LAMPIRAN 1

FORMAT PENGUMPULAN DATA TAHAP 1

Faktor-faktor kualitas komunikasi pada pengelolaan proyek	Masukan, Komentar, Tanggapan
I. PERENCANAAN KOMUNIKASI	
1.1 Penyampaian perencanaan struktur organisasi yang kurang jelas	
1.2 Dalam menunjuk manajer proyek tidak melalui seleksi yang benar	
1.3 Tidak adanya persyaratan tertulis dalam penunjukan manajer	
1.4 Calon manajer proyek tidak melakukan presentasi atas program yang akan dilakukan	
1.5 Hubungan koordinasi pelaksanaan dalam tim kerja internal yang kurang baik (hubungan tim kerja proyek di lapangan)	
1.6 Hubungan koordinasi yang kurang antar kantor proyek dengan kantor pusat	
1.7 Kurang ketersediaan informasi antar bagian dan keahlian khusus yang terlibat dalam proyek	
1.8 Kurang ketersediaan informasi dalam pelaksanaan proyek dari kontraktor	
1.9 Terlambatnya penyampaian informasi perubahan perencanaan desain yang terjadi (*change orders*)	

Faktor-faktor kualitas komunikasi pada pengelolaan proyek I. PERENCANAAN KOMUNIKASI	Masukan, Komentar, Tanggapan
1.10 Tidak sesuainya teknologi yang tersedia dengan yang dibutuhkan	
1.11 Ketidak cocokan pengalaman dan keahlian pelaksana dengan teknologi yang digunakan	
1.12 Kurangnya komunikasi dalam proyek karena penggunanan metode dan teknologi yang tidak sesuai dengan proyek	
1.13 Tidak jelasannya pembagian tugas dalam dan pembuatan program pelaksanaan	
1.14 Ketidak jelasan struktur pengarsipan rencana manajemen komunikasi yang ada	
1.15 Kurang jelasnya spesifikasi teknis yang tertulis dan kurang lengkapnya *requirement* yang diminta dalam kontrak	
1.16 Sistem pendistribusian informasi rencana manajemen komunikasi yang tidak baik	
1.17 Sistem pendistribusian informasi terhadap perubahan perencanaan (*change orders*) yang tidak baik	

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Faktor-faktor kualitas komunikasi pada pengelolaan proyek	Masukan, Komentar, Tanggapan
II. DISTRIBUSI INFORMASI	
2.1 Kurang kelengkapan dokumen tender struktur organisasi	
2.2 Kurangnya kejelasan strategi sistem pengelolaan proyek	
2.3 Kurangnya kemampuan melakukan komunikasi (*communication skill*) internal dengan pekerja proyek	
2.4 Manajer proyek kurang efektif dalam menerapkan konsep SMART (*Specific, Measureable, Achivable & Reable, Time Constraint*) saat berkomunikasi dengan bawahannya	
2.5 Jadwal rapat harian yang tidak berjalan dengan baik dan kurangnya fasilitas rapat	
2.6 Tidak berjalan dengan baik jadwal rapat koordinasi mingguan dan fasilitas rapat yang kurang	
2.7 Jadwal rapat bulanan yang tidak berjalan dengan baik dan kurangnya fasilitas rapat	
2.8 Risalah rapat dan pendistribusian yang tidak tepat waktu	

Faktor-faktor kualitas komunikasi pada pengelolaan proyek II. DISTRIBUSI INFORMASI	Masukan, Komentar, Tanggapan
2.9 Kurangnya kelengkapan peserta maupun perwakilannya dalam menghadiri rapat	
2.10 Kemampuan komunikasi informal (memo, *ad hoc*, dll) yang tidak baik	
2.11 Kurangnya komunikasi vertikal antara kantor pusat dengan kantor proyek	
2.12 Sistem distribusi informasi dengan rapat koordinasi mingguan yang tidak berjalan baik	
2.13 Sistem distribusi informasi dengan rapat konstruksi bulanan yang tidak berjalan dengan baik	
2.14 Kurangnya distribusi dokumen cetakan dan tidak tepat waktu (laporan, risalah)	
2.15 Kurangnya penggunaan/kebebasan menggunakan akses telepon	
2.16 Penggunaan *faximile* yang tidak maksimal	

Faktor-faktor kualitas komunikasi pada pengelolaan proyek	Masukan, Komentar, Tanggapan
II. DISTRIBUSI INFORMASI	
2.17 Kurangnya penggunaan *email* dan *voice mail*	
2.18 Kurangnya penggunaan *video conference*	
2.19 Catatan proyek yang tidak terpelihara secara teratur	
2.20 Metode presentasi yang kurang memadai serta kurang relevan isi informasi yang dibutuhkan audien	
2.21 Penyampaian informasi laporan proyek yang kurang baik	

Faktor-faktor kualitas komunikasi pada pengelolaan proyek **III. LAPORAN KINERJA**	Masukan, Komentar, Tanggapan
3.1 Kurang jelasnya dokumen teknik seperti gambar teknis, spesifikasi rencana, rencana tes/pengujian	
3.2 Kurang jelasnya laporan harian mengenai kemajuan pekerjaan	
3.3 Kurang jelasnya laporan harian mengenai perubahan pekerjaan	
3.4 Kurang jelasnya laporan mingguan mengenai kemajuan pekerjaan	
3.5 Kurang jelasnya laporan mingguan mengenai perubahan pekerjaan	
3.6 Tidak jelasnya laporan harian kerja proyek (laporan tenaga kerja, laporan pendatanganan, lapangan material dan alat)	
3.7 Tidak jelasnya laporan mingguan kerja proyek (laporan tenaga kerja, laporan pendatanganan, lapangan material dan alat)	
3.8 Tidak jelasnya laporan bulanan kerja proyek (laporan tenaga kerja, laporan pendatanganan, lapangan material dan alat)	

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Faktor-faktor kualitas komunikasi pada pengelolaan proyek	Masukan, Komentar, Tanggapan
III. LAPORAN KINERJA	
3.9 Kurang jelasnya laporan bulanan mengenai kemajuan pekerjaan	
3.10 Kurang jelasnya laporan bulanan mengenai perubahan pekerjaan	
3.11 Kurangnya *site inspection* atau *controlling* bersama pada tinjauan kinerja	
3.12 Tidak berjalannya jadwal pertemuan untuk pembicaraan dan pemeriksaan *progress* proyek	
3.13 Kurangnya tindak lanjut permasalahan proyek temasuk klaim yang disampaikan ke kontraktor untuk penyelesaian	
3.14 Kurangnya *review* atas *progress* kinerja sebagai alat dan teknik komunikasi	

Faktor-faktor kualitas komunikasi pada pengelolaan proyek	Masukan, Komentar, Tanggapan
IV. PENGATURAN *STAKEHOLDER*	
4.1 Kurangnya kemampuan melakukan komunikasi (*communication skill*) eksternal (dengan *owner*, konsultan pengawas, konsultan perencana, kontraktor diproyek)	
4.2 Hubungan koordinasi yang kurang baik antara kontraktor dan pengawas	
4.3 Hubungan *flow* koordinasi dalam perencanaan dan pelaksanaan proyek yang kurang baik antar pihak yang terkait (*owner*, konsultan perencana, konsultan pengawas, kontraktor)	

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Hasil Validasi Awal Terhadap Pakar

No.	Variabel	Pakar 1	Pakar 2	Pakar 3
1	Penyampaian perencanaan struktur organisasi yang kurang jelas	Penyampaian perencanaan struktur organisasi	√	√
2	Dalam menunjuk manajer proyek tidak melalui seleksi yang benar	Penunjukkan manajer proyek	√	√
3	Tidak adanya persyaratan tertulis dalam penunjukan manajer	Persyaratan tertulis dalam penunjukan manajer	√	√
4	Calon manajer proyek tidak melakukan presentasi atas program yang akan dilakukan.	Presentasi atas program yang akan dilakukan oleh calon manajer proyek	√	√
5	Hubungan koordinasi pelaksanaan dalam tim kerja internal yang kurang baik (hubungan tim kerja proyek di lapangan)	Hubungan koordinasi pelaksanaan dalam tim kerja internal (hubungan tim kerja proyek di lapangan)	√	√
6	Hubungan koordinasi yang kurang antar kantor proyek dengan kantor pusat	Hubungan koordinasi antar kantor proyek dengan kantor pusat	√	√
7	Kurang ketersediaan informasi antar bagian dan keahlian khusus yang terlibat dalam proyek	Informasi antar bagian dan keahlian khusus yang terlibat dalam proyek	√	√
8	Kurang ketersediaan informasi dalam pelaksanaan proyek dari kontraktor	Informasi dalam pelaksanaan proyek dari kontraktor	√	√
9	Terlambatnya penyampaian informasi perubahan perencanaan desain yang terjadi (*change orders*)	Penyampaian informasi perubahan perencanaan desain yang terjadi (*change orders*)	√	√
10	Tidak sesuainya teknologi yang tersedia dengan yang dibutuhkan	Sesuainya teknologi yang tersedia dengan yang dibutuhkan	√	√
11	Ketidak cocokan pengalaman dan keahlian pelaksana dengan teknologi yang digunakan	Kecocokan pengalaman dan keahlian pelaksana dengan teknologi yang digunakan	√	√

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No.	Variabel	Pakar 1	Pakar 2	Pakar 3
12	Kurangnya komunikasi dalam proyek karena penggunanan metode dan teknologi yang tidak sesuai dengan proyek	Komunikasi dalam proyek dalam penggunanan metode dan teknologi yang sesuai dengan proyek	√	√
13	Tidak jelasannya pembagian tugas dalam dan pembuatan program pelaksanaan	Pembagian tugas dalam dan pembuatan program pelaksanaan	√	√
14	Ketidak jelasan struktur pengarsipan rencana manajemen komunikasi yang ada	Struktur pengarsipan rencana manajemen komunikasi yang ada	√	Kesesuaian struktur pengarsipan rencana manajemen komunikasi yang ada
15	Kurang jelasnya spesifikasi teknis yang tertulis dan kurang lengkapnya *requirement* yang diminta di kontrak	Spesifikasi teknis yang tertulis	√	Terstrukturnya spesifikasi teknis yang tertulis
16	Sistem pendistribusian informasi rencana manajemen komunikasi yang tidak baik	Sistem pendistribusian informasi rencana manajemen komunikasi	√	√
17	Sistem pendistribusian informasi terhadap perubahan perencanaan (*change orders*) yang tidak baik	Sistem pendistribusian informasi terhadap perubahan perencanaan (*change orders*)	√	√
18		*Requirement* yang diminta	*Requirement* yang diminta dalam kontrak	Sesuainya *requirement* yang diminta dalam kontrak dengan spesifikasi
19	Kurang kelengkapan dokumen tender struktur organisasi	Kelengkapan dokumen tender struktur organisasi	√	√
20	Kurangnya kejelasan strategi sistem pengelolaan proyek	Kejelasan strategi sistem pengelolaan proyek	√	√
21	Kurangnya kemampuan melakukan komunikasi (*communication skill*) internal dengan pekerja proyek	Kemampuan melakukan komunikasi (*communication skill*) internal dengan pekerja proyek	√	√

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No.	Variabel	Pakar 1	Pakar 2	Pakar 3
22	Manajer proyek kurang efektif dalam menerapkan konsep SMART (*Specific, Measureable, Achivable & Reable, Time Constraint*) saat berkomunikasi dengan bawahannya	Manajer proyek dalam menerapkan konsep SMART (*Specific, Measureable, Achivable & Reable, Time Constraint*) saat berkomunikasi dengan bawahannya	√	√
23	Jadwal rapat harian yang tidak berjalan dengan baik dan kurangnya fasilitas rapat	Jadwal rapat harian/mingguan/bulanan	√	√
	Tidak berjalan dengan baik jadwal rapat koordinasi mingguan dan fasilitas rapat yang kurang	Reduksi: Karena rapat harian, mingguan dan bulanan memiliki bobot yang sama	√	√
	Jadwal rapat bulanan yang tidak berjalan dengan baik dan kurangnya fasilitas rapat	Reduksi: Karena rapat harian, mingguan dan bulanan memiliki bobot yang sama	√	√
24		Fasilitas rapat	Fasilitas rapat yang tersedia	√
25	Risalah rapat dan pendistribusian yang tidak tepat waktu	Pendistribusian risalah rapat	√	√
26	Kurangnya kelengkapan peserta maupun perwakilannya dalam menghadiri rapat	Kelengkapan peserta maupun perwakilannya dalam menghadiri rapat	√	√
27	Kemampuan komunikasi informal (memo, *ad hoc*, dll) yang tidak baik	Kemampuan komunikasi informal (memo, *ad hoc*, dll)	√	√
28	Kurangnya komunikasi vertikal antara kantor pusat dengan kantor proyek	Komunikasi vertikal antara kantor pusat dengan kantor proyek	√	√

No.	Variabel	Pakar 1	Pakar 2	Pakar 3
29	Sistem distribusi informasi dengan rapat koordinasi mingguan yang tidak berjalan baik	Sistem distribusi informasi dengan rapat koordinasi mingguan	√	√
30	Sistem distribusi informasi dengan rapat konstruksi bulanan yang tidak berjalan dengan baik	Sistem distribusi informasi dengan rapat konstruksi bulanan	√	√
31	Kurangnya distribusi dokumen cetakan dan tidak tepat waktu (laporan, risalah)	Ketepatan distribusi dokumen cetakan (laporan, risalah)	√	√
32	Kurangnya penggunaan/kebebasan menggunakan akses telepon	Penggunaan/kebebasan menggunakan akses telepon	√	√
33	Penggunaan *faximile* yang tidak maksimal	Penggunaan *faximile*	√	√
34	Kurangnya penggunaan *email* dan *voice mail*	Penggunaan *email* dan *voice mail*	√	√
35	Kurangnya penggunaan *video conference*	Penggunaan *video conference*	√	√
36	Catatan proyek yang tidak terpelihara secara teratur	Pemeliharaan catatan proyek	√	√
37	Metode presentasi yang kurang memadai serta kurang relevan isi informasi yang dibutuhkan audien	Relevannya metode presentasi dan isi informasi yang dibutuhkan audien	√	√
38	Penyampaian informasi laporan proyek yang kurang baik	Penyampaian informasi laporan proyek	√	√
39	Kurang jelasnya dokumen teknik seperti gambar teknis, spesifikasi rencana, rencana tes/pengujian	Kejelasan dokumen teknik seperti gambar teknis, spesifikasi rencana, rencana tes/pengujian+A52	√	√
40	Kurang jelasnya laporan harian mengenai kemajuan pekerjaan	Kejelasan laporan harian mengenai kemajuan pekerjaan	√	√

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No.	Variabel	Pakar 1	Pakar 2	Pakar 3
41	Kurang jelasnya laporan harian mengenai perubahan pekerjaan	Kejelasan laporan harian mengenai perubahan pekerjaan	√	√
42	Kurang jelasnya laporan mingguan mengenai kemajuan pekerjaan	Kejelasan laporan mingguan mengenai kemajuan pekerjaan	√	√
43	Kurang jelasnya laporan mingguan mengenai perubahan pekerjaan	Kejelasan laporan mingguan mengenai perubahan pekerjaan	√	√
44	Tidak jelasnya laporan harian kerja proyek (laporan tenaga kerja, laporan pendatanganan, lapangan material dan alat)	Kejelasan laporan harian kerja proyek (laporan tenaga kerja, laporan pendatanganan, lapangan material dan alat)	√	√
45	Tidak jelasnya laporan mingguan kerja proyek (laporan tenaga kerja, laporan pendatanganan, lapangan material dan alat)	Kejelasan laporan mingguan kerja proyek (laporan tenaga kerja, laporan pendatanganan, lapangan material dan alat)	√	√
46	Tidak jelasnya laporan bulanan kerja proyek (laporan tenaga kerja, laporan pendatanganan, lapangan material dan alat)	Kejelasan laporan bulanan kerja proyek (laporan tenaga kerja, laporan pendatanganan, lapangan material dan alat)	√	√
47	Kurang jelasnya laporan bulanan mengenai kemajuan pekerjaan	Kejelasan laporan bulanan mengenai kemajuan pekerjaan	√	√
48	Kurang jelasnya laporan bulanan mengenai perubahan pekerjaan	Kejelasan laporan bulanan mengenai perubahan	√	√
49	Kurangnya *site inspection* atau *controlling* bersama pada tinjauan kinerja	*Site inspection* atau *controlling* bersama pada tinjauan kinerja	√	√

