

Thesis Title

by

Name of Author

Doctor of Philosophy in Psychology

2020



Faculty of Social Sciences

University of Macau

Thesis Title

by

Name of Author

SUPERVISOR: Name of Supervisor

DEPARTMENT: Name of Department

Degree Title

2020

University of Macau

Author's right 2020 by
SURNAME, Given Names

Acknowledgements

Here you could put the persons you want to thanks.

Abstract

The title Abstract should be in bold and centered. The abstract must not be more than 350 words

Declaration

I declare that the thesis here submitted is original except for the source materials explicitly acknowledged and that this thesis as a whole, or any part of this thesis has not been previously submitted for the same degree or for a different degree.

I also acknowledge that I have read and understood the Rules on Handling Student Academic Dishonesty and the Regulations of the Student Discipline of the University of Macau.

Table of Contents

Acknowledgements	i
Abstract	ii
Declaration	iii
Chapter 1 Introduction	1
1.1 Potential Contributions	1
1.2 Statement of Originality	1
Chapter 2 Literature Review	2
References	3
Appendices	9
A R codes	9

List of Figures

1 Example of Figures.	8
-----------------------	---

List of Tables

1 Characteristics of the Meta-Analysis Conducted by Bora et al. (2009)	6
--	---

Chapter 1 Introduction

You can write the first chapter here.

The APA style citing: for example, you mentioned something (Abelson, 1985). Or Abelson (1985) mentioned something very important.

Below is two subsections which the Graduate School asked me to put.

1.1 Potential Contributions

You can write something here.

1.2 Statement of Originality

You can write something here.

Chapter 2 Literature Review

How to quote:

Without intending any necessary implication of causality, it is convenient to use the phrase “effect size” to mean “the degree to which the phenomenon is present in the population,” or “the degree to which the null hypothesis is false.”. By the above route it can now readily be clear that when the null hypothesis is false, it is false to some specific degree, i.e., the effect size (ES) is some specific non-zero value in the population. The larger this value, the greater the degree to which the phenomenon under study is manifested. (pp. 9-10)

If you quote, you have to quote in this way: “a named expression that maps data, statistics, or parameters onto a quantity that represents the magnitude of some phenomenon” (Kelley & Preacher, 2012, p.141).

Examples of Equations:

$$\delta = \frac{\mu^E - \mu^C}{\sigma}, \quad (1)$$

References

References marked with an asterisk indicate studies included in the meta-analysis.

- Abelson, R. P. (1985). A variance explanation paradox: When a little is a lot. *Psychological Bulletin*, 97, 129–133. doi: 10.1037/0033-2909.97.1.129
- *Bâ, M. B., Zanello, A., Varnier, M., Koellner, V., & Merlo, M. C. (2008). Deficits in neurocognition, theory of mind, and social functioning in patients with schizophrenic disorders: Are they related? *The Journal of Nervous and Mental Disease*, 196, 153–156. doi: 10.1097/NMD.0b013e318162aa08
- *Bertrand, M.-C., Sutton, H., Achim, A. M., Malla, A. K., & Lepage, M. (2007). Social cognitive impairments in first episode psychosis. *Schizophrenia Research*, 95, 124–133. doi: 10.1016/j.schres.2007.05.033
- *Bora, E., Gökçen, S., Kayahan, B., & Veznedaroglu, B. (2008). Deficits of social-cognitive and social-perceptual aspects of theory of mind in remitted patients with schizophrenia: Effect of residual symptoms. *The Journal of Nervous and Mental Disease*, 196, 95–99. doi: 10.1097/NMD.0b013e318162a9e1
- *Brüne, M., Abdel-Hamid, M., Lehmkämer, C., & Sonntag, C. (2007). Mental state attribution, neurocognitive functioning, and psychopathology: What predicts poor social competence in schizophrenia best? *Schizophrenia Research*, 92, 151–159. doi: 10.1016/j.schres.2007.01.006
- *Brüne, M., & Bodenstein, L. (2005). Proverb comprehension reconsidered—‘Theory of mind’ and the pragmatic use of language in schizophrenia. *Schizophrenia Research*, 75, 233–239. doi: 10.1016/j.schres.2004.11.006
- *Brunet, E., Sarfati, Y., & Hardy-Baylé, M.-C. (2003). Reasoning about physical causality and other’s intentions in schizophrenia. *Cognitive Neuropsychiatry*, 8, 129–139. doi: 10.1080/13546800244000256
- *Corcoran, R., & Frith, C. D. (2003). Autobiographical memory and theory of mind: Evidence of a relationship in schizophrenia. *Psychological Medicine*, 33, 897–905. doi: 10.1017/S0033291703007529
- *Corcoran, R., Mercer, G., & Frith, C. D. (1995). Schizophrenia, symptomatology and social inference: Investigating “theory of mind” in people with schizophrenia. *Schizophrenia Research*, 17, 5–13. doi: 10.1016/0920-9964(95)00024-G
- *Corcoran, R., Rowse, G., Moore, R., Blackwood, N., Kinderman, P., Howard, R., ... Bentall, R. P. (2008). A transdiagnostic investigation of ‘theory of mind’ and ‘jumping to conclusions’ in patients with persecutory delusions. *Psychological Medicine*, 38, 1577–1583. doi: 10.1017/S0033291707002152
- *Couture, S. M., Penn, D. L., Addington, J., Woods, S. W., & Perkins, D. O. (2008). Assessment of social judgments and complex mental states in the early phases of psychosis. *Schizophrenia Research*, 100, 237–241. doi: 10.1016/j.schres.2007.12.484
- *Craig, J. S., Hatton, C., Craig, F. B., & Bentall, R. P. (2004). Persecutory beliefs, attributions and theory of mind: Comparison of patients with paranoid delusions, Asperger’s syndrome and healthy controls. *Schizophrenia Research*, 69(1), 29–33. doi: 10.1016/S0920-9964(03)00154-3

- *Harrington, L., Langdon, R., Siegert, R. J., & McClure, J. (2005). Schizophrenia, theory of mind, and persecutory delusions. *Cognitive Neuropsychiatry*, 10(2), 87–104. doi: 10.1080/13546800344000327
- *Kelemen, O., Erdélyi, R., Pataki, I., Benedek, G., Janka, Z., & Kéri, S. (2005). Theory of mind and motion perception in schizophrenia. *Neuropsychology*, 19(4), 494–500. doi: 10.1037/0894-4105.19.4.494
- Kelley, K., & Preacher, K. J. (2012). On effect size. *Psychological Methods*, 17, 137–152. doi: 10.1037/a0028086
- *Kington, J. M., Jones, L. A., Watt, A. A., Hopkin, E. J., & Williams, J. (2000). Impaired eye expression recognition in schizophrenia. *Journal of Psychiatric Research*, 34(4-5), 341–347. doi: 10.1016/s0022-3956(00)00029-7
- *Langdon, R., Coltheart, M., Ward, P. B., & Catts, S. V. (2001). Visual and cognitive perspective-taking impairments in schizophrenia: A failure of allocentric simulation? *Cognitive Neuropsychiatry*, 6(4), 241–269. doi: 10.1080/13546800143000005
- *Langdon, R., Coltheart, M., Ward, P. B., & Catts, S. V. (2002). Disturbed communication in schizophrenia: The role of poor pragmatics and poor mind-reading. *Psychological Medicine*, 32(7), 1273–1284. doi: 10.1017/S0033291702006396
- *Langdon, R., Corner, T., McLaren, J., Ward, P. B., & Coltheart, M. (2006). Externalizing and personalizing biases in persecutory delusions: The relationship with poor insight and theory-of-mind. *Behaviour Research and Therapy*, 44(5), 699–713. doi: 10.1016/j.brat.2005.03.012
- *Marjoram, D., Gardner, C., Burns, J., Miller, P., Lawrie, S. M., & Johnstone, E. C. (2005). Symptomatology and social inference: A theory of mind study of schizophrenia and psychotic affective disorder. *Cognitive Neuropsychiatry*, 10(5), 347–359. doi: 10.1080/13546800444000092
- *Martino, D. J., Bucay, D., Butman, J. T., & Allegri, R. F. (2007). Neuropsychological frontal impairments and negative symptoms in schizophrenia. *Psychiatry Research*, 152(2-3), 121–128. doi: 10.1016/j.psychres.2006.03.002
- *Mo, S., Su, Y., Chan, R. C., & Liu, J. (2008). Comprehension of metaphor and irony in schizophrenia during remission: The role of theory of mind and IQ. *Psychiatry Research*, 157(1-3), 21–29. doi: 10.1016/j.psychres.2006.04.002
- *Pinkham, A. E., & Penn, D. L. (2006). Neurocognitive and social cognitive predictors of interpersonal skill in schizophrenia. *Psychiatry Research*, 143(2-3), 167–178. doi: 10.1016/j.psychres.2005.09.005
- *Pousa, E., Duñó, R., Brébion, G., David, A. S., Ruiz, A. I., & Obiols, J. E. (2008). Theory of mind deficits in chronic schizophrenia: Evidence for state dependence. *Psychiatry Research*, 158(1), 1–10. doi: 10.1016/j.psychres.2006.05.018
- *Randall, F., Corcoran, R., Day, J. C., & Bentall, R. P. (2003). Attention, theory of mind, and causal attributions in people with persecutory delusions: A preliminary investigation. *Cognitive Neuropsychiatry*, 8(4), 287–294. doi: 10.1080/1354680000057
- *Russell, T. A., Rubia, K., Bullmore, E. T., Soni, W., Suckling, J., Brammer, M. J., ... Sharma, T. (2000). Exploring the social brain in schizophrenia: Left prefrontal underactivation during mental state attribution. *American Journal of*

Psychiatry, 157(12), 2040–2042. doi: 10.1176/appi.ajp.157.12.2040

- *Sarfati, Y., Hardy-Baylé, M.-C., Besche, C., & Widlöcher, D. (1997). Attribution of intentions to others in people with schizophrenia: A non-verbal exploration with comic strips. *Schizophrenia Research*, 25(3), 199–209. doi: 10.1016/s0920-9964(97)00025-x
- *Sarfati, Y., Hardy-Baylé, M.-C., Brunet, E., & Widlöcher, D. (1999). Investigating theory of mind in schizophrenia: Influence of verbalization in disorganized and non-disorganized patients. *Schizophrenia Research*, 37(2), 183–190.

Table 1

Characteristics of the Meta-Analysis Conducted by Bora et al. (2009)

No	Study	n_1	m_1	sd_1	CV_1	n_2	m_2	sd_2	CV_2	P. Max	d
1	Corcoran et al., 1995	55	15.60	3.90	25.00	30	18.30	1.60	8.74	20	0.822
2	Sarfati et al., 1997	24	18.40	6.70	36.41	24	24.90	2.10	8.43	28	1.309
3	Sarfati et al., 1999a	25	9.90	3.69	37.27	15	13.20	0.90	6.82	14	1.106
4	Sarfati et al., 1999b	26	18.65	6.45	34.56	13	24.40	2.30	9.43	28	1.053
5	Russell et al., 2000	5	12.60	5.03	39.92	7	6.16	3.84	62.34	30	1.479
6	Kington et al., 2000	16	7.75	1.24	16.00	16	9.06	0.85	9.38	10	1.232
7	Langdon et al., 2001	32	4.05	1.38	34.07	24	5.50	0.78	14.18	6	1.247
8	Langdon et al., 2002	25	3.79	1.36	35.88	20	5.54	0.76	13.72	6	1.542
9	Langdon et al., 2002	25	0.66	0.25	37.88	20	0.92	0.12	13.04	1	1.280
10	Brunet et al., 2003	25	11.10	2.80	25.23	25	13.00	1.20	9.23	14	0.882
11	Randall et al., 2003	32	3.61	2.22	61.37	18	5.43	1.40	25.78	6	0.925
12	Randall et al., 2003	32	1.64	1.96	119.50	18	4.57	1.6	35.01	6	1.591
13	Corcoran & Frith 2003	59	2.42	1.04	42.98	44	3.65	0.49	13.42	4	1.446
14	Corcoran & Frith 2003	59	14.86	5.32	35.8	44	18.90	1.02	5.4	20	0.964
15	Craig et al., 2004	16	15.75	3.34	21.21	16	19.56	0.73	3.73	20	1.576
16	Craig et al., 2004	16	18.19	6.65	36.56	16	27.63	4.43	16.03	36	1.671
17	Harrington et al., 2005a	25	4.46	1.20	26.91	38	5.16	0.99	19.19	6	0.650
18	Harrington et al., 2005a	25	76.70	22.90	29.86	38	87.20	16.00	18.35	100	0.552
19	Harrington et al., 2005a	25	54.60	29.80	54.58	38	72.20	19.70	27.29	100	0.728
20	Marjoram et al., 2005	15	15.50	2.20	14.19	15	19.20	1.10	5.73	20	2.127
21	Brüne & Bodenstein 2005	31	25.30	8.40	33.20	21	35.30	1.30	3.68	36	1.525

Continued on next page

Table 1 – continued from previous page

No	Study	n_1	m_1	sd_1	CV_1	n_2	m_2	sd_2	CV_2	P. Max	d
22	Brüne & Bodenstein 2005	31	40.80	12.00	29.41	21	56.30	2.90	5.15	59	1.636
23	Kelemen et al., 2005	52	18.50	5.20	28.11	30	22.50	2.90	12.89	29	0.888
24	Langdon et al., 2006	34	3.74	1.60	42.69	21	5.60	0.56	10.00	6	1.429
25	Pinkham & Penn, 2006	49	3.06	0.88	28.69	44	3.58	0.63	17.49	4	0.677
26	Pinkham & Penn, 2006	49	15.10	4.06	26.91	44	17.14	2.12	12.38	20	0.620
27	Martino et al., 2007	21	0.82	0.11	13.41	15	0.94	0.05	5.32	1	1.329
28	Brüne et al., 2007	38	29.20	6.00	20.55	29	34.00	2.50	7.35	36	0.997
29	Brüne et al., 2007	38	19.20	3.50	18.23	29	21.90	1.40	6.39	23	0.966
30	Bertrand et al., 2007	36	15.31	3.11	20.31	27	18.07	1.47	8.14	20	1.085
31	Pousa et al., 2008	61	4.06	1.55	38.18	51	4.20	1.14	27.14	6	0.102
32	Pousa et al., 2008	61	1.23	0.76	61.79	51	1.41	0.67	47.52	2	0.250
33	Bâ et al., 2008	16	2.69	0.60	22.3	16	3.00	0	0	3	0.731
34	Mo et al., 2008	29	1.17	0.71	60.68	22	1.95	0.21	10.77	2	1.375
35	Couture et al., 2008	26	62.70	13.70	21.85	41	68.80	14.00	20.35	100	0.439
36	Corcoran et al., 2008	39	4.40	1.30	29.55	33	5.30	1.20	22.64	6	0.717
37	Bora et al., 2008	91	14.80	4.50	30.41	55	17.80	3.40	19.10	27	0.728
38	Bora et al., 2008	91	5.80	2.30	39.66	55	7.60	0.70	9.21	8	0.964

Notes. The n_1 is the sample size of patients with schizophrenia and n_2 is the sample size of healthy control subjects; m_1 and m_2 are the means of patients and control groups, respectively; sd_1 and sd_2 are the standard deviations of patients and control groups, respectively; CV_1 and CV_2 are the coefficient of variability; P. Max. is short for the possible maximum of the items. The CV_1 and CV_2 are in bold when out of the range between 15 and 75, which indicates nonnormality.

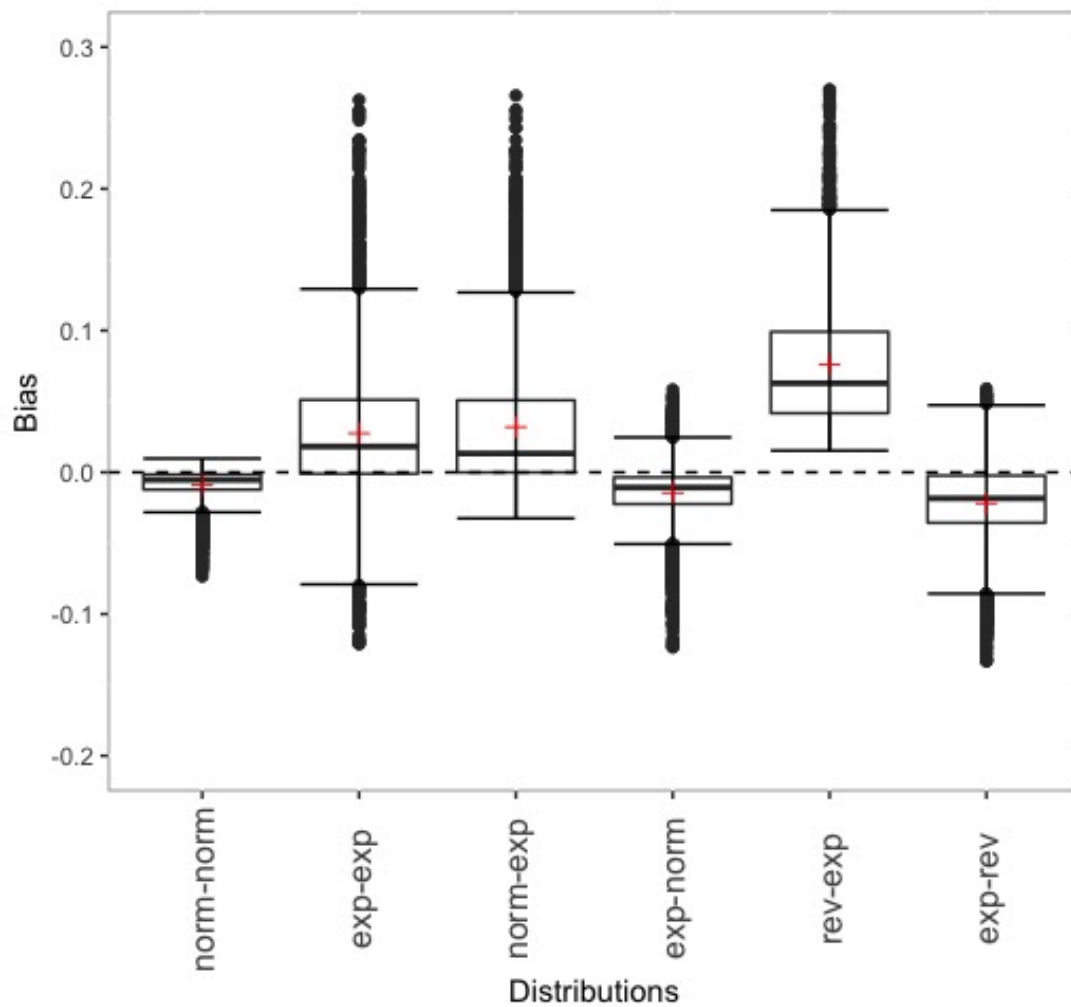


Figure 1. Example of figures. If the figure title is too long, you could the shortened title in the content.

Appendices

A R codes

How to have R codes: For example, I want to use the function `describeBy` in the package `psych` to compute:

```
describeBy(data, by = groups)
```
