

Disoder of cognition/DSM Shigeru Nakamaru IOND UNIVERSITY JAPAN, USA

ABSTRACT Diagnostic and statistical manual of mental disorders on disorder of cognition (DC/DSM) described disorders of human as computer program in DSM.

Artificial cognition and disorder of cognition (AC/DC) are computer programs as laws(Nakamaru 2005a). DSM(Diagnostic and statistical manual of mental disorders) is check list for measure or estimation of psyciotorical problem. In this study, there dealt with each behaviors or reactions by DSM on DC(DC/DSM). DC/DSM is consisted by memory system as human cognition. Kinds of memory are sensory memory(SM), short term memory(STM), long term momory(LTM), working memory(WM). There is disorder in memories on DC belong DSM, for example, small STM, only WM without STM and so on. Memories in LTM are meaning part, procedure part, episode part, and self-concept part.

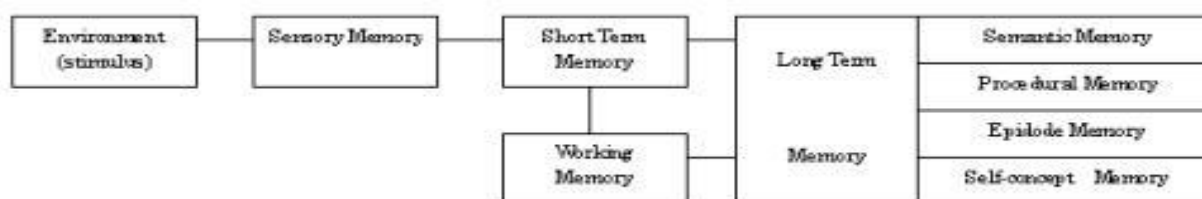


Figure 1 Memory system for artificial cognition and disorder of cognition

DC/DSM described disorders of human as computer program. For examples, there are DC/DSM for reading disorder, mathematic disorder, conduct disorder, and schizotypal personality disorder. Learning disorder is difficulty to learn or aquirement of knowledges. Reading disorder (DSM/ 315.00) is hardly to understand word or sentence. Mathematics disorder(DSM/315.1) is hardly to operate numbers(arithmetic operation). Conduct disorder(DSM) is rough, violence, evil, or crime. Schizotypal personality disorder(DSM/301.22) is soft schizophrenia(believed ESP, ghost, telepathy, superstition, soft delusion of reference, and so on). There is behavioral traits on artificial cognition for self concept, for example, like a PAP or POPs(Nakamaru 2003,2004,2005b). Creation of DC/DSM is necessary to analyze of behavioral script belong DSM or ICD(international classification of disease). There is resolution of cognitive parts in psychiatric problems by DC/DSM analysis. By study of DC/DSM, there are progress to knowledges and of analysis in psychiatry and artificial personality study.

Reference

- Nakamaru,S. 2003 PAP; Producing Angry Programs. Social contributions and responsibilities of simulation & gaming. ISAGA2003,617-625
- Nakamaru,S. 2004 Program of personality. The 18th Japanese Society for Artificial Intelligence 2004, 2C1-03 (第 18 回日本人工知能学会) *CD-ROM 番号 2C1-03
- Nakamaru,S. 2005a Artificial Cognition and Disorder of Cognition. 6th Tsukuba International Conference On Memory, 46
- Nakamaru,S. 2005b Program of personality tests. The 19th Japanese Society for Artificial Intelligence 2005, 2G2-04 (第 19 回日本人工知能学会) *CD-ROM 番号 2G2-04

Program Notes(sample programs)