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No.	Variabel	Pakar 1	Pakar 2	Pakar 3
50	Tidak berjalannya jadwal pertemuan untuk pembicaraan dan pemeriksaan *progress* proyek	Jadwal pertemuan untuk pembicaraan dan pemeriksaan *progress* proyek	√	√
51	Kurangnya tindak lanjut permasalahan proyek temasuk klaim yang disampaikan ke kontraktor untuk penyelesaian	Tindak lanjut permasalahan proyek temasuk klaim yang disampaikan ke kontraktor untuk penyelesaian	√	√
52	Kurangnya *review* atas *progress* kinerja sebagai alat dan teknik komunikasi	*Review* atas *progress* kinerja sebagai alat dan teknik komunikasi	√	√
53	Kurangnya kemampuan melakukan komunikasi (*communication skill*) eksternal (dengan *owner*, konsultan pengawas, konsultan perencana, kontraktor diproyek)	Kemampuan melakukan komunikasi (*communication skill*) eksternal (dengan *owner*, konsultan pengawas, konsultan perencana, kontraktor diproyek)	√	√
54	Hubungan koordinasi yang kurang baik antara kontraktor dan pengawas	Hubungan koordinasi antara kontraktor dan pengawas	√	√
55	Hubungan *flow* koordinasi dalam perencanaan dan pelaksanaan proyek yang kurang baik antar pihak yang terkait (*owner*, konsultan perencana, konsultan pengawas, kontraktor)	Hubungan *flow* koordinasi dalam perencanaan dan pelaksanaan proyek antar pihak yang terkait (*owner*, konsultan perencana, konsultan pengawas, kontraktor)	√	√

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Keterangan Warna:

 	=	Variabel yang mengalami perubahan
 	=	Variabel yang mengalami penambahan
 	=	Variabel yang mengalami reduksi
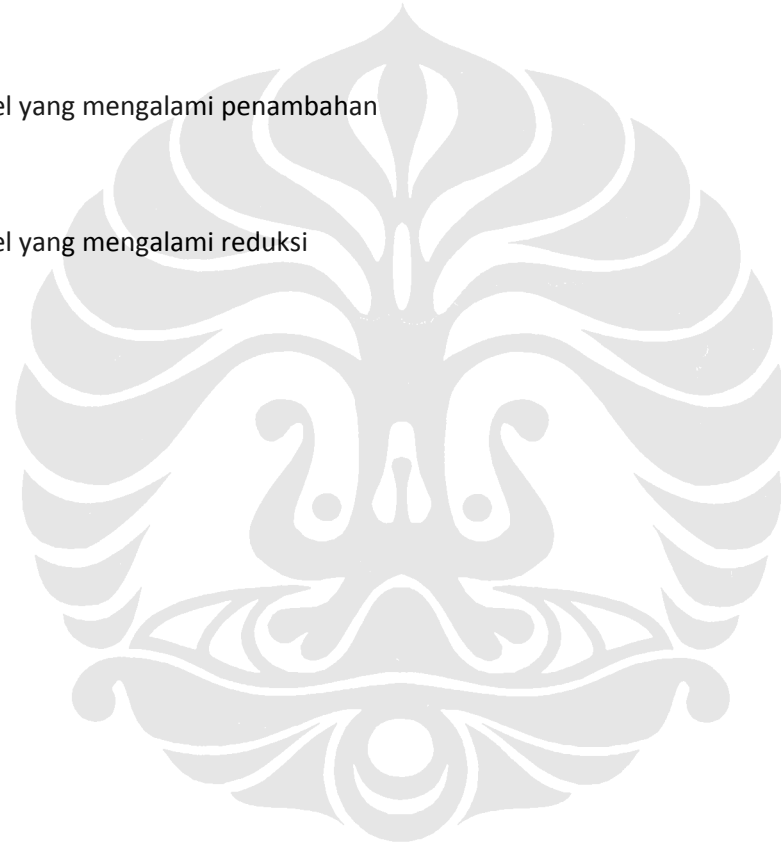
LAMPIRAN 2

FORMAT PENGUMPULAN DATA TAHAP 2

Lampiran 2 : Format Pengumpulan Data Tahap 2 (Lanjutan)

PENGARUH TINGKAT PEMAHAMAN MANAJER PROYEK DALAM ASPEK MANAJEMEN KOMUNIKASI TERHADAP MUTU PEKERJAAN PROYEK KONSTRUKSI

KUESIONER

Oleh

HANIFAH MARDIANA
04 04 01 026 Y

DEPARTEMEN TEKNIK SIPIL
FAKULTAS TEKNIK UNIVERSITAS INDONESIA
GASAL 2008/2009

Lampiran 2 : Format Pengumpulan Data Tahap 2 (Lanjutan)

Kuesioner ini dimaksudkan untuk membantu penulis dalam melaksanakan kegiatan Skripsi yang berjudul Pengaruh Tingkat Pemahaman Manajer Proyek Dalam Aspek Manajemen Komunikasi Terhadap Mutu Pekerjaan Proyek Konstruksi.

Manajemen komunikasi proyek merupakan keterkaitan antara personil, ide-ide atau gagasan, dan informasi yang dibutuhkan. Setiap personil dalam suatu struktur organisasi proyek harus memberikan dan menerima komunikasi dari dua arah sehingga seluruh pekerjaan dapat tersampaikan dengan baik. Oleh karena itu, pemahaman seorang manajer proyek dalam aspek manajemen komunikasi proyek menjadi sangat penting karena tingkat kekuatan manajer proyek dalam menyampaikan informasi kepada tim organisasi sangat berpengaruh terhadap mutu pekerjaan dalam proyek.

Diakhir kata penulis mengucapkan terimakasih sebanyak-banyaknya kepada responden yang bersedia meluangkan waktunya untuk mengisi kuesioner ini disela kesibukannya.

Penulis,

Depok, September 2008

CP: Diana – 02130300719

Dr. Ir. Yusuf Latief, M.T - 08128099019

DATA RESPONDEN KUESIONER

Nama Proyek:

Nama Perusahaan:

Alamat Proyek:

Nama Responden:

Jabatan:

Pengalaman Kerja:

Pendidikan Terakhir:

Beri Tanda *checklist* (√) yang sesuai

Contoh:

Penyebab kualitas komunikasi pada pengelolaan proyek	Seberapa Besar Tingkat Pemahaman Saudara Terhadap Aspek Manajemen Komunikasi Proyek					Bagaimana Penerapan/Implementasi Aspek Manajemen Komunikasi Pada Proyek					Bagaimana Pengaruh Tingkat Pemahaman Saudara dan Penerapan Terhadap Peningkatan Mutu				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
I. PERENCANAAN KOMUNIKASI	Tidak Paham	Kurang Paham	Sedang	Paham	Sangat Paham	Tidak Pernah	Jarang	Sedang	Sering	Selalu	Tidak Ada	Rendah	Sedang	Tinggi	Sangat Tinggi
1.1 Penyampaian perencanaan struktur organisasi			√					√						√	
1.2 Penunjukkan manajer proyek				√			√						√		
1.3 Persyaratan tertulis dalam penunjukan manajer proyek		√							√						√

Seluruh data yang telah diisi akan dijaga kerahasiaanya.

Faktor-faktor kualitas komunikasi pada pengelolaan proyek	Seberapa Besar Tingkat Pemahaman Saudara Terhadap Aspek Manajemen Komunikasi Proyek					Bagaimana Penerapan/Implementasi Aspek Manajemen Komunikasi Pada Proyek					Bagaimana Pengaruh Tingkat Pemahaman Saudara dan Penerapan Terhadap Peningkatan Mutu				
	1	**2**	**3**	**4**	**5**	**1**	**2**	**3**	**4**	**5**	**1**	**2**	**3**	**4**	**5**
I. PERENCANAAN KOMUNIKASI	Tidak Paham	Kurang Paham	Sedang	Paham	Sangat Paham	Tidak Pernah	Jarang	Sedang	Sering	Selalu	Tidak Ada	Rendah	Sedang	Tinggi	Sangat Tinggi
1.1 Penyampaian perencanaan struktur organisasi															
1.2 Penunjukkan manajer proyek															
1.3 Persyaratan tertulis dalam penunjukan manajer proyek															
1.4 Presentasi atas program yang akan dilakukan oleh calon manajer proyek															
1.5 Hubungan koordinasi pelaksanaan dalam tim kerja internal (hubungan tim kerja proyek di lapangan)															
1.6 Hubungan koordinasi antar kantor proyek dengan kantor pusat															
1.7 Informasi antar bagian dan keahlian khusus yang terlibat dalam proyek															
1.8 Informasi dalam pelaksanaan proyek dari kontraktor															

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Faktor-faktor kualitas komunikasi pada pengelolaan proyek	Seberapa Besar Tingkat Pemahaman Saudara Terhadap Aspek Manajemen Komunikasi Proyek					Bagaimana Penerapan/Implementasi Aspek Manajemen Komunikasi Pada Proyek					Bagaimana Pengaruh Tingkat Pemahaman Saudara dan Penerapan Terhadap Peningkatan Mutu				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
I. PERENCANAAN KOMUNIKASI	Tidak Paham	Kurang Paham	Sedang	Paham	Sangat Paham	Tidak Pernah	Jarang	Sedang	Sering	Selalu	Tidak Ada	Rendah	Sedang	Tinggi	Sangat Tinggi
1.9 Penyampaian informasi perubahan perencanaan desain yang terjadi (change orders)															
1.10 Sesuainya teknologi yang tersedia dengan yang dibutuhkan															
1.11 Kecocokan pengalaman dan keahlian pelaksana dengan teknologi yang digunakan															
1.12 Komunikasi dalam proyek dalam penggunanan metode dan teknologi yang sesuai dengan proyek															
1.13 Pembagian tugas dalam dan pembuatan program pelaksanaan															
1.14 Kesesuaian struktur pengarsipan rencana manajemen komunikasi yang ada															
1.15 Terstrukturnya spesifikasi teknis yang tertulis															

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Faktor-faktor kualitas komunikasi pada pengelolaan proyek	Seberapa Besar Tingkat Pemahaman Saudara Terhadap Aspek Manajemen Komunikasi Proyek					Bagaimana Penerapan/Implementasi Aspek Manajemen Komunikasi Pada Proyek					Bagaimana Pengaruh Tingkat Pemahaman Saudara dan Penerapan Terhadap Peningkatan Mutu				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
I. PERENCANAAN KOMUNIKASI	Tidak Paham	Kurang Paham	Sedang	Paham	Sangat Paham	Tidak Pernah	Jarang	Sedang	Sering	Selalu	Tidak Ada	Rendah	Sedang	Tinggi	Sangat Tinggi
1.16 Sistem pendistribusian informasi rencana manajemen komunikasi															
1.17 Sistem pendistribusian informasi terhadap perubahan perencanaan (change orders)															
1.18 Sesuainya requirement yang diminta dalam kontrak dengan spesifikasi															

Faktor-faktor kualitas komunikasi pada pengelolaan proyek	Seberapa Besar Tingkat Pemahaman Saudara Terhadap Aspek Manajemen Komunikasi Proyek					Bagaimana Penerapan/Implementasi Aspek Manajemen Komunikasi Pada Proyek					Bagaimana Pengaruh Tingkat Pemahaman Saudara dan Penerapan Terhadap Peningkatan Mutu				
	1	**2**	**3**	**4**	**5**	**1**	**2**	**3**	**4**	**5**	**1**	**2**	**3**	**4**	**5**
II. DISTRIBUSI INFORMASI	Tidak Paham	Kurang Paham	Sedang	Paham	Sangat Paham	Tidak Pernah	Jarang	Sedang	Sering	Selalu	Tidak Ada	Rendah	Sedang	Tinggi	Sangat Tinggi
2.1 Kelengkapan dokumen tender struktur organisasi															
2.2 Kejelasan strategi sistem pengelolaan proyek															
2.3 Kemampuan melakukan komunikasi (communication skill) internal dengan pekerja proyek															
2.4 Manajer proyek dalam menerapkan konsep SMART (Specific, Measureable, Achivable & Reable, Time Constraint) saat berkomunikasi dengan bawahannya															
2.5 Jadwal rapat harian/mingguan/bulanan															

Faktor-faktor kualitas komunikasi pada pengelolaan proyek	Seberapa Besar Tingkat Pemahaman Saudara Terhadap Aspek Manajemen Komunikasi Proyek					Bagaimana Penerapan/Implementasi Aspek Manajemen Komunikasi Pada Proyek					Bagaimana Pengaruh Tingkat Pemahaman Saudara dan Penerapan Terhadap Peningkatan Mutu				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
II. DISTRIBUSI INFORMASI	Tidak Paham	Kurang Paham	Sedang	Paham	Sangat Paham	Tidak Pernah	Jarang	Sedang	Sering	Selalu	Tidak Ada	Rendah	Sedang	Tinggi	Sangat Tinggi
2.6 Fasilitas rapat yang tersedia															
2.7 Pendistribusian risalah rapat															
2.9 Kemampuan komunikasi informal (memo, ad hoc, dll)															
2.10 Komunikasi vertikal antara kantor pusat dengan kantor proyek															
2.11 Sistem distribusi informasi dengan rapat koordinasi mingguan															
2.12 Sistem distribusi informasi dengan rapat konstruksi bulanan															
2.13 Ketepatan distribusi dokumen cetakan (laporan, risalah)															
2.14 Penggunaan/kebebasan menggunakan akses telepon															
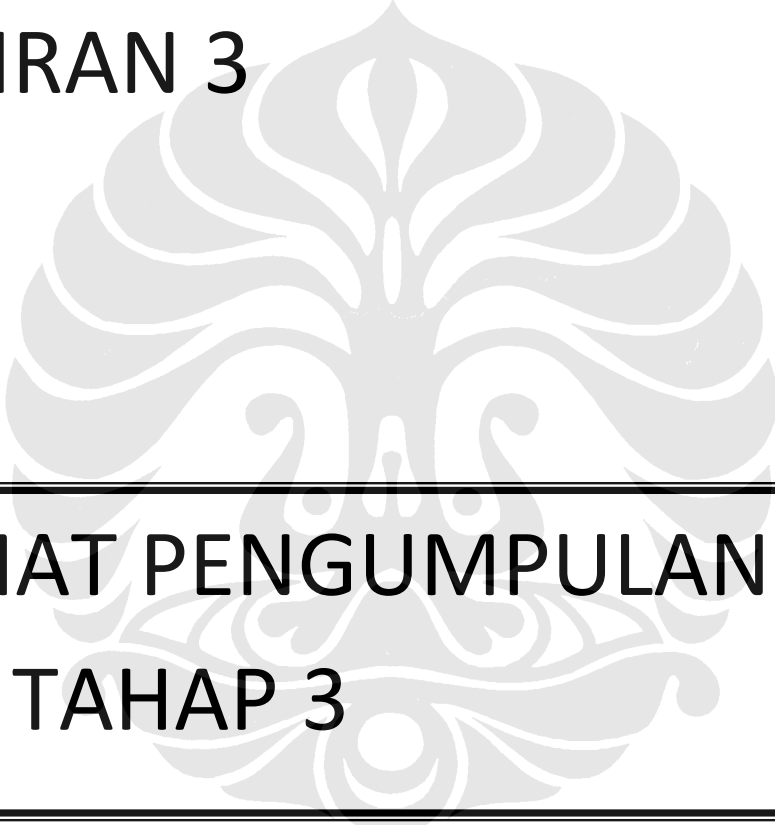
Faktor-faktor kualitas komunikasi pada pengelolaan proyek	Seberapa Besar Tingkat Pemahaman Saudara Terhadap Aspek Manajemen Komunikasi Proyek					Bagaimana Penerapan/Implementasi Aspek Manajemen Komunikasi Pada Proyek					Bagaimana Pengaruh Tingkat Pemahaman Saudara dan Penerapan Terhadap Peningkatan Mutu				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
II. DISTRIBUSI INFORMASI	Tidak Paham	Kurang Paham	Sedang	Paham	Sangat Paham	Tidak Pernah	Jarang	Sedang	Sering	Selalu	Tidak Ada	Rendah	Sedang	Tinggi	Sangat Tinggi
2.15 Penggunaan faximile															
2.16 Penggunaan email dan voice maill															
2.17 Penggunaan video conference															
2.18 Pemeliharaan catatan proyek															
2.19 Relevannya metode presentasi dan isi informasi yang dibutuhkan audien															
2.20 Penyampaian informasi laporan proyek															

Faktor-faktor kualitas komunikasi pada pengelolaan proyek	Seberapa Besar Tingkat Pemahaman Saudara Terhadap Aspek Manajemen Komunikasi Proyek					Bagaimana Penerapan/Implementasi Aspek Manajemen Komunikasi Pada Proyek					Bagaimana Pengaruh Tingkat Pemahaman Saudara dan Penerapan Terhadap Peningkatan Mutu				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
III. LAPORAN KINERJA	Tidak Paham	Kurang Paham	Sedang	Paham	Sangat Paham	Tidak Pernah	Jarang	Sedang	Sering	Selalu	Tidak Ada	Rendah	Sedang	Tinggi	Sangat Tinggi
3.1 Kejelasan dokumen teknik seperti gambar teknis, spesifikasi rencana, rencana tes/pengujian+A52															
3.2 Kejelasan laporan harian mengenai kemajuan pekerjaan															
3.3 Kejelasan laporan harian mengenai perubahan pekerjaan															
3.4 Kejelasan laporan mingguan mengenai kemajuan pekerjaan															
3.5 Kejelasan laporan mingguan mengenai perubahan pekerjaan															
3.6 Kejelasan laporan harian kerja proyek (laporan tenaga kerja, laporan pendatanganan, lapangan material dan alat)															
3.7 Kejelasan laporan mingguan kerja proyek (laporan tenaga kerja, laporan pendatanganan, lapangan material dan alat)															

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Faktor-faktor kualitas komunikasi pada pengelolaan proyek	Seberapa Besar Tingkat Pemahaman Saudara Terhadap Aspek Manajemen Komunikasi Proyek					Bagaimana Penerapan/Implementasi Aspek Manajemen Komunikasi Pada Proyek					Bagaimana Pengaruh Tingkat Pemahaman Saudara dan Penerapan Terhadap Peningkatan Mutu				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
III. LAPORAN KINERJA	Tidak Paham	Kurang Paham	Sedang	Paham	Sangat Paham	Tidak Pernah	Jarang	Sedang	Sering	Selalu	Tidak Ada	Rendah	Sedang	Tinggi	Sangat Tinggi
3.8 Kejelasan laporan bulanan kerja proyek (laporan tenaga kerja, laporan pendatanganan, lapangan material dan alat)															
3.9 Kejelasan laporan bulanan mengenai kemajuan pekerjaan															
3.10 Kejelasan laporan bulanan mengenai perubahan pekerjaan															
3.11 Site inspection atau controlling bersama pada tinjauan kinerja															
3.12 Jadwal pertemuan untuk pembicaraan dan pemeriksaan progress proyek															
3.13 Tindak lanjut permasalahan proyek temasuk klaim yang disampaikan ke kontraktor untuk penyelesaian															
3.14 Review atas progress kinerja sebagai alat dan teknik komunikasi															

Faktor-faktor kualitas komunikasi pada pengelolaan proyek	Seberapa Besar Tingkat Pemahaman Saudara Terhadap Aspek Manajemen Komunikasi Proyek					Bagaimana Penerapan/Implementasi Aspek Manajemen Komunikasi Pada Proyek					Bagaimana Pengaruh Tingkat Pemahaman Saudara dan Penerapan Terhadap Peningkatan Mutu				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
IV. PENGATURAN *STAKEHOLDER*	Tidak Paham	Kurang Paham	Sedang	Paham	Sangat Paham	Tidak Pernah	Jarang	Sedang	Sering	Selalu	Tidak Ada	Rendah	Sedang	Tinggi	Sangat Tinggi
4.1 Kemampuan melakukan komunikasi (communication skill) eksternal (dengan owner, konsultan pengawas, konsultan perencana, kontraktor diproyek)															
4.2 Hubungan koordinasi antara kontraktor dan pengawas															
4.3 Hubungan flow koordinasi dalam perencanaan dan pelaksanaan proyek antar pihak yang terkait (owner, konsultan perencana, konsultan pengawas, kontraktor)															

LAMPIRAN 3

FORMAT PENGUMPULAN DATA TAHAP 3

HASIL UJI VALIDITAS DAN REABILITAS

Setelah dilakukan uji validitas dan reabilitas, maka berikut variabel yang tidak valid dan tereduksi:

Tabel 1.   Variabel Yang Tereduksi

Variabel	Penjelasan	Komentar dan Tanggapan
2	Penunjukkan manajer proyek	
4	Presentasi atas program yang akan dilakukan oleh calon manajer proyek	
5	Hubungan koordinasi pelaksanaan dalam tim kerja internal (hubungan tim kerja proyek di lapangan)	
8	Informasi dalam pelaksanaan proyek dari kontraktor	
9	Penyampaian informasi perubahan perencanaan desain yang terjadi (*change orders*)	
13	Pembagian tugas dalam dan pembuatan program pelaksanaan	

Variabel	Penjelasan	Komentar dan Tanggapan
14	Kesesuaian struktur pengarsipan rencana manajemen komunikasi yang ada	
15	Terstrukturnya spesifikasi teknis yang tertulis	
17	Sistem pendistribusian informasi terhadap perubahan perencanaan (*change orders*)	
25	Pendistribusian risalah rapat	
35	Penggunaan *video conference*	
50	Jadwal pertemuan untuk pembicaraan dan pemeriksaan *progress* proyek	
53	Kemampuan melakukan komunikasi (*communication skill*) eksternal (dengan owner, konsultan pengawas, konsultan perencana, kontraktor diproyek)	
54	Hubungan koordinasi antara kontraktor dan pengawas	

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Tabel 2.　　Variabel Yang Valid

Variabel	Penjelasan	Komentar dan Tanggapan
1	Penyampaian perencanaan struktur organisasi	
3	Persyaratan tertulis dalam penunjukan manajer proyek	
6	Hubungan koordinasi antar kantor proyek dengan kantor pusat	
7	Informasi antar bagian dan keahlian khusus yang terlibat dalam proyek	
10	Sesuainya teknologi yang tersedia dengan yang dibutuhkan	
11	Kecocokan pengalaman dan keahlian pelaksana dengan teknologi yang digunakan	
12	Komunikasi dalam proyek dalam penggunanan metode dan teknologi yang sesuai dengan proyek	
16	Sistem pendistribusian informasi rencana manajemen komunikasi	

Variabel	Penjelasan	Komentar dan Tanggapan
18	Sesuainya *requirement* yang diminta dalam kontrak dengan spesifikasi	
19	Kelengkapan dokumen tender struktur organisasi	
20	Kejelasan strategi sistem pengelolaan proyek	
21	Kemampuan melakukan komunikasi (*communication skill*) internal dengan pekerja proyek	
22	Manajer proyek dalam menerapkan konsep SMART (*Specific, Measureable, Achivable & Reable, Time Constraint*) saat berkomunikasi dengan bawahannya	
23	Jadwal rapat harian/mingguan/bulanan	
24	Fasilitas rapat yang tersedia	
26	Kelengkapan peserta maupun perwakilannya dalam menghadiri rapat	

Variabel	Penjelasan	Komentar dan Tanggapan
27	Kemampuan komunikasi informal (memo, ad hoc, dll)	
28	Komunikasi vertikal antara kantor pusat dengan kantor proyek	
29	Sistem distribusi informasi dengan rapat koordinasi mingguan	
30	Sistem distribusi informasi dengan rapat konstruksi bulanan	
31	Ketepatan distribusi dokumen cetakan (laporan, risalah)	
32	Penggunaan/kebebasan menggunakan akses telepon	
33	Penggunaan *faximile*	
34	Penggunaan *email* dan *voice mail*	
36	Pemeliharaan catatan proyek	
37	Relevannya metode presentasi dan isi informasi yang dibutuhkan audien	
38	Penyampaian informasi laporan proyek	

Variabel	Penjelasan	Komentar dan Tanggapan
39	Kejelasan dokumen teknik seperti gambar teknis, spesifikasi rencana, rencana tes/pengujian+A52	
40	Kejelasan laporan harian mengenai kemajuan pekerjaan	
41	Kejelasan laporan harian mengenai perubahan pekerjaan	
42	Kejelasan laporan mingguan mengenai kemajuan pekerjaan	
43	Kejelasan laporan mingguan mengenai perubahan pekerjaan	
44	Kejelasan laporan harian kerja proyek (laporan tenaga kerja, laporan pendatanganan, lapangan material dan alat)	
45	Kejelasan laporan mingguan kerja proyek (laporan tenaga kerja, laporan pendatanganan, lapangan material dan alat)	
46	Kejelasan laporan bulanan kerja proyek (laporan tenaga kerja, laporan pendatanganan, lapangan material dan alat)	

Variabel	Penjelasan	Komentar dan Tanggapan
47	Kejelasan laporan bulanan mengenai kemajuan pekerjaan	
48	Kejelasan laporan bulanan mengenai perubahan pekerjaan	
49	*Site inspection* atau *controlling* bersama pada tinjauan kinerja	
51	Tindak lanjut permasalahan proyek temasuk klaim yang disampaikan ke kontraktor untuk penyelesaian	
52	*Review* atas *progress* kinerja sebagai alat dan teknik komunikasi	
55	Hubungan flow koordinasi dalam perencanaan dan pelaksanaan proyek antar pihak yang terkait (owner, konsultan perencana, konsultan pengawas, kontraktor)	

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HASIL UJI NON-PARAMETRIK *KRUSKAL-WALLIS*

Tabel 3. Perbedaan Persepsi Responden Berdasarkan Tingkat Pendidikan

Variabel	Penjelasan	Komentar dan Tanggapan
Pemahaman Manajemen Komunikasi		
7	Informasi antar bagian dan keahlian khusus yang terlibat dalam proyek	
16	Sistem pendistribusian informasi rencana manajemen komunikasi	
Aplikasi Terhadap Proyek		
7	Informasi antar bagian dan keahlian khusus yang terlibat dalam proyek	
27	Kemampuan komunikasi informal (*memo, ad hoc*, dll)	
Kinerja Mutu		
6	Hubungan koordinasi antar kantor proyek dengan kantor pusat	

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Variabel	Penjelasan	Komentar dan Tanggapan
Kinerja Mutu		
7	Informasi antar bagian dan keahlian khusus yang terlibat dalam proyek	
23	Jadwal rapat harian/mingguan/bulanan	

Tabel VI.4.   Perbedaan Persepsi Responden Berdasarkan Perbedaan Jabatan

Variabel	Penjelasan	Komentar dan Tanggapan
Pemahaman Manajemen Komunikasi		
6	Hubungan koordinasi antar kantor proyek dengan kantor pusat	
32	Penggunaan/kebebasan menggunakan akses telepon	
33	Penggunaan *faximile*	

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Variabel	Penjelasan	Komentar dan Tanggapan
Pemahaman Manajemen Komunikasi		
39	Kejelasan dokumen teknik seperti gambar teknis, spesifikasi rencana, rencana tes/pengujian+A52	
46	Kejelasan laporan bulanan kerja proyek (laporan tenaga kerja, laporan pendatanganan, lapangan material dan alat)	
Aplikasi Terhadap Proyek		
6	Hubungan koordinasi antar kantor proyek dengan kantor pusat	
36	Pemeliharaan catatan proyek	
39	Kejelasan dokumen teknik seperti gambar teknis, spesifikasi rencana, rencana tes/pengujian+A52	
42	Kejelasan laporan mingguan mengenai kemajuan pekerjaan	
44	Kejelasan laporan harian kerja proyek (laporan tenaga kerja, laporan pendatanganan, lapangan material dan alat)	

Variabel	Penjelasan	Komentar dan Tanggapan
Aplikasi Terhadap Proyek		
45	Kejelasan laporan mingguan kerja proyek (laporan tenaga kerja, laporan pendatanganan, lapangan material dan alat)	
47	Kejelasan laporan bulanan mengenai kemajuan pekerjaan	
51	Tindak lanjut permasalahan proyek temasuk klaim yang disampaikan ke kontraktor untuk penyelesaian	
52	*Review* atas *progress* kinerja sebagai alat dan teknik komunikasi	
Kinerja Mutu		
3	Persyaratan tertulis dalam penunjukan manajer proyek	
18	Sesuainya *requirement* yang diminta dalam kontrak dengan spesifikasi	

Variabel	Penjelasan	Komentar dan Tanggapan
Kinerja Mutu		
46	Kejelasan laporan bulanan kerja proyek (laporan tenaga kerja, laporan pendatanganan, lapangan material dan alat)	
48	Kejelasan laporan bulanan mengenai perubahan pekerjaan	
49	*Site inspection* atau *controlling* bersama pada tinjauan kinerja	
51	Tindak lanjut permasalahan proyek temasuk klaim yang disampaikan ke kontraktor untuk penyelesaian	

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Tabel 5.   Perbedaan Persepsi Responden Berdasarkan Perbedaan Pengalaman di Dunia Konstruksi

Variabel	Penjelasan	Komentar dan Tanggapan
Pemahaman Manajemen Komunikasi		
21	Kemampuan melakukan komunikasi (*communication skill*) internal dengan pekerja proyek	
Aplikasi Terhadap Proyek		
32	Penggunaan/kebebasan menggunakan akses telepon	
Kinerja Mutu		
19	Kelengkapan dokumen tender struktur organisasi	
55	Hubungan *flow* koordinasi dalam perencanaan dan pelaksanaan proyek antar pihak yang terkait (owner, konsultan perencana, konsultan pengawas, kontraktor)	

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HASIL UJI DESKRIPTIF

Tabel 6.   Hasil Pengolahan Data Deskriptif Responden

Variabel	Penjelasan	Rata-rata	Definisi	Komentar dan Tanggapan
Pemahaman				
23	Jadwal rapat harian/mingguan/bulanan	4,28	Paham	
Aplikasi				
23	Jadwal rapat harian/mingguan/bulanan	4,38	Sering	
39	Kejelasan dokumen teknik seperti gambar teknis, spesifikasi rencana, rencana tes/pengujian+A52	4,38	Sering	
Kinerja Mutu				
29	Sistem distribusi informasi dengan rapat koordinasi mingguan	4,19	Tinggi	

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HASIL UJI KORELASI

Tabel 7.   Hasil Pengolahan Data Korelasi Antar Variabel

Variabel	Penjelasan	Nilai Korelasi	Definisi	Komentar dan Tanggapan
Hubungan antara aplikasi dan kinerja mutu pemahaman **KUAT**				
Z10↔Y10	Sesuainya teknologi yang tersedia dengan yang dibutuhkan	0.833	Sangat Kuat	
Z11↔Y11	Kecocokan pengalaman dan keahlian pelaksana dengan teknologi yang digunakan	0,767	Sangat Kuat	
Hubungan antara aplikasi dan kinerja mutu pemahaman **LEMAH**				
Z1↔Y1	Penyampaian perencanaan struktur organisasi	-0,068	Sangat Lemah	
Hubungan antara kemampuan dan kinerja mutu **KUAT**				
X16↔Y16	Sistem pendistribusian informasi rencana manajemen komunikasi	0,75	Sangat Kuat	

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Variabel	Penjelasan	Nilai Korelasi	Definisi	Komentar dan Tanggapan
Hubungan antara kemampuan dan kinerja mutu **KUAT**				
X22↔Y22	Manajer proyek dalam menerapkan konsep SMART (*Specific, Measureable, Achivable & Reable, Time Constraint*) saat berkomunikasi dengan bawahannya	0,773	Sangat Kuat	
Hubungan antara kemampuan dan kinerja mutu **LEMAH**				
X34↔Y34	Penggunaan *email* dan *voice mail*	0,204	Lemah	
X52↔Y52	*Review* atas *progress* kinerja sebagai alat dan teknik komunikasi	0,245	Lemah	
Hubungan antara kemampuan dan aplikasi **KUAT**				
X24↔Z24	Fasilitas rapat yang tersedia	0,756	Sangat Kuat	
Hubungan antara kemampuan dan aplikasi **LEMAH**				
X1↔Z1	Penyampaian perencanaan struktur organisasi	0,022	Lemah	

Variabel	Penjelasan	Nilai Korelasi	Definisi	Komentar dan Tanggapan
Hubungan antara kemampuan dan aplikasi **LEMAH**				
X21↔Z21	Kemampuan melakukan komunikasi (*communication skill*) internal dengan pekerja proyek	0,189	Lemah	
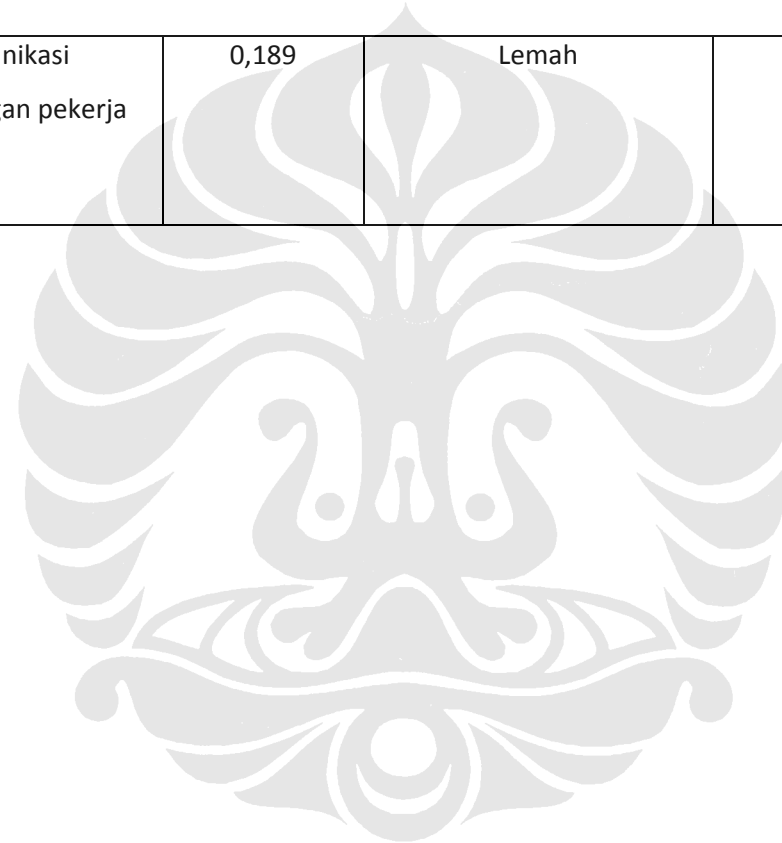
LAMPIRAN 4

ANALISIS VALIDITAS DAN REABILITAS

Reliability

Warnings

The space saver method is used. That is, the covariance matrix is not calculated or used in the analysis.

Case Processing Summary

		N	%
Cases	Valid	21	100.0
	Excluded[a]	0	.0
	Total	21	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.989	165

Item Statistics

	Mean	Std. Deviation	N
X1	4.1429	.47809	21
X2	3.7619	.83095	21
X3	3.7619	.76842	21
X4	4.1429	.57321	21
X5	4.2381	.62488	21
X6	3.9524	.86465	21
X7	4.0952	.53896	21
X8	4.1429	.47809	21
X9	4.2381	.70034	21
X10	4.0476	.66904	21
X11	4.0952	.83095	21
X12	4.0952	.83095	21
X13	4.1429	.72703	21
X14	4.0000	.44721	21
X15	4.2381	.62488	21
X16	4.0952	.70034	21
X17	4.2381	.43644	21
X18	4.0952	.70034	21
X19	4.1429	.57321	21
X20	3.9524	.66904	21
X21	4.1905	.51177	21
X22	4.1905	.67964	21
X23	4.2857	.56061	21
X24	3.8571	.47809	21
X25	4.0952	.30079	21
X26	3.9048	.70034	21
X27	4.1905	.67964	21
X28	4.0952	.76842	21
X29	4.1905	.60159	21
X30	4.1905	.51177	21
X31	3.9524	.49761	21

Item Statistics

	Mean	Std. Deviation	N
X32	3.9524	.58959	21
X33	3.9048	.62488	21
X34	3.5238	.74960	21
X35	3.0476	.86465	21
X36	4.1429	.57321	21
X37	3.8571	.57321	21
X38	4.0952	.62488	21
X39	3.9524	.66904	21
X40	4.0952	.62488	21
X41	3.9524	.66904	21
X42	4.1429	.57321	21
X43	3.7619	.62488	21
X44	3.9524	.38421	21
X45	3.9048	.43644	21
X46	3.8095	.67964	21
X47	4.1429	.57321	21
X48	4.0476	.49761	21
X49	3.9524	.49761	21
X50	3.8095	.40237	21
X51	4.0952	.53896	21
X52	3.8571	.47809	21
X53	4.0952	.53896	21
X54	4.2381	.43644	21
X55	4.1905	.51177	21
Z1	4.2381	.70034	21
Z2	3.6667	.85635	21
Z3	3.4762	1.03049	21
Z4	3.8095	.87287	21
Z5	4.3810	.74001	21
Z6	4.2381	.88909	21
Z7	4.2857	.64365	21
Z8	4.1905	.74960	21
Z9	4.1905	.67964	21
Z10	3.4762	.60159	21
Z11	3.8095	.81358	21
Z12	3.9048	.99523	21
Z13	4.4762	.60159	21
Z14	3.9524	.86465	21
Z15	4.3333	.65828	21
Z16	4.3333	.96609	21
Z17	4.1905	.74960	21
Z18	4.1905	.74960	21
Z19	4.1429	.72703	21
Z20	4.2381	.88909	21
Z21	4.1905	.67964	21
Z22	4.0476	.80475	21
Z23	4.3810	.80475	21
Z24	3.8095	.74960	21
Z25	4.3810	.66904	21
Z26	3.9048	.83095	21
Z27	4.1429	.79282	21
Z28	4.1429	.91026	21
Z29	4.2857	.71714	21
Z30	4.1905	.67964	21

Item Statistics

	Mean	Std. Deviation	N
Z31	3.9524	.58959	21
Z32	4.1429	.65465	21
Z33	4.0952	.76842	21
Z34	3.0000	1.09545	21
Z35	2.0952	.99523	21
Z36	4.1429	.79282	21
Z37	3.7143	.95618	21
Z38	4.1429	.72703	21
Z39	4.3810	.80475	21
Z40	4.4286	.81064	21
Z41	4.0952	.83095	21
Z42	4.3333	.73030	21
Z43	3.9524	.80475	21
Z44	4.1905	.67964	21
Z45	4.1429	.85356	21
Z46	3.9524	.74001	21
Z47	4.1905	.74960	21
Z48	4.1905	.81358	21
Z49	4.0000	.54772	21
Z50	4.0000	.54772	21
Z51	4.2381	.76842	21
Z52	4.0000	.83666	21
Z53	4.4286	.59761	21
Z54	4.2857	.56061	21
Z55	4.3333	.57735	21
Y1	3.8571	.57321	21
Y2	3.8571	.47809	21
Y3	3.6667	.57735	21
Y4	4.0000	.54772	21
Y5	4.0476	.66904	21
Y6	3.9524	.86465	21
Y7	3.8095	.67964	21
Y8	4.0952	.62488	21
Y9	3.8571	.57321	21
Y10	3.4762	.60159	21
Y11	3.9048	.76842	21
Y12	3.7619	.70034	21
Y13	4.0952	.53896	21
Y14	3.7143	.56061	21
Y15	4.1905	.74960	21
Y16	4.0476	.74001	21
Y17	3.9048	.76842	21
Y18	3.9524	.58959	21
Y19	3.9524	.49761	21
Y20	4.0000	.77460	21
Y21	3.8571	.85356	21
Y22	4.0476	.92066	21
Y23	4.0000	.89443	21
Y24	3.7143	.64365	21
Y25	4.0952	.76842	21
Y26	3.8571	.72703	21
Y27	3.8571	.85356	21
Y28	4.0000	.77460	21
Y29	4.1905	.67964	21

Item Statistics

	Mean	Std. Deviation	N
Y30	4.0000	.63246	21
Y31	4.0476	.58959	21
Y32	3.7143	.64365	21
Y33	3.6667	.65828	21
Y34	3.0476	.92066	21
Y35	2.1429	1.06234	21
Y36	4.0000	.77460	21
Y37	3.8571	.72703	21
Y38	3.8571	.65465	21
Y39	4.0952	.83095	21
Y40	3.9048	.62488	21
Y41	3.7619	.70034	21
Y42	4.0476	.58959	21
Y43	3.8571	.72703	21
Y44	3.8095	.81358	21
Y45	3.8571	.72703	21
Y46	3.9048	.70034	21
Y47	4.0952	.70034	21
Y48	3.9048	.76842	21
Y49	3.9048	.76842	21
Y50	3.8571	.72703	21
Y51	4.0476	.66904	21
Y52	3.7143	.64365	21
Y53	4.0476	.58959	21
Y54	4.0476	.49761	21
Y55	4.1429	.47809	21

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
X1	653.6667	4645.933	.684	.989
X2	654.0476	4612.948	.683	.989
X3	654.0476	4641.548	.464	.989
X4	653.6667	4653.233	.476	.989
X5	653.5714	4660.557	.349	.989
X6	653.8571	4628.029	.527	.989
X7	653.7143	4653.414	.504	.989
X8	653.6667	4658.133	.496	.989
X9	653.5714	4631.657	.615	.989
X10	653.7619	4634.790	.610	.989
X11	653.7143	4630.314	.528	.989
X12	653.7143	4633.714	.498	.989
X13	653.6667	4679.333	.110	.989
X14	653.8095	4658.162	.531	.989
X15	653.5714	4660.857	.346	.989
X16	653.7143	4614.314	.798	.988
X17	653.5714	4670.557	.336	.989
X18	653.7143	4619.814	.740	.989
X19	653.6667	4658.233	.412	.989
X20	653.8571	4636.729	.588	.989
X21	653.6190	4652.148	.549	.989
X22	653.6190	4617.748	.785	.988

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
X23	653.5238	4660.062	.397	.989
X24	653.9524	4651.548	.598	.989
X25	653.7143	4677.014	.332	.989
X26	653.9048	4637.790	.550	.989
X27	653.6190	4626.048	.695	.989
X28	653.7143	4618.514	.686	.989
X29	653.6190	4635.348	.672	.989
X30	653.6190	4662.448	.401	.989
X31	653.8571	4664.029	.390	.989
X32	653.8571	4650.529	.496	.989
X33	653.9048	4639.890	.593	.989
X34	654.2857	4617.614	.712	.989
X35	654.7619	4652.990	.314	.989
X36	653.6667	4645.433	.576	.989
X37	653.9524	4623.948	.853	.988
X38	653.7143	4628.414	.729	.989
X39	653.8571	4626.929	.696	.989
X40	653.7143	4652.114	.449	.989
X41	653.8571	4628.429	.680	.989
X42	653.6667	4659.033	.401	.989
X43	654.0476	4629.848	.712	.989
X44	653.8571	4658.429	.614	.989
X45	653.9048	4647.790	.719	.989
X46	654.0000	4617.600	.787	.988
X47	653.6667	4647.833	.545	.989
X48	653.7619	4644.390	.680	.989
X49	653.8571	4646.829	.644	.989
X50	654.0000	4673.800	.305	.989
X51	653.7143	4639.314	.697	.989
X52	653.9524	4660.748	.456	.989
X53	653.7143	4666.914	.320	.989
X54	653.5714	4676.957	.228	.989
X55	653.6190	4656.648	.485	.989
Z1	653.5714	4651.957	.401	.989
Z2	654.1429	4651.729	.328	.989
Z3	654.3333	4619.333	.502	.989
Z4	654.0000	4653.000	.311	.989
Z5	653.4286	4624.357	.654	.989
Z6	653.5714	4602.757	.723	.989
Z7	653.5238	4640.862	.564	.989
Z8	653.6190	4628.048	.609	.989
Z9	653.6190	4658.748	.340	.989
Z10	654.3333	4647.133	.528	.989
Z11	654.0000	4620.600	.628	.989
Z12	653.9048	4580.190	.813	.988
Z13	653.3333	4629.133	.748	.989
Z14	653.8571	4661.629	.240	.989
Z15	653.4762	4645.162	.503	.989
Z16	653.4762	4592.862	.741	.988
Z17	653.6190	4644.948	.443	.989
Z18	653.6190	4614.948	.739	.988
Z19	653.6667	4628.733	.622	.989
Z20	653.5714	4615.257	.618	.989

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Z21	653.6190	4647.648	.460	.989
Z22	653.7619	4597.790	.846	.988
Z23	653.4286	4623.457	.609	.989
Z24	654.0000	4619.600	.693	.989
Z25	653.4286	4638.457	.569	.989
Z26	653.9048	4619.890	.621	.989
Z27	653.6667	4609.233	.751	.988
Z28	653.6667	4597.033	.753	.988
Z29	653.5238	4622.562	.694	.989
Z30	653.6190	4643.548	.505	.989
Z31	653.8571	4650.229	.500	.989
Z32	653.6667	4639.733	.567	.989
Z33	653.7143	4648.314	.399	.989
Z34	654.8095	4615.662	.496	.989
Z35	655.7143	4705.914	-.118	.989
Z36	653.6667	4605.233	.789	.988
Z37	654.0952	4584.090	.817	.988
Z38	653.6667	4623.133	.679	.989
Z39	653.4286	4596.157	.861	.988
Z40	653.3810	4614.148	.690	.989
Z41	653.7143	4618.814	.631	.989
Z42	653.4762	4620.562	.702	.989
Z43	653.8571	4609.029	.742	.988
Z44	653.6190	4618.548	.777	.988
Z45	653.6667	4593.733	.832	.988
Z46	653.8571	4609.829	.800	.988
Z47	653.6190	4628.248	.607	.989
Z48	653.6190	4603.448	.785	.988
Z49	653.8095	4636.862	.719	.989
Z50	653.8095	4647.562	.574	.989
Z51	653.5714	4616.557	.705	.989
Z52	653.8095	4610.162	.703	.989
Z53	653.3810	4651.648	.475	.989
Z54	653.5238	4648.062	.554	.989
Z55	653.4762	4632.562	.736	.989
Y1	653.9524	4648.148	.541	.989
Y2	653.9524	4667.748	.349	.989
Y3	654.1429	4652.629	.480	.989
Y4	653.8095	4646.562	.588	.989
Y5	653.7619	4635.290	.604	.989
Y6	653.8571	4616.929	.622	.989
Y7	654.0000	4625.000	.706	.989
Y8	653.7143	4662.414	.328	.989
Y9	653.9524	4650.148	.515	.989
Y10	654.3333	4637.433	.646	.989
Y11	653.9048	4646.390	.418	.989
Y12	654.0476	4626.048	.674	.989
Y13	653.7143	4649.014	.564	.989
Y14	654.0952	4653.690	.481	.989
Y15	653.6190	4608.548	.802	.988
Y16	653.7619	4609.890	.799	.988
Y17	653.9048	4606.290	.804	.988
Y18	653.8571	4638.629	.645	.989

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Y19	653.8571	4647.629	.632	.989
Y20	653.8095	4604.462	.815	.988
Y21	653.9524	4620.548	.599	.989
Y22	653.7619	4586.590	.829	.988
Y23	653.8095	4613.662	.628	.989
Y24	654.0952	4629.490	.695	.989
Y25	653.7143	4604.914	.818	.988
Y26	653.9524	4630.048	.608	.989
Y27	653.9524	4610.348	.687	.989
Y28	653.8095	4610.862	.754	.988
Y29	653.6190	4628.248	.671	.989
Y30	653.8095	4651.362	.452	.989
Y31	653.7619	4650.990	.490	.989
Y32	654.0952	4657.790	.371	.989
Y33	654.1429	4647.929	.472	.989
Y34	654.7619	4621.390	.547	.989
Y35	655.6667	4680.333	.064	.989
Y36	653.8095	4603.062	.829	.988
Y37	653.9524	4636.948	.538	.989
Y38	653.9524	4637.448	.593	.989
Y39	653.7143	4599.314	.805	.988
Y40	653.9048	4642.590	.561	.989
Y41	654.0476	4632.848	.602	.989
Y42	653.7619	4645.090	.564	.989
Y43	653.9524	4612.348	.789	.988
Y44	654.0000	4613.000	.698	.989
Y45	653.9524	4625.048	.659	.989
Y46	653.9048	4617.890	.760	.988
Y47	653.7143	4626.714	.667	.989
Y48	653.9048	4604.690	.820	.988
Y49	653.9048	4618.290	.688	.989
Y50	653.9524	4628.248	.627	.989
Y51	653.7619	4628.290	.681	.989
Y52	654.0952	4642.490	.546	.989
Y53	653.7619	4647.590	.533	.989
Y54	653.7619	4645.590	.662	.989
Y55	653.6667	4654.533	.552	.989

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
657.8095	4690.762	68.48914	165

Reliability

Warnings

The space saver method is used. That is, the covariance matrix is not calculated or used in the analysis.

Case Processing Summary

		N	%
Cases	Valid	21	100.0
	Excluded[a]	0	.0
	Total	21	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.988	123

Item Statistics

	Mean	Std. Deviation	N
X1	4.1429	.47809	21
X3	3.7619	.76842	21
X6	3.9524	.86465	21
X7	4.0952	.53896	21
X10	4.0476	.66904	21
X11	4.0952	.83095	21
X12	4.0952	.83095	21
X16	4.0952	.70034	21
X18	4.0952	.70034	21
X19	4.1429	.57321	21
X20	3.9524	.66904	21
X21	4.1905	.51177	21
X22	4.1905	.67964	21
X23	4.2857	.56061	21
X24	3.8571	.47809	21
X26	3.9048	.70034	21
X27	4.1905	.67964	21
X28	4.0952	.76842	21
X29	4.1905	.60159	21
X30	4.1905	.51177	21
X31	3.9524	.49761	21
X32	3.9524	.58959	21
X33	3.9048	.62488	21
X34	3.5238	.74960	21
X36	4.1429	.57321	21
X37	3.8571	.57321	21
X38	4.0952	.62488	21
X39	3.9524	.66904	21
X40	4.0952	.62488	21
X41	3.9524	.66904	21
X42	4.1429	.57321	21

Item Statistics

	Mean	Std. Deviation	N
X43	3.7619	.62488	21
X44	3.9524	.38421	21
X45	3.9048	.43644	21
X46	3.8095	.67964	21
X47	4.1429	.57321	21
X48	4.0476	.49761	21
X49	3.9524	.49761	21
X51	4.0952	.53896	21
X52	3.8571	.47809	21
X55	4.1905	.51177	21
Z1	4.2381	.70034	21
Z3	3.4762	1.03049	21
Z6	4.2381	.88909	21
Z7	4.2857	.64365	21
Z10	3.4762	.60159	21
Z11	3.8095	.81358	21
Z12	3.9048	.99523	21
Z16	4.3333	.96609	21
Z18	4.1905	.74960	21
Z19	4.1429	.72703	21
Z20	4.2381	.88909	21
Z21	4.1905	.67964	21
Z22	4.0476	.80475	21
Z23	4.3810	.80475	21
Z24	3.8095	.74960	21
Z26	3.9048	.83095	21
Z27	4.1429	.79282	21
Z28	4.1429	.91026	21
Z29	4.2857	.71714	21
Z30	4.1905	.67964	21
Z31	3.9524	.58959	21
Z32	4.1429	.65465	21
Z33	4.0952	.76842	21
Z34	3.0000	1.09545	21
Z36	4.1429	.79282	21
Z37	3.7143	.95618	21
Z38	4.1429	.72703	21
Z39	4.3810	.80475	21
Z40	4.4286	.81064	21
Z41	4.0952	.83095	21
Z42	4.3333	.73030	21
Z43	3.9524	.80475	21
Z44	4.1905	.67964	21
Z45	4.1429	.85356	21
Z46	3.9524	.74001	21
Z47	4.1905	.74960	21
Z48	4.1905	.81358	21
Z49	4.0000	.54772	21
Z51	4.2381	.76842	21
Z52	4.0000	.83666	21
Z55	4.3333	.57735	21
Y1	3.8571	.57321	21
Y3	3.6667	.57735	21
Y6	3.9524	.86465	21

Item Statistics

	Mean	Std. Deviation	N
Y7	3.8095	.67964	21
Y10	3.4762	.60159	21
Y11	3.9048	.76842	21
Y12	3.7619	.70034	21
Y16	4.0476	.74001	21
Y18	3.9524	.58959	21
Y19	3.9524	.49761	21
Y20	4.0000	.77460	21
Y21	3.8571	.85356	21
Y22	4.0476	.92066	21
Y23	4.0000	.89443	21
Y24	3.7143	.64365	21
Y26	3.8571	.72703	21
Y27	3.8571	.85356	21
Y28	4.0000	.77460	21
Y29	4.1905	.67964	21
Y30	4.0000	.63246	21
Y31	4.0476	.58959	21
Y32	3.7143	.64365	21
Y33	3.6667	.65828	21
Y34	3.0476	.92066	21
Y36	4.0000	.77460	21
Y37	3.8571	.72703	21
Y38	3.8571	.65465	21
Y39	4.0952	.83095	21
Y40	3.9048	.62488	21
Y41	3.7619	.70034	21
Y42	4.0476	.58959	21
Y43	3.8571	.72703	21
Y44	3.8095	.81358	21
Y45	3.8571	.72703	21
Y46	3.9048	.70034	21
Y47	4.0952	.70034	21
Y48	3.9048	.76842	21
Y49	3.9048	.76842	21
Y51	4.0476	.66904	21
Y52	3.7143	.64365	21
Y55	4.1429	.47809	21

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
X1	486.9048	3116.690	.681	.988
X3	487.2857	3111.514	.480	.988
X6	487.0952	3103.190	.512	.988
X7	486.9524	3125.048	.463	.988
X10	487.0000	3109.100	.586	.988
X11	486.9524	3105.448	.509	.988
X12	486.9524	3106.848	.493	.988
X16	486.9524	3092.648	.772	.988
X18	486.9524	3095.448	.735	.988
X19	486.9048	3127.590	.395	.988

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
X20	487.0952	3109.590	.579	.988
X21	486.8571	3123.229	.520	.988
X22	486.8571	3092.629	.796	.988
X23	486.7619	3128.390	.391	.988
X24	487.1905	3122.862	.564	.988
X26	487.1429	3110.729	.538	.988
X27	486.8571	3100.429	.692	.988
X28	486.9524	3093.048	.697	.988
X29	486.8571	3108.529	.661	.988
X30	486.8571	3130.429	.394	.988
X31	487.0952	3132.090	.375	.988
X32	487.0952	3120.290	.495	.988
X33	487.1429	3112.329	.581	.988
X34	487.5238	3091.762	.731	.988
X36	486.9048	3115.490	.585	.988
X37	487.1905	3098.962	.845	.988
X38	486.9524	3103.448	.710	.988
X39	487.0952	3100.390	.703	.988
X40	486.9524	3120.448	.464	.988
X41	487.0952	3102.290	.678	.988
X42	486.9048	3126.390	.414	.988
X43	487.2857	3102.414	.725	.988
X44	487.0952	3126.390	.622	.988
X45	487.1429	3118.429	.710	.988
X46	487.2381	3091.490	.811	.988
X47	486.9048	3116.790	.564	.988
X48	487.0000	3115.600	.673	.988
X49	487.0952	3116.290	.661	.988
X51	486.9524	3111.748	.685	.988
X52	487.1905	3127.362	.480	.988
X55	486.8571	3125.629	.478	.988
Z1	486.8095	3124.462	.361	.988
Z3	487.5714	3096.557	.485	.988
Z6	486.8095	3080.862	.725	.988
Z7	486.7619	3114.490	.534	.988
Z10	487.5714	3118.457	.512	.988
Z11	487.2381	3094.990	.636	.988
Z12	487.1429	3063.429	.806	.988
Z16	486.7143	3075.014	.721	.988
Z18	486.8571	3089.629	.757	.988
Z19	486.9048	3103.590	.606	.988
Z20	486.8095	3094.362	.587	.988
Z21	486.8571	3119.029	.445	.988
Z22	487.0000	3075.800	.860	.988
Z23	486.6667	3098.633	.602	.988
Z24	487.2381	3095.390	.687	.988
Z26	487.1429	3094.929	.623	.988
Z27	486.9048	3086.590	.750	.988
Z28	486.9048	3074.490	.772	.988
Z29	486.7619	3095.590	.716	.988
Z30	486.8571	3113.129	.523	.988
Z31	487.0952	3118.690	.519	.988
Z32	486.9048	3111.390	.567	.988

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Z33	486.9524	3117.348	.411	.988
Z34	488.0476	3094.148	.475	.988
Z36	486.9048	3082.790	.793	.988
Z37	487.3333	3064.833	.826	.988
Z38	486.9048	3099.790	.654	.988
Z39	486.6667	3073.933	.882	.988
Z40	486.6190	3091.348	.679	.988
Z41	486.9524	3092.948	.645	.988
Z42	486.7143	3095.814	.700	.988
Z43	487.0952	3085.190	.754	.988
Z44	486.8571	3093.129	.789	.988
Z45	486.9048	3072.090	.850	.988
Z46	487.0952	3085.790	.814	.988
Z47	486.8571	3099.029	.643	.988
Z48	486.8571	3079.529	.809	.988
Z49	487.0476	3107.948	.737	.988
Z51	486.8095	3090.562	.727	.988
Z52	487.0476	3083.948	.738	.988
Z55	486.7143	3106.014	.729	.988
Y1	487.1905	3118.062	.545	.988
Y3	487.3810	3121.248	.491	.988
Y6	487.0952	3092.490	.624	.988
Y7	487.2381	3100.390	.692	.988
Y10	487.5714	3109.557	.646	.988
Y11	487.1429	3117.329	.412	.988
Y12	487.2857	3100.314	.672	.988
Y16	487.0000	3087.300	.795	.988
Y18	487.0952	3108.690	.672	.988
Y19	487.0952	3118.590	.619	.988
Y20	487.0476	3082.448	.816	.988
Y21	487.1905	3097.262	.582	.988
Y22	487.0000	3068.100	.827	.988
Y23	487.0476	3091.148	.616	.988
Y24	487.3333	3104.033	.680	.988
Y26	487.1905	3102.162	.624	.988
Y27	487.1905	3087.962	.681	.988
Y28	487.0476	3086.948	.763	.988
Y29	486.8571	3101.529	.677	.988
Y30	487.0476	3118.248	.490	.988
Y31	487.0000	3121.200	.481	.988
Y32	487.3333	3124.433	.395	.988
Y33	487.3810	3117.348	.482	.988
Y34	488.0000	3098.200	.529	.988
Y36	487.0476	3080.848	.835	.988
Y37	487.1905	3108.762	.542	.988
Y38	487.1905	3108.362	.609	.988
Y39	486.9524	3079.648	.791	.988
Y40	487.1429	3112.929	.573	.988
Y41	487.2857	3104.214	.622	.988
Y42	487.0000	3114.600	.582	.988
Y43	487.1905	3087.562	.806	.988
Y44	487.2381	3088.590	.708	.988
Y45	487.1905	3099.962	.652	.988

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Y46	487.1429	3091.029	.793	.988
Y47	486.9524	3099.248	.686	.988
Y48	487.1429	3081.029	.840	.988
Y49	487.1429	3092.429	.705	.988
Y51	487.0000	3100.500	.702	.988
Y52	487.3333	3112.533	.561	.988
Y55	486.9048	3123.290	.556	.988

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
491.0476	3153.248	56.15379	123
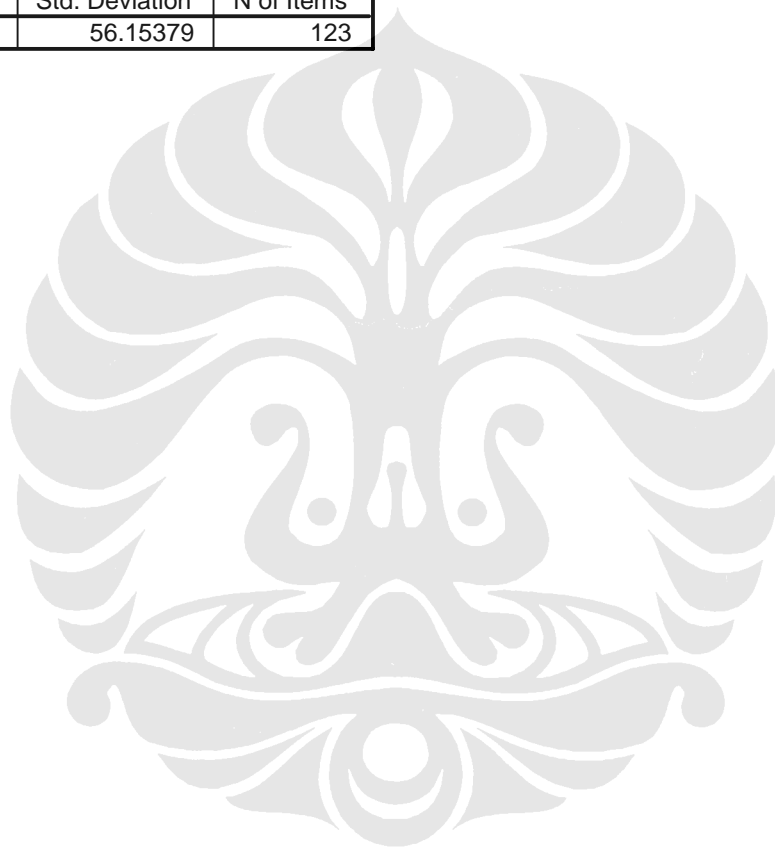
LAMPIRAN 5

ANALISIS NON-PARAMETRIK
KRUSKAL-WALLIS

NPar Tests

Kruskal-Wallis Test

Ranks

	PDK	N	Mean Rank
X1	1	16	10.22
	2	3	16.17
	3	2	9.50
	Total	21	
X3	1	16	10.53
	2	3	12.50
	3	2	12.50
	Total	21	
X6	1	16	9.56
	2	3	18.50
	3	2	11.25
	Total	21	
X7	1	16	9.53
	2	3	19.50
	3	2	10.00
	Total	21	
X10	1	16	10.59
	2	3	13.50
	3	2	10.50
	Total	21	
X11	1	16	10.81
	2	3	13.00
	3	2	9.50
	Total	21	
X12	1	16	11.22
	2	3	13.00
	3	2	6.25
	Total	21	
X16	1	16	9.72
	2	3	18.50
	3	2	10.00
	Total	21	
X18	1	16	10.28
	2	3	15.83
	3	2	9.50
	Total	21	
X19	1	16	10.28
	2	3	12.67
	3	2	14.25
	Total	21	
X20	1	16	10.44
	2	3	14.00
	3	2	11.00
	Total	21	
X21	1	16	11.00
	2	3	12.33
	3	2	9.00
	Total	21	

Ranks

	PDK	N	Mean Rank
X22	1	16	9.91
	2	3	15.17
	3	2	13.50
	Total	21	
X23	1	16	10.69
	2	3	11.33
	3	2	13.00
	Total	21	
X24	1	16	10.63
	2	3	15.33
	3	2	7.50
	Total	21	
X26	1	16	10.75
	2	3	11.67
	3	2	12.00
	Total	21	
X27	1	16	11.16
	2	3	11.83
	3	2	8.50
	Total	21	
X28	1	16	10.34
	2	3	12.50
	3	2	14.00
	Total	21	
X29	1	16	9.84
	2	3	15.33
	3	2	13.75
	Total	21	
X30	1	16	10.38
	2	3	15.67
	3	2	9.00
	Total	21	
X31	1	16	10.84
	2	3	11.50
	3	2	11.50
	Total	21	
X32	1	16	10.31
	2	3	14.33
	3	2	11.50
	Total	21	
X33	1	16	10.19
	2	3	14.67
	3	2	12.00
	Total	21	
X34	1	16	9.38
	2	3	17.00
	3	2	15.00
	Total	21	
X36	1	16	9.69
	2	3	15.83
	3	2	14.25
	Total	21	

Ranks

	PDK	N	Mean Rank
X37	1	16	10.13
	2	3	15.00
	3	2	12.00
	Total	21	
X38	1	16	10.19
	2	3	16.00
	3	2	10.00
	Total	21	
X39	1	16	10.44
	2	3	14.00
	3	2	11.00
	Total	21	
X40	1	16	10.19
	2	3	13.00
	3	2	14.50
	Total	21	
X41	1	16	10.44
	2	3	14.00
	3	2	11.00
	Total	21	
X42	1	16	10.28
	2	3	12.67
	3	2	14.25
	Total	21	
X43	1	16	10.38
	2	3	13.00
	3	2	13.00
	Total	21	
X44	1	16	10.84
	2	3	11.50
	3	2	11.50
	Total	21	
X45	1	16	10.69
	2	3	12.00
	3	2	12.00
	Total	21	
X46	1	16	10.53
	2	3	12.50
	3	2	12.50
	Total	21	
X47	1	16	9.69
	2	3	15.83
	3	2	14.25
	Total	21	
X48	1	16	9.97
	2	3	16.83
	3	2	10.50
	Total	21	
X49	1	16	11.00
	2	3	11.00
	3	2	11.00
	Total	21	

Ranks

	PDK	N	Mean Rank
X51	1	16	10.13
	2	3	16.33
	3	2	10.00
	Total	21	
X52	1	16	10.53
	2	3	12.50
	3	2	12.50
	Total	21	
X55	1	16	11.00
	2	3	12.33
	3	2	9.00
	Total	21	
Z1	1	16	10.66
	2	3	11.50
	3	2	13.00
	Total	21	
Z3	1	16	11.06
	2	3	14.50
	3	2	5.25
	Total	21	
Z6	1	16	9.81
	2	3	16.50
	3	2	12.25
	Total	21	
Z7	1	16	10.56
	2	3	17.50
	3	2	4.75
	Total	21	
Z10	1	16	10.69
	2	3	12.67
	3	2	11.00
	Total	21	
Z11	1	16	11.16
	2	3	14.50
	3	2	4.50
	Total	21	
Z12	1	16	10.50
	2	3	16.00
	3	2	7.50
	Total	21	
Z16	1	16	9.59
	2	3	15.50
	3	2	15.50
	Total	21	
Z18	1	16	10.59
	2	3	11.67
	3	2	13.25
	Total	21	
Z19	1	16	9.34
	2	3	15.17
	3	2	18.00
	Total	21	

Ranks

	PDK	N	Mean Rank
Z20	1	16	10.88
	2	3	10.83
	3	2	12.25
	Total	21	
Z21	1	16	9.91
	2	3	15.17
	3	2	13.50
	Total	21	
Z22	1	16	9.72
	2	3	15.67
	3	2	14.25
	Total	21	
Z23	1	16	10.03
	2	3	16.00
	3	2	11.25
	Total	21	
Z24	1	16	10.59
	2	3	15.00
	3	2	8.25
	Total	21	
Z26	1	16	10.38
	2	3	11.50
	3	2	15.25
	Total	21	
Z27	1	16	9.38
	2	3	18.00
	3	2	13.50
	Total	21	
Z28	1	16	10.63
	2	3	11.67
	3	2	13.00
	Total	21	
Z29	1	16	9.69
	2	3	14.00
	3	2	17.00
	Total	21	
Z30	1	16	9.94
	2	3	12.00
	3	2	18.00
	Total	21	
Z31	1	16	9.78
	2	3	14.33
	3	2	15.75
	Total	21	
Z32	1	16	10.34
	2	3	12.50
	3	2	14.00
	Total	21	
Z33	1	16	9.31
	2	3	15.33
	3	2	18.00
	Total	21	

Ranks

	PDK	N	Mean Rank
Z34	1	16	9.78
	2	3	16.50
	3	2	12.50
	Total	21	
Z36	1	16	9.47
	2	3	17.50
	3	2	13.50
	Total	21	
Z37	1	16	9.59
	2	3	17.50
	3	2	12.50
	Total	21	
Z38	1	16	9.88
	2	3	15.17
	3	2	13.75
	Total	21	
Z39	1	16	9.44
	2	3	16.00
	3	2	16.00
	Total	21	
Z40	1	16	9.75
	2	3	15.00
	3	2	15.00
	Total	21	
Z41	1	16	9.88
	2	3	15.17
	3	2	13.75
	Total	21	
Z42	1	16	9.84
	2	3	16.50
	3	2	12.00
	Total	21	
Z43	1	16	10.50
	2	3	13.67
	3	2	11.00
	Total	21	
Z44	1	16	9.94
	2	3	15.00
	3	2	13.50
	Total	21	
Z45	1	16	10.03
	2	3	14.67
	3	2	13.25
	Total	21	
Z46	1	16	10.47
	2	3	11.00
	3	2	15.25
	Total	21	
Z47	1	16	10.56
	2	3	9.00
	3	2	17.50
	Total	21	

Ranks

	PDK	N	Mean Rank
Z48	1	16	10.09
	2	3	14.50
	3	2	13.00
	Total	21	
Z49	1	16	11.16
	2	3	10.50
	3	2	10.50
	Total	21	
Z51	1	16	10.19
	2	3	14.17
	3	2	12.75
	Total	21	
Z52	1	16	10.16
	2	3	15.83
	3	2	10.50
	Total	21	
Z55	1	16	10.22
	2	3	14.17
	3	2	12.50
	Total	21	
Y1	1	16	11.28
	2	3	12.00
	3	2	7.25
	Total	21	
Y3	1	16	10.53
	2	3	14.50
	3	2	9.50
	Total	21	
Y6	1	16	10.03
	2	3	18.50
	3	2	7.50
	Total	21	
Y7	1	16	9.63
	2	3	20.00
	3	2	8.50
	Total	21	
Y10	1	16	10.69
	2	3	12.67
	3	2	11.00
	Total	21	
Y11	1	16	10.81
	2	3	14.00
	3	2	8.00
	Total	21	
Y12	1	16	10.47
	2	3	12.50
	3	2	13.00
	Total	21	
Y16	1	16	10.16
	2	3	15.83
	3	2	10.50
	Total	21	

Ranks

	PDK	N	Mean Rank
Y18	1	16	10.41
	2	3	11.00
	3	2	15.75
	Total	21	
Y19	1	16	10.84
	2	3	11.50
	3	2	11.50
	Total	21	
Y20	1	16	10.63
	2	3	13.33
	3	2	10.50
	Total	21	
Y21	1	16	10.72
	2	3	14.33
	3	2	8.25
	Total	21	
Y22	1	16	9.81
	2	3	17.50
	3	2	10.75
	Total	21	
Y23	1	16	9.28
	2	3	18.00
	3	2	14.25
	Total	21	
Y24	1	16	10.34
	2	3	16.00
	3	2	8.75
	Total	21	
Y26	1	16	10.72
	2	3	11.83
	3	2	12.00
	Total	21	
Y27	1	16	10.28
	2	3	16.67
	3	2	8.25
	Total	21	
Y28	1	16	10.63
	2	3	13.33
	3	2	10.50
	Total	21	
Y29	1	16	9.94
	2	3	15.00
	3	2	13.50
	Total	21	
Y30	1	16	9.94
	2	3	13.83
	3	2	15.25
	Total	21	
Y31	1	16	10.59
	2	3	13.50
	3	2	10.50
	Total	21	

Ranks

	PDK	N	Mean Rank
Y32	1	16	9.66
	2	3	16.17
	3	2	14.00
	Total	21	
Y33	1	16	9.53
	2	3	16.50
	3	2	14.50
	Total	21	
Y34	1	16	10.00
	2	3	15.33
	3	2	12.50
	Total	21	
Y36	1	16	10.09
	2	3	13.33
	3	2	14.75
	Total	21	
Y37	1	16	10.19
	2	3	14.67
	3	2	12.00
	Total	21	
Y38	1	16	10.06
	2	3	15.00
	3	2	12.50
	Total	21	
Y39	1	16	9.75
	2	3	18.00
	3	2	10.50
	Total	21	
Y40	1	16	10.75
	2	3	14.67
	3	2	7.50
	Total	21	
Y41	1	16	9.91
	2	3	15.50
	3	2	13.00
	Total	21	
Y42	1	16	10.03
	2	3	16.50
	3	2	10.50
	Total	21	
Y43	1	16	9.69
	2	3	17.33
	3	2	12.00
	Total	21	
Y44	1	16	10.59
	2	3	14.83
	3	2	8.50
	Total	21	
Y45	1	16	10.63
	2	3	14.83
	3	2	8.25
	Total	21	

Ranks

	PDK	N	Mean Rank
Y46	1	16	9.78
	2	3	17.17
	3	2	11.50
	Total	21	
Y47	1	16	9.72
	2	3	15.67
	3	2	14.25
	Total	21	
Y48	1	16	9.84
	2	3	16.83
	3	2	11.50
	Total	21	
Y49	1	16	11.00
	2	3	11.00
	3	2	11.00
	Total	21	
Y51	1	16	11.31
	2	3	10.00
	3	2	10.00
	Total	21	
Y52	1	16	10.66
	2	3	14.00
	3	2	9.25
	Total	21	
Y55	1	16	11.47
	2	3	9.50
	3	2	9.50
	Total	21	

Test Statistics[a,b]

	X1	X3	X6	X7	X10	X11	X12
Chi-Square	4.440	.547	5.918	10.455	.715	.519	1.761
df	2	2	2	2	2	2	2
Asymp. Sig.	.109	.761	.052	.005	.699	.771	.415

Test Statistics[a,b]

	X16	X18	X19	X20	X21	X22	X23
Chi-Square	6.181	3.112	1.418	1.315	.556	3.189	.353
df	2	2	2	2	2	2	2
Asymp. Sig.	.045	.211	.492	.518	.757	.203	.838

Test Statistics[a,b]

	X24	X26	X27	X28	X29	X30	X31
Chi-Square	3.910	.136	.570	1.039	3.258	3.316	.077
df	2	2	2	2	2	2	2
Asymp. Sig.	.142	.934	.752	.595	.196	.191	.962

Test Statistics[a,b]

	X32	X33	X34	X36	X37	X38	X39
Chi-Square	1.546	1.837	5.772	4.465	3.444	3.040	1.315
df	2	2	2	2	2	2	2
Asymp. Sig.	.462	.399	.056	.107	.179	.219	.518

Test Statistics[a,b]

	X40	X41	X42	X43	X44	X45	X46
Chi-Square	1.634	1.315	1.418	1.082	.115	.365	.550
df	2	2	2	2	2	2	2
Asymp. Sig.	.442	.518	.492	.582	.944	.833	.760

Test Statistics[a,b]

	X47	X48	X49	X51	X52	X55	Z1
Chi-Square	4.465	5.595	.000	4.111	.695	.556	.331
df	2	2	2	2	2	2	2
Asymp. Sig.	.107	.061	1.000	.128	.707	.757	.848

Test Statistics[a,b]

	Z3	Z6	Z7	Z10	Z11	Z12	Z16
Chi-Square	2.881	3.542	6.735	.330	3.658	3.033	4.364
df	2	2	2	2	2	2	2
Asymp. Sig.	.237	.170	.034	.848	.161	.219	.113

Test Statistics[a,b]

	Z18	Z19	Z20	Z21	Z22	Z23	Z24
Chi-Square	.471	5.927	.105	3.189	3.520	2.917	2.139
df	2	2	2	2	2	2	2
Asymp. Sig.	.790	.052	.949	.203	.172	.233	.343

Test Statistics[a,b]

	Z26	Z27	Z28	Z29	Z30	Z31	Z32
Chi-Square	1.292	6.390	.342	3.906	3.780	3.818	1.042
df	2	2	2	2	2	2	2
Asymp. Sig.	.524	.041	.843	.142	.151	.148	.594

Test Statistics[a,b]

	Z33	Z34	Z36	Z37	Z38	Z39	Z40
Chi-Square	5.949	3.457	5.230	5.255	2.673	5.309	3.633
df	2	2	2	2	2	2	2
Asymp. Sig.	.051	.178	.073	.072	.263	.070	.163

Test Statistics[a,b]

	Z41	Z42	Z43	Z44	Z45	Z46	Z47
Chi-Square	2.660	3.547	.786	2.494	1.966	1.399	3.003
df	2	2	2	2	2	2	2
Asymp. Sig.	.264	.170	.675	.287	.374	.497	.223

Test Statistics[a,b]

	Z48	Z49	Z51	Z52	Z55	Y1	Y3
Chi-Square	1.795	.115	1.411	2.465	1.516	1.792	1.530
df	2	2	2	2	2	2	2
Asymp. Sig.	.408	.944	.494	.292	.469	.408	.465

Test Statistics[a,b]

	Y6	Y7	Y10	Y11	Y12	Y16	Y18
Chi-Square	6.103	9.071	.330	1.356	.667	2.484	2.809
df	2	2	2	2	2	2	2
Asymp. Sig.	.047	.011	.848	.508	.716	.289	.246

Test Statistics[a,b]

	Y19	Y20	Y21	Y22	Y23	Y24	Y26
Chi-Square	.077	.621	1.457	4.332	6.243	3.456	.184
df	2	2	2	2	2	2	2
Asymp. Sig.	.962	.733	.483	.115	.044	.178	.912

Test Statistics[a,b]

	Y27	Y28	Y29	Y30	Y31	Y32	Y33
Chi-Square	3.508	.621	2.494	2.708	.818	4.113	4.777
df	2	2	2	2	2	2	2
Asymp. Sig.	.173	.733	.287	.258	.664	.128	.092

Test Statistics[a,b]

	Y34	Y36	Y37	Y38	Y39	Y40	Y41
Chi-Square	2.206	1.873	1.821	2.191	5.247	2.286	3.044
df	2	2	2	2	2	2	2
Asymp. Sig.	.332	.392	.402	.334	.073	.319	.218

Test Statistics[a,b]

	Y42	Y43	Y44	Y45	Y46	Y47	Y48
Chi-Square	3.969	5.160	1.781	1.878	5.138	3.536	4.019
df	2	2	2	2	2	2	2
Asymp. Sig.	.137	.076	.410	.391	.077	.171	.134

Test Statistics[a,b]

	Y49	Y51	Y52	Y55
Chi-Square	.000	.271	1.134	.695
df	2	2	2	2
Asymp. Sig.	1.000	.873	.567	.707

a. Kruskal Wallis Test

b. Grouping Variable: PDK

NPar Tests

Kruskal-Wallis Test

Ranks

	JBT	N	Mean Rank
X1	1	5	13.50
	2	8	12.00
	3	5	9.50
	4	3	6.67
	Total	21	
X3	1	5	14.10
	2	8	12.44
	3	5	8.60
	4	3	6.00
	Total	21	
X6	1	5	14.10
	2	8	13.81
	3	5	6.80
	4	3	5.33
	Total	21	
X7	1	5	13.80
	2	8	11.31
	3	5	8.30
	4	3	10.00
	Total	21	
X10	1	5	10.60
	2	8	13.75
	3	5	8.90
	4	3	7.83
	Total	21	
X11	1	5	11.60
	2	8	12.94
	3	5	8.20
	4	3	9.50
	Total	21	
X12	1	5	11.60
	2	8	12.94
	3	5	8.20
	4	3	9.50
	Total	21	

Ranks

	JBT	N	Mean Rank
X16	1	5	11.90
	2	8	13.31
	3	5	8.50
	4	3	7.50
	Total	21	
X18	1	5	15.20
	2	8	11.88
	3	5	8.00
	4	3	6.67
	Total	21	
X19	1	5	15.20
	2	8	9.69
	3	5	9.80
	4	3	9.50
	Total	21	
X20	1	5	14.60
	2	8	9.94
	3	5	9.30
	4	3	10.67
	Total	21	
X21	1	5	13.00
	2	8	10.25
	3	5	11.00
	4	3	9.67
	Total	21	
X22	1	5	12.50
	2	8	13.50
	3	5	8.50
	4	3	6.00
	Total	21	
X23	1	5	12.00
	2	8	11.75
	3	5	10.60
	4	3	8.00
	Total	21	
X24	1	5	14.20
	2	8	11.25
	3	5	8.50
	4	3	9.17
	Total	21	
X26	1	5	9.90
	2	8	13.88
	3	5	8.60
	4	3	9.17
	Total	21	
X27	1	5	12.50
	2	8	11.00
	3	5	10.50
	4	3	9.33
	Total	21	

Ranks

	JBT	N	Mean Rank
X28	1	5	14.90
	2	8	11.75
	3	5	8.50
	4	3	6.67
	Total	21	
X29	1	5	12.80
	2	8	12.56
	3	5	9.40
	4	3	6.50
	Total	21	
X30	1	5	15.00
	2	8	11.50
	3	5	9.00
	4	3	6.33
	Total	21	
X31	1	5	9.60
	2	8	13.75
	3	5	7.70
	4	3	11.50
	Total	21	
X32	1	5	13.20
	2	8	13.63
	3	5	7.90
	4	3	5.50
	Total	21	
X33	1	5	13.60
	2	8	14.00
	3	5	6.60
	4	3	6.00
	Total	21	
X34	1	5	13.50
	2	8	12.75
	3	5	9.60
	4	3	4.50
	Total	21	
X36	1	5	13.60
	2	8	10.69
	3	5	11.40
	4	3	6.83
	Total	21	
X37	1	5	11.90
	2	8	12.00
	3	5	10.10
	4	3	8.33
	Total	21	
X38	1	5	12.00
	2	8	12.25
	3	5	8.40
	4	3	10.33
	Total	21	

Ranks

	JBT	N	Mean Rank
X39	1	5	16.40
	2	8	9.94
	3	5	9.30
	4	3	7.67
	Total	21	
X40	1	5	12.00
	2	8	11.25
	3	5	11.80
	4	3	7.33
	Total	21	
X41	1	5	14.60
	2	8	11.06
	3	5	9.30
	4	3	7.67
	Total	21	
X42	1	5	13.30
	2	8	10.88
	3	5	11.40
	4	3	6.83
	Total	21	
X43	1	5	12.70
	2	8	13.00
	3	5	9.20
	4	3	5.83
	Total	21	
X44	1	5	9.50
	2	8	12.69
	3	5	11.50
	4	3	8.17
	Total	21	
X45	1	5	10.00
	2	8	13.13
	3	5	10.00
	4	3	8.67
	Total	21	
X46	1	5	12.30
	2	8	13.50
	3	5	10.70
	4	3	2.67
	Total	21	
X47	1	5	11.70
	2	8	11.88
	3	5	11.40
	4	3	6.83
	Total	21	
X48	1	5	14.30
	2	8	11.69
	3	5	8.70
	4	3	7.50
	Total	21	

Ranks

	JBT	N	Mean Rank
X49	1	5	13.00
	2	8	11.00
	3	5	11.00
	4	3	7.67
	Total	21	
X51	1	5	13.80
	2	8	12.38
	3	5	8.30
	4	3	7.17
	Total	21	
X52	1	5	12.20
	2	8	12.50
	3	5	10.50
	4	3	5.83
	Total	21	
X55	1	5	13.00
	2	8	11.50
	3	5	9.00
	4	3	9.67
	Total	21	
Z1	1	5	12.10
	2	8	10.25
	3	5	10.80
	4	3	11.50
	Total	21	
Z3	1	5	16.50
	2	8	10.50
	3	5	9.20
	4	3	6.17
	Total	21	
Z6	1	5	16.50
	2	8	12.69
	3	5	7.00
	4	3	4.00
	Total	21	
Z7	1	5	15.60
	2	8	11.94
	3	5	6.70
	4	3	8.00
	Total	21	
Z10	1	5	14.00
	2	8	11.00
	3	5	8.00
	4	3	11.00
	Total	21	
Z11	1	5	10.70
	2	8	14.13
	3	5	9.30
	4	3	6.00
	Total	21	

Ranks

	JBT	N	Mean Rank
Z12	1	5	12.60
	2	8	12.94
	3	5	8.30
	4	3	7.67
	Total	21	
Z16	1	5	11.20
	2	8	12.63
	3	5	10.10
	4	3	7.83
	Total	21	
Z18	1	5	12.90
	2	8	13.25
	3	5	8.50
	4	3	6.00
	Total	21	
Z19	1	5	14.60
	2	8	11.81
	3	5	8.40
	4	3	7.17
	Total	21	
Z20	1	5	14.80
	2	8	10.56
	3	5	9.40
	4	3	8.50
	Total	21	
Z21	1	5	10.50
	2	8	12.25
	3	5	11.00
	4	3	8.50
	Total	21	
Z22	1	5	12.00
	2	8	13.19
	3	5	10.30
	4	3	4.67
	Total	21	
Z23	1	5	13.20
	2	8	12.44
	3	5	9.20
	4	3	6.50
	Total	21	
Z24	1	5	15.30
	2	8	11.44
	3	5	8.50
	4	3	6.83
	Total	21	
Z26	1	5	11.50
	2	8	12.44
	3	5	11.50
	4	3	5.50
	Total	21	

Ranks

	JBT	N	Mean Rank
Z27	1	5	11.30
	2	8	11.25
	3	5	11.30
	4	3	9.33
	Total	21	
Z28	1	5	12.70
	2	8	14.00
	3	5	8.40
	4	3	4.50
	Total	21	
Z29	1	5	14.00
	2	8	11.38
	3	5	11.60
	4	3	4.00
	Total	21	
Z30	1	5	13.00
	2	8	12.38
	3	5	9.40
	4	3	6.67
	Total	21	
Z31	1	5	13.10
	2	8	12.56
	3	5	9.70
	4	3	5.50
	Total	21	
Z32	1	5	13.10
	2	8	12.88
	3	5	9.80
	4	3	4.50
	Total	21	
Z33	1	5	14.80
	2	8	12.13
	3	5	8.80
	4	3	5.33
	Total	21	
Z34	1	5	13.40
	2	8	11.19
	3	5	8.00
	4	3	11.50
	Total	21	
Z36	1	5	13.00
	2	8	14.50
	3	5	8.20
	4	3	3.00
	Total	21	
Z37	1	5	13.90
	2	8	11.44
	3	5	10.40
	4	3	6.00
	Total	21	

Ranks

	JBT	N	Mean Rank
Z38	1	5	11.50
	2	8	13.75
	3	5	8.10
	4	3	7.67
	Total	21	
Z39	1	5	14.10
	2	8	12.44
	3	5	10.30
	4	3	3.17
	Total	21	
Z40	1	5	12.50
	2	8	12.38
	3	5	9.10
	4	3	8.00
	Total	21	
Z41	1	5	14.60
	2	8	11.06
	3	5	9.90
	4	3	6.67
	Total	21	
Z42	1	5	14.70
	2	8	12.44
	3	5	9.30
	4	3	3.83
	Total	21	
Z43	1	5	12.70
	2	8	13.06
	3	5	9.50
	4	3	5.17
	Total	21	
Z44	1	5	11.20
	2	8	14.63
	3	5	9.00
	4	3	4.33
	Total	21	
Z45	1	5	11.20
	2	8	14.31
	3	5	10.70
	4	3	2.33
	Total	21	
Z46	1	5	12.80
	2	8	13.13
	3	5	9.40
	4	3	5.00
	Total	21	
Z47	1	5	11.10
	2	8	13.25
	3	5	12.40
	4	3	2.50
	Total	21	

Ranks

	JBT	N	Mean Rank
Z48	1	5	13.90
	2	8	11.88
	3	5	10.90
	4	3	4.00
	Total	21	
Z49	1	5	12.50
	2	8	11.75
	3	5	10.50
	4	3	7.33
	Total	21	
Z51	1	5	13.60
	2	8	12.75
	3	5	10.70
	4	3	2.50
	Total	21	
Z52	1	5	13.90
	2	8	12.63
	3	5	10.50
	4	3	2.67
	Total	21	
Z55	1	5	15.50
	2	8	11.25
	3	5	9.50
	4	3	5.33
	Total	21	
Y1	1	5	13.80
	2	8	12.00
	3	5	8.20
	4	3	8.33
	Total	21	
Y3	1	5	15.80
	2	8	12.00
	3	5	6.50
	4	3	7.83
	Total	21	
Y6	1	5	14.10
	2	8	12.94
	3	5	8.20
	4	3	5.33
	Total	21	
Y7	1	5	14.00
	2	8	11.63
	3	5	9.40
	4	3	7.00
	Total	21	
Y10	1	5	14.00
	2	8	12.25
	3	5	8.00
	4	3	7.67
	Total	21	

Ranks

	JBT	N	Mean Rank
Y11	1	5	11.80
	2	8	12.63
	3	5	8.80
	4	3	9.00
	Total	21	
Y12	1	5	10.90
	2	8	12.81
	3	5	9.40
	4	3	9.00
	Total	21	
Y16	1	5	13.80
	2	8	11.56
	3	5	10.60
	4	3	5.50
	Total	21	
Y18	1	5	11.00
	2	8	13.38
	3	5	11.00
	4	3	4.67
	Total	21	
Y19	1	5	13.30
	2	8	10.31
	3	5	11.40
	4	3	8.33
	Total	21	
Y20	1	5	13.90
	2	8	11.69
	3	5	10.70
	4	3	4.83
	Total	21	
Y21	1	5	11.90
	2	8	13.69
	3	5	9.70
	4	3	4.50
	Total	21	
Y22	1	5	12.10
	2	8	13.75
	3	5	9.10
	4	3	5.00
	Total	21	
Y23	1	5	12.20
	2	8	12.63
	3	5	10.10
	4	3	6.17
	Total	21	
Y24	1	5	13.10
	2	8	12.31
	3	5	9.10
	4	3	7.17
	Total	21	

Ranks

	JBT	N	Mean Rank
Y26	1	5	8.50
	2	8	13.00
	3	5	13.60
	4	3	5.50
	Total	21	
Y27	1	5	11.80
	2	8	11.94
	3	5	10.40
	4	3	8.17
	Total	21	
Y28	1	5	13.90
	2	8	12.63
	3	5	7.50
	4	3	7.67
	Total	21	
Y29	1	5	12.60
	2	8	12.38
	3	5	11.20
	4	3	4.33
	Total	21	
Y30	1	5	11.00
	2	8	12.06
	3	5	12.70
	4	3	5.33
	Total	21	
Y31	1	5	10.60
	2	8	12.75
	3	5	10.60
	4	3	7.67
	Total	21	
Y32	1	5	13.40
	2	8	12.44
	3	5	10.20
	4	3	4.50
	Total	21	
Y33	1	5	11.90
	2	8	12.88
	3	5	10.70
	4	3	5.00
	Total	21	
Y34	1	5	10.80
	2	8	12.06
	3	5	10.90
	4	3	8.67
	Total	21	
Y36	1	5	10.70
	2	8	13.69
	3	5	10.70
	4	3	4.83
	Total	21	

Ranks

	JBT	N	Mean Rank
Y37	1	5	10.20
	2	8	10.88
	3	5	13.60
	4	3	8.33
	Total	21	
Y38	1	5	12.20
	2	8	13.25
	3	5	10.70
	4	3	3.50
	Total	21	
Y39	1	5	14.60
	2	8	11.88
	3	5	8.60
	4	3	6.67
	Total	21	
Y40	1	5	10.20
	2	8	13.88
	3	5	10.20
	4	3	6.00
	Total	21	
Y41	1	5	13.00
	2	8	12.63
	3	5	9.40
	4	3	6.00
	Total	21	
Y42	1	5	12.30
	2	8	12.81
	3	5	10.50
	4	3	4.83
	Total	21	
Y43	1	5	11.90
	2	8	12.94
	3	5	10.30
	4	3	5.50
	Total	21	
Y44	1	5	10.90
	2	8	14.00
	3	5	10.90
	4	3	3.33
	Total	21	
Y45	1	5	10.80
	2	8	13.00
	3	5	10.50
	4	3	6.83
	Total	21	
Y46	1	5	11.50
	2	8	13.63
	3	5	11.50
	4	3	2.33
	Total	21	

Ranks

	JBT	N	Mean Rank
Y47	1	5	10.20
	2	8	13.19
	3	5	11.90
	4	3	5.00
	Total	21	
Y48	1	5	11.50
	2	8	13.50
	3	5	11.50
	4	3	2.67
	Total	21	
Y49	1	5	11.00
	2	8	13.38
	3	5	11.00
	4	3	4.67
	Total	21	
Y51	1	5	10.00
	2	8	13.56
	3	5	11.90
	4	3	4.33
	Total	21	
Y52	1	5	12.10
	2	8	12.44
	3	5	11.50
	4	3	4.50
	Total	21	
Y55	1	5	11.50
	2	8	12.00
	3	5	11.50
	4	3	6.67
	Total	21	

Test Statistics[a,b]

	X1	X3	X6	X7	X10	X11	X12
Chi-Square	5.027	6.242	8.670	3.279	3.707	2.366	2.366
df	3	3	3	3	3	3	3
Asymp. Sig.	.170	.100	.034	.351	.295	.500	.500

Test Statistics[a,b]

	X16	X18	X19	X20	X21	X22	X23
Chi-Square	3.603	7.349	4.358	3.635	1.243	6.381	1.332
df	3	3	3	3	3	3	3
Asymp. Sig.	.308	.062	.225	.304	.743	.094	.722

Test Statistics[a,b]

	X24	X26	X27	X28	X29	X30	X31
Chi-Square	4.378	3.484	.794	5.522	3.834	6.972	5.871
df	3	3	3	3	3	3	3
Asymp. Sig.	.223	.323	.851	.137	.280	.073	.118

Test Statistics[a,b]

	X32	X33	X34	X36	X37	X38	X39
Chi-Square	8.147	9.639	6.090	3.288	2.071	1.828	8.312
df	3	3	3	3	3	3	3
Asymp. Sig.	.043	.022	.107	.349	.558	.609	.040

Test Statistics[a,b]

	X40	X41	X42	X43	X44	X45	X46
Chi-Square	1.703	4.620	2.987	5.886	4.166	3.470	9.953
df	3	3	3	3	3	3	3
Asymp. Sig.	.636	.202	.394	.117	.244	.325	.019

Test Statistics[a,b]

	X47	X48	X49	X51	X52	X55	Z1
Chi-Square	2.310	5.681	5.333	5.567	5.013	1.972	.357
df	3	3	3	3	3	3	3
Asymp. Sig.	.511	.128	.149	.135	.171	.578	.949

Test Statistics[a,b]

	Z3	Z6	Z7	Z10	Z11	Z12	Z16
Chi-Square	6.705	12.199	7.523	3.000	5.053	3.300	1.821
df	3	3	3	3	3	3	3
Asymp. Sig.	.082	.007	.057	.392	.168	.348	.610

Test Statistics[a,b]

	Z18	Z19	Z20	Z21	Z22	Z23	Z24
Chi-Square	5.503	4.521	3.202	1.238	5.185	3.808	5.766
df	3	3	3	3	3	3	3
Asymp. Sig.	.138	.210	.361	.744	.159	.283	.124

Test Statistics[a,b]

	Z26	Z27	Z28	Z29	Z30	Z31	Z32
Chi-Square	3.289	.308	7.297	6.016	3.310	5.258	6.062
df	3	3	3	3	3	3	3
Asymp. Sig.	.349	.958	.063	.111	.346	.154	.109

Test Statistics[a,b]

	Z33	Z34	Z36	Z37	Z38	Z39	Z40
Chi-Square	6.037	2.174	10.331	3.883	4.190	8.127	2.471
df	3	3	3	3	3	3	3
Asymp. Sig.	.110	.537	.016	.274	.242	.043	.480

Test Statistics[a,b]

	Z41	Z42	Z43	Z44	Z45	Z46	Z47
Chi-Square	3.870	7.879	5.018	8.211	9.422	5.960	8.057
df	3	3	3	3	3	3	3
Asymp. Sig.	.276	.049	.171	.042	.024	.114	.045

Test Statistics[a,b]

	Z48	Z49	Z51	Z52	Z55	Y1	Y3
Chi-Square	6.053	4.023	8.311	8.203	7.157	5.960	8.702
df	3	3	3	3	3	3	3
Asymp. Sig.	.109	.259	.040	.042	.067	.114	.034

Test Statistics[a,b]

	Y6	Y7	Y10	Y11	Y12	Y16	Y18
Chi-Square	6.260	3.458	4.528	1.801	1.771	4.039	9.154
df	3	3	3	3	3	3	3
Asymp. Sig.	.100	.326	.210	.615	.621	.257	.027

Test Statistics[a,b]

	Y19	Y20	Y21	Y22	Y23	Y24	Y26
Chi-Square	2.450	5.215	5.774	5.583	2.970	3.679	6.465
df	3	3	3	3	3	3	3
Asymp. Sig.	.484	.157	.123	.134	.396	.298	.091

Test Statistics[a,b]

	Y27	Y28	Y29	Y30	Y31	Y32	Y33
Chi-Square	1.058	5.130	5.126	4.146	2.220	5.677	4.486
df	3	3	3	3	3	3	3
Asymp. Sig.	.787	.162	.163	.246	.528	.128	.214

Test Statistics[a,b]

	Y34	Y36	Y37	Y38	Y39	Y40	Y41
Chi-Square	.736	5.618	2.012	7.141	4.747	5.122	4.465
df	3	3	3	3	3	3	3
Asymp. Sig.	.865	.132	.570	.068	.191	.163	.215

Test Statistics[a,b]

	Y42	Y43	Y44	Y45	Y46	Y47	Y48
Chi-Square	5.605	4.381	7.472	2.614	10.509	4.817	8.455
df	3	3	3	3	3	3	3
Asymp. Sig.	.133	.223	.058	.455	.015	.186	.037

Test Statistics[a,b]

	Y49	Y51	Y52	Y55
Chi-Square	9.154	8.038	4.877	3.145
df	3	3	3	3
Asymp. Sig.	.027	.045	.181	.370

a. Kruskal Wallis Test

b. Grouping Variable: JBT

NPar Tests

Kruskal-Wallis Test

Ranks

	EXP	N	Mean Rank
X1	1	6	11.17
	2	13	10.38
	3	2	14.50
	Total	21	
X3	1	6	12.42
	2	13	10.35
	3	2	11.00
	Total	21	
X6	1	6	13.50
	2	13	10.38
	3	2	7.50
	Total	21	
X7	1	6	10.17
	2	13	11.54
	3	2	10.00
	Total	21	
X10	1	6	13.33
	2	13	10.00
	3	2	10.50
	Total	21	
X11	1	6	12.67
	2	13	10.46
	3	2	9.50
	Total	21	
X12	1	6	12.67
	2	13	10.46
	3	2	9.50
	Total	21	

Ranks

	EXP	N	Mean Rank
X16	1	6	10.33
	2	13	11.46
	3	2	10.00
	Total	21	
X18	1	6	11.08
	2	13	11.19
	3	2	9.50
	Total	21	
X19	1	6	9.75
	2	13	11.08
	3	2	14.25
	Total	21	
X20	1	6	9.58
	2	13	11.62
	3	2	11.25
	Total	21	
X21	1	6	9.00
	2	13	10.69
	3	2	19.00
	Total	21	
X22	1	6	13.50
	2	13	9.46
	3	2	13.50
	Total	21	
X23	1	6	11.33
	2	13	9.77
	3	2	18.00
	Total	21	
X24	1	6	10.83
	2	13	10.85
	3	2	12.50
	Total	21	
X26	1	6	11.83
	2	13	10.54
	3	2	11.50
	Total	21	
X27	1	6	11.83
	2	13	9.46
	3	2	18.50
	Total	21	
X28	1	6	12.50
	2	13	9.85
	3	2	14.00
	Total	21	
X29	1	6	13.75
	2	13	10.04
	3	2	9.00
	Total	21	
X30	1	6	12.33
	2	13	10.69
	3	2	9.00
	Total	21	

Ranks

	EXP	N	Mean Rank
X31	1	6	11.42
	2	13	11.46
	3	2	6.75
	Total	21	
X32	1	6	14.33
	2	13	10.08
	3	2	7.00
	Total	21	
X33	1	6	14.67
	2	13	9.85
	3	2	7.50
	Total	21	
X34	1	6	9.75
	2	13	11.65
	3	2	10.50
	Total	21	
X36	1	6	9.75
	2	13	11.81
	3	2	9.50
	Total	21	
X37	1	6	10.42
	2	13	11.12
	3	2	12.00
	Total	21	
X38	1	6	8.67
	2	13	11.54
	3	2	14.50
	Total	21	
X39	1	6	9.58
	2	13	10.96
	3	2	15.50
	Total	21	
X40	1	6	8.83
	2	13	12.15
	3	2	10.00
	Total	21	
X41	1	6	9.58
	2	13	11.65
	3	2	11.00
	Total	21	
X42	1	6	9.75
	2	13	11.81
	3	2	9.50
	Total	21	
X43	1	6	11.42
	2	13	11.23
	3	2	8.25
	Total	21	
X44	1	6	9.83
	2	13	11.46
	3	2	11.50
	Total	21	

Ranks

	EXP	N	Mean Rank
X45	1	6	10.33
	2	13	11.15
	3	2	12.00
	Total	21	
X46	1	6	11.00
	2	13	10.77
	3	2	12.50
	Total	21	
X47	1	6	9.75
	2	13	11.81
	3	2	9.50
	Total	21	
X48	1	6	10.50
	2	13	11.31
	3	2	10.50
	Total	21	
X49	1	6	11.00
	2	13	11.00
	3	2	11.00
	Total	21	
X51	1	6	10.00
	2	13	11.62
	3	2	10.00
	Total	21	
X52	1	6	10.83
	2	13	11.62
	3	2	7.50
	Total	21	
X55	1	6	10.67
	2	13	11.46
	3	2	9.00
	Total	21	
Z1	1	6	10.42
	2	13	10.27
	3	2	17.50
	Total	21	
Z3	1	6	10.25
	2	13	10.92
	3	2	13.75
	Total	21	
Z6	1	6	12.83
	2	13	10.35
	3	2	9.75
	Total	21	
Z7	1	6	10.08
	2	13	11.15
	3	2	12.75
	Total	21	
Z10	1	6	12.67
	2	13	10.23
	3	2	11.00
	Total	21	

Ranks

	EXP	N	Mean Rank
Z11	1	6	12.17
	2	13	10.23
	3	2	12.50
	Total	21	
Z12	1	6	11.17
	2	13	10.35
	3	2	14.75
	Total	21	
Z16	1	6	11.08
	2	13	10.27
	3	2	15.50
	Total	21	
Z18	1	6	12.17
	2	13	10.12
	3	2	13.25
	Total	21	
Z19	1	6	11.17
	2	13	10.50
	3	2	13.75
	Total	21	
Z20	1	6	12.83
	2	13	9.31
	3	2	16.50
	Total	21	
Z21	1	6	10.17
	2	13	11.00
	3	2	13.50
	Total	21	
Z22	1	6	10.25
	2	13	10.19
	3	2	18.50
	Total	21	
Z23	1	6	10.50
	2	13	10.46
	3	2	16.00
	Total	21	
Z24	1	6	9.67
	2	13	10.81
	3	2	16.25
	Total	21	
Z26	1	6	11.50
	2	13	9.54
	3	2	19.00
	Total	21	
Z27	1	6	9.42
	2	13	11.35
	3	2	13.50
	Total	21	
Z28	1	6	13.42
	2	13	8.96
	3	2	17.00
	Total	21	

Ranks

	EXP	N	Mean Rank
Z29	1	6	10.00
	2	13	10.54
	3	2	17.00
	Total	21	
Z30	1	6	10.83
	2	13	10.69
	3	2	13.50
	Total	21	
Z31	1	6	11.42
	2	13	10.08
	3	2	15.75
	Total	21	
Z32	1	6	14.00
	2	13	8.46
	3	2	18.50
	Total	21	
Z33	1	6	14.00
	2	13	9.15
	3	2	14.00
	Total	21	
Z34	1	6	9.50
	2	13	11.46
	3	2	12.50
	Total	21	
Z36	1	6	12.42
	2	13	9.96
	3	2	13.50
	Total	21	
Z37	1	6	9.83
	2	13	10.73
	3	2	16.25
	Total	21	
Z38	1	6	11.17
	2	13	10.50
	3	2	13.75
	Total	21	
Z39	1	6	11.25
	2	13	10.12
	3	2	16.00
	Total	21	
Z40	1	6	10.83
	2	13	10.46
	3	2	15.00
	Total	21	
Z41	1	6	11.25
	2	13	10.46
	3	2	13.75
	Total	21	
Z42	1	6	11.08
	2	13	10.12
	3	2	16.50
	Total	21	

Ranks

	EXP	N	Mean Rank
Z43	1	6	11.17
	2	13	10.31
	3	2	15.00
	Total	21	
Z44	1	6	12.33
	2	13	10.00
	3	2	13.50
	Total	21	
Z45	1	6	12.25
	2	13	9.42
	3	2	17.50
	Total	21	
Z46	1	6	12.50
	2	13	9.65
	3	2	15.25
	Total	21	
Z47	1	6	12.17
	2	13	9.46
	3	2	17.50
	Total	21	
Z48	1	6	11.50
	2	13	9.77
	3	2	17.50
	Total	21	
Z49	1	6	12.17
	2	13	9.77
	3	2	15.50
	Total	21	
Z51	1	6	11.33
	2	13	9.92
	3	2	17.00
	Total	21	
Z52	1	6	12.00
	2	13	10.00
	3	2	14.50
	Total	21	
Z55	1	6	10.83
	2	13	10.08
	3	2	17.50
	Total	21	
Y1	1	6	12.00
	2	13	11.12
	3	2	7.25
	Total	21	
Y3	1	6	11.17
	2	13	10.65
	3	2	12.75
	Total	21	
Y6	1	6	11.08
	2	13	10.92
	3	2	11.25
	Total	21	

Ranks

	EXP	N	Mean Rank
Y7	1	6	8.50
	2	13	11.85
	3	2	13.00
	Total	21	
Y10	1	6	12.67
	2	13	10.23
	3	2	11.00
	Total	21	
Y11	1	6	13.00
	2	13	9.92
	3	2	12.00
	Total	21	
Y12	1	6	12.75
	2	13	9.88
	3	2	13.00
	Total	21	
Y16	1	6	9.33
	2	13	10.62
	3	2	18.50
	Total	21	
Y18	1	6	14.17
	2	13	9.54
	3	2	11.00
	Total	21	
Y19	1	6	9.92
	2	13	10.04
	3	2	20.50
	Total	21	
Y20	1	6	12.08
	2	13	9.27
	3	2	19.00
	Total	21	
Y21	1	6	13.08
	2	13	9.35
	3	2	15.50
	Total	21	
Y22	1	6	12.75
	2	13	9.19
	3	2	17.50
	Total	21	
Y23	1	6	9.75
	2	13	11.08
	3	2	14.25
	Total	21	
Y24	1	6	10.33
	2	13	10.92
	3	2	13.50
	Total	21	
Y26	1	6	11.92
	2	13	9.81
	3	2	16.00
	Total	21	

Ranks

	EXP	N	Mean Rank
Y27	1	6	10.67
	2	13	10.46
	3	2	15.50
	Total	21	
Y28	1	6	11.92
	2	13	10.00
	3	2	14.75
	Total	21	
Y29	1	6	13.50
	2	13	9.46
	3	2	13.50
	Total	21	
Y30	1	6	12.42
	2	13	10.35
	3	2	11.00
	Total	21	
Y31	1	6	10.58
	2	13	10.58
	3	2	15.00
	Total	21	
Y32	1	6	11.92
	2	13	10.85
	3	2	9.25
	Total	21	
Y33	1	6	12.33
	2	13	9.85
	3	2	14.50
	Total	21	
Y34	1	6	11.33
	2	13	9.85
	3	2	17.50
	Total	21	
Y36	1	6	13.50
	2	13	9.27
	3	2	14.75
	Total	21	
Y37	1	6	10.50
	2	13	10.46
	3	2	16.00
	Total	21	
Y38	1	6	10.75
	2	13	10.88
	3	2	12.50
	Total	21	
Y39	1	6	11.25
	2	13	9.81
	3	2	18.00
	Total	21	
Y40	1	6	10.33
	2	13	11.15
	3	2	12.00
	Total	21	

Ranks

	EXP	N	Mean Rank
Y41	1	6	12.75
	2	13	10.58
	3	2	8.50
	Total	21	
Y42	1	6	10.58
	2	13	11.27
	3	2	10.50
	Total	21	
Y43	1	6	10.50
	2	13	11.08
	3	2	12.00
	Total	21	
Y44	1	6	10.83
	2	13	10.85
	3	2	12.50
	Total	21	
Y45	1	6	9.42
	2	13	10.96
	3	2	16.00
	Total	21	
Y46	1	6	11.50
	2	13	10.69
	3	2	11.50
	Total	21	
Y47	1	6	11.58
	2	13	10.23
	3	2	14.25
	Total	21	
Y48	1	6	11.50
	2	13	10.08
	3	2	15.50
	Total	21	
Y49	1	6	14.17
	2	13	9.54
	3	2	11.00
	Total	21	
Y51	1	6	13.17
	2	13	9.42
	3	2	14.75
	Total	21	
Y52	1	6	11.92
	2	13	9.62
	3	2	17.25
	Total	21	
Y55	1	6	11.17
	2	13	9.62
	3	2	19.50
	Total	21	

Test Statistics[a,b]

	X1	X3	X6	X7	X10	X11	X12
Chi-Square	1.392	.652	1.961	.410	1.509	.759	.759
df	2	2	2	2	2	2	2
Asymp. Sig.	.498	.722	.375	.815	.470	.684	.684

Test Statistics[a,b]

	X16	X18	X19	X20	X21	X22	X23
Chi-Square	.233	.189	1.150	.701	6.385	3.077	4.227
df	2	2	2	2	2	2	2
Asymp. Sig.	.890	.910	.563	.704	.041	.215	.121

Test Statistics[a,b]

	X24	X26	X27	X28	X29	X30	X31
Chi-Square	.234	.233	5.617	1.603	2.295	.829	1.868
df	2	2	2	2	2	2	2
Asymp. Sