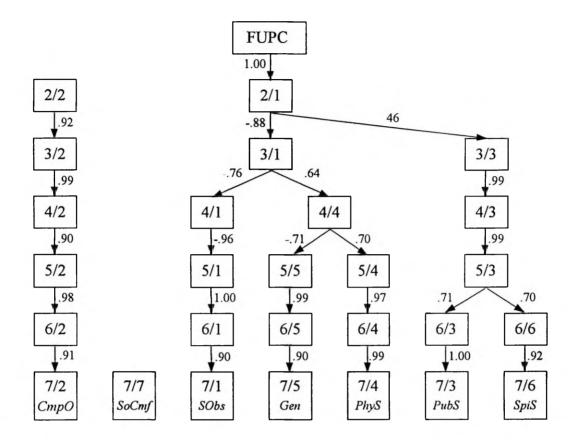


Figure 2

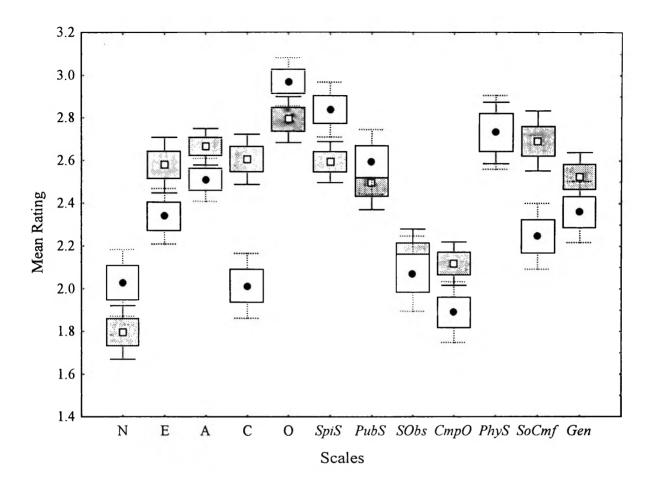
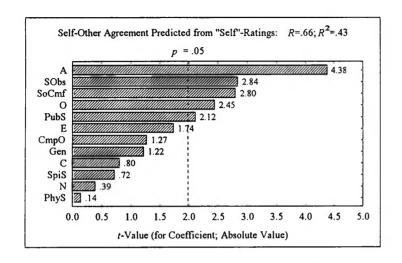
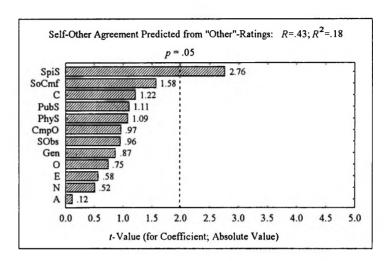
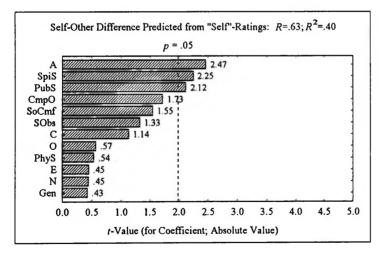
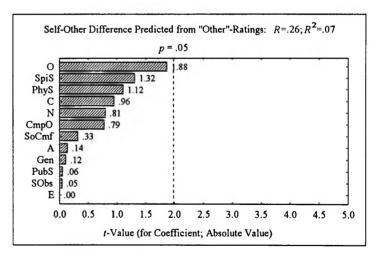


Figure 3









# Appendix

# English Translations of the Items of the Self-Attitude Scale (SAS)

	-
Spiri	tual Self ( <u>SpiS</u> )
#09	My inner life is important to me
#11	I reflect about myself often
#15	I don't like scrutinizing myself <sup>R</sup>
#16	I'm constantly self-occupied
#35	Being occupied with your feelings only disturbs your life <sup>R</sup>
#38	I don't think that scrutinizing myself would make me any happier <sup>R</sup>
#49	I don't waste time wondering whether I have done something wrong or not <sup>R</sup>
Publi	ic Self (PubS)
#02	I often think of others' opinions about me
#08	I don't care about the impression I make on others <sup>R</sup>
#10	I'm afraid to seem stupid
#18	It is important for me to know what other people think of me
#25	I often compare my appearance with that of the other people
#27	I often examine my appearance in the mirror
#32	It is important for me to make a good impression
Phys	ical Self (PhyS)
#20	It is difficult for me to find fitting clothes for my body <sup>R</sup>
#22	I'm ashamed of my body <sup>R</sup>
#26	My body is a burden to me <sup>R</sup>

I enjoy being on the beach in summertime

#29

(Appendix continues)

# Appendix (continued) I have a weight problem<sup>R</sup> #34 If I could, I would select myself a different look<sup>R</sup> #47 #48 I have no reason to complain about my looks Self-Obscurity (SObs) Sometimes I feel that there is somebody else inside of me controlling my deeds #01 #12 Something is distracting my thoughts #21 I am a puzzle to myself #23 There is something about me I just cannot explain #30 Something makes me act in an unpredictable way Often I don't understand what is going on with me #31 #37 Sometimes I'm surprised at my own deeds Comprehension of Others (CmpO) Usually, I know beforehand what my conversation partner is going to say #05 I can read in people's intentions in their faces #07 It's possible to deduce from person's attitude what they are going to do next #13 A stranger's character is revealed to me at first glance It's hard for me to tell a person's thoughts by their looks<sup>R</sup> #14 #39 I don't think I'm good at knowing human nature/judging people<sup>R</sup> It's hard to judge if somebody is lying or not by their appearance<sup>R</sup> #42 Social Comfort (SoCmf) I cannot amuse people<sup>R</sup> #03

I don't try to take charge a party<sup>R</sup>

#06

(Appendix continues)

## Appendix (continued)

- #17 In social gatherings, I mostly remain unnoticed<sup>R</sup>
- #19 I find it easy to talk to strangers
- #28 I have no problems with speaking up in front of a group
- #46 New situations cause me no problems
- #19 I would rather avoid large groups<sup>R</sup>

## Genuineness (Gen)

- #33 I can lie if needed<sup>R</sup>
- #36 Usually, I am not accustomed to pretend
- #40 I'm glad if nobody understands how I actually feel<sup>R</sup>
- #41 I don't want to be seen as somebody I am actually not
- #43 I don't consider it right to wear a mask that hides my true feelings
- #44 I don't consider it right to be cunning with other people
- #45 I'm sincere when communicating with others

Note. R = item reversed for scoring.