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I. DC/DSM READING DISORDER/DSM/315.00 [RD00.bas]
10000 ' DC/DSM READING DISORDER/DSM/315.00 [RD00.bas]
10010 ' 2005/SEP/25-2005/OCT/03
10020 ' Program by Nakamaru, S. (IOND UNIVERSITY)
10030 '
11000 '
11100 NN=10:NN2=7:N=10:dim UW$(NN),W$(NN2)
11200 ii=1:BN(1)=ii:flag1=1:flag2=0
11300 for i=1 to 10:read UW$(i):next i
12000 *CO
12010 input ">",IP$:'<---- input who
12020 print "> I am RD. I am Male. My age is 32 years
old."
20000 for k=1 to N
20100 flag2=1:ii=1:flag3=0:flag1=1
20200 input ">",X$
20300 LS=len(X$)
20400 for i=1 to LS
20500 L$(i)=mid$(X$,i,1)
20600 'print L$(i)
20700 if L$(i)=" " or L$(i)="." or L$(i)="," then
20800 ii=ii+1
20900 BN(ii)=i
21000 end if
21100 next i
21200 BN(ii+1)=LS
21210 for i=1 to NN2:W$(i)="" :flag4(i)=0:next i
21300 for i=1 to ii
21400 for j=BN(i) to BN(i+1)
21500 if not(L$(j)=" " or L$(j)="." or L$(j)=","
or L$(j)="!" or L$(j)="?") then W$(i)=W$(i)+L$(j)
21600 next j:'print W$(i)
21700 next i
21710 if W$(ii)="" then ii=ii-1
21800 for i=1 to ii
21850 if flag3=0 then
21900 for j=1 to NN
22000 if W$(i)="I" and flag1=1 then
22100 print ">You are ";W$(i+2);"."
22200 flag1=0:flag2=0
22300 end if
22301 next j
22302 next i
22303 if flag2=1 then
22305 for i=1 to ii
22307 for j=1 to NN
22310 if not(W$(i)="you" or W$(i)="You" or
W$(i)="are") then
22400 if W$(i)=UW$(j) then
22510 print "> I know ";W$(i);"! "
22520 flag2=99
22700 else
22800 if not(W$(i)=UW$(j)) and flag1=0 and
not(flag2=0) then flag2=i
22900 if W$(i)="" then flag2=0
23000 end if
23010 end if
23100 next j
23200 if (not(flag2=0) or not(W$(1)="I")) and
not(flag2>NN2) then
23210 print "> I don't know";W$(flag2);"! !!":' Like
a PAP print "> What the";W$(flag2)
23220 end if
23300 end if

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23400 next i
23500 end if
50000 next k
60000 print "> Good Bye!"
80000 end
90000 'Understood words(UW) data
90100 data
"Hello","Hi","Good","Bad","You","eat","Who","What","fool",
"Foolish"
90500 'SELF-CONCEPT
90510 data "I am poor at reading."

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II. DC/DSM CONDUCT DISORDER/DSM [CD00.bas]

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10000 ' DC/DSM CONDUCT DISORDER/DSM [CD00.bas]
10010 ' 2005/OCT/10-2005/OCT/24
10020 ' Program by Nakamaru, S. (IOND UNIVERSITY)
10030 '
11000 '
11100 N=3:NW1=7:NN1=10:NN2=2:NN3=1:NN4=10:dim
UW$(NN1),HS$(NN2,3),SC$(NN3),HW$(NN4),W$(NW1)
11200 ii=1:BN(1)=ii:flag1=1:flag2=0
11250 restore *DHW:for i=1 to NN4:read HW$(i):next i
11300 restore *DUW:for i=1 to NN1:read UW$(i):next i
11400 restore *DHS:for i=1 to NN2:for j=1 to 3:read
HS$(i,j):next j:next i
11500 restore *DSC:for i=1 to NN3:read SC$(i):next i
12000 *CO
12010 input ">",IP$:'<---- input who
12020 print "> I am CD. I am Male. My age is 18 years
old."
20000 for k=1 to N
20100 flag2=1:ii=1:flag3=0:flag1=1
20200 input ">",X$
20300 LS=len(X$)
20400 for i=1 to LS
20500 L$(i)=mid$(X$,i,1)
20600 'print L$(i)
20700 if L$(i)=" " or L$(i)="." or L$(i)="," then
20800 ii=ii+1
20900 BN(ii)=i
21000 end if
21100 next i
21200 BN(ii+1)=LS
21300 for i=1 to NN2:W$(i)="" :flag4(i)=0:next i
21400 for i=1 to ii
21500 for j=BN(i) to BN(i+1)
21600 if not(L$(j)=" " or L$(j)="." or L$(j)=","
or L$(j)="!" or L$(j)="?") then W$(i)=W$(i)+L$(j)
21700 next j:'print W$(i)
21800 next i
21900 if W$(ii)="" then ii=ii-1
22000 for i=1 to ii
22100 if flag3=0 then
22200 for j=1 to NN
22300 if W$(i)="I" and flag1=1 then
22400 print ">You are ";W$(i+2);"."
22500 flag1=0:flag2=0
22600 end if
22700 next j
22800 next i
22900 if flag2=1 then
23000 for i=1 to ii
23100 for j=1 to NN4
23200 if not(W$(i)="you" or W$(i)="You" or
W$(i)="are") then
23300 if W$(i)=HW$(j) then
23400 if W$(i)="animal" then

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23500          print "> I love to kill
animals!!!"
23600      else
23700          print "> I love";HW$(i);"!"
23800      end if
23900      flag2=99
24000  else
24100      if not(W$(i)=UW$(j)) and flag1=0 and
not(flag2=0) then flag2=i
24200      if W$(i)="" then flag2=0
24300  end if
24400  end if
24500 next j
24600  if (not(flag2=0) or not(W$(1)="I")) and
not(flag2>NN2) then
24700      print "> What the";W$(flag2) ;"!!!"
24800  end if
24900 end if
25000 next i
25100 end if
25200 next k
25300 for i=1 to 3
25400     input ">", X$
25500     print ">";HS$(1,i)
25600 next i
25700 for i=1 to NN3
25800     input ">", X$
25900     print ">";SC$(i)
26000     if i=NN3 then print " Good Bye!"
26100 next i
80000 end
90000 *DHW
90100 'for harassment words
90200 data
"animal","thief","harm","theft","violence","forced
Sex","entry","deceive","arson","fight"
90300 *DUW
90400 'Understood words(UW) data
90500 data
"Hello","Hi","Good","Bad","You","eat","Who","What","fool",
"foolish"
90600 *DHS
90700 'Animal harassment script
90800 data "Do you like animal?"
90900 data "I dislike Animal!"
91000 data "I have A experience to kill Animals!"
91100 'Crime experience script
91200 data "Do you have Crime?"
91300 data "I have A experience to do Crime! My jobs are
Thief, Harm, Theft, Violence, Forced Sex, Entry, Deceive,
Arson, and Fight!!!"
91400 data "My crimes Front Under the Other's Eyes, but I
am FREE!!"
91500 *DSC
91600 'SELF-CONCEPT
91700 data "I pleasure to Kill Animals, to Do Crime front
thier EYES, I LOVE DO!!"

III. DC/DSM Schizotypal Personlity Disorder/DSM 301.22
[SPD00.bas]
10000 ' DC/DSM Schizotypal Personlity Disorder/DSM
301.22 [SPD00.bas]
10010 ' 2005/NOV/06-2005/NOV/06
10020 ' Program by Nakamaru, S. (IOND UNIVERSITY)
10030 '
11000 '
11100 N=3:NW1=7:NN1=10:NN2=3:NN3=3:dim
UW$(NN1), SS$(NN2), SC$(NN3), W$(NW1)
11200 ii=1:iii=1:BN(1)=ii:flag1=1:flag2=0
11300 restore *DUW:for i=1 to NN1:read UW$(i):next i
11400 restore *DSS:for i=1 to NN2:read SS$(i):next i
11500 restore *DSC:for i=1 to NN3:read SC$(i):next i
12000 *CO
12010 input ">", IP$:'<---- input who
12020 print "> I am SPD. I am Male. My age is 40 years
old."
20000 for k=1 to N
20100     flag2=1:ii=1:flag3=0:flag1=1
20200     input ">", X$
20300     LS=len(X$)
20400     for i=1 to LS
20500         L$(i)=mid$(X$, i, 1)
20600         'print L$(i)
20700         if L$(i)=" " or L$(i)="." or L$(i)="," then
20800             ii=ii+1
20900             BN(ii)=i
21000         end if
21100     next i
21200     BN(ii+1)=LS
21300 for i=1 to NN2:W$(i)="" :flag4(i)=0:next i
21400 for i=1 to ii
21500     for j=BN(i) to BN(i+1)
21600         if not(L$(j)=" " or L$(j)="." or L$(j)=","
or L$(j)="!" or L$(j)="?") then W$(i)=W$(i)+L$(j)
21700     next j
21800 next i
21900 if W$(ii)="" then ii=ii-1
22000     print ">";SS$(iii);W$(1);"!!!"
22100     iii=iii+1
22200     if iii>3 then iii=1
22300 next k
25000 for i=1 to NN3
25100     input ">", X$
25200     print ">";SC$(i)
25300     if i=NN3 then print " Good Bye!"
25400 next i
60000 *snext
60100 if not(inkey$=" ") then goto *snext
80000 end
90000 *DUW
90100 'Understood words(UW) data
90200 data
"Hello","Hi","Good","Bad","You","eat","Who","What","fool",
"foolish"
90500 *DSS
90600 'stranger script
90600 data "What mean"
90700 data "I dislike"
90800 data "I HATE"
91000 *DSC
91100 'SELF-CONCEPT
91200 data "I some feel some cues to me on your talk.
like a TV program, Newspaper' NEWS, Radio DJ at
sometime."
91300 data "I BELIEVE ESP, UFO, GHOST, TELEPACY ETC."
91400 data "I believe the best of MY Parents only."

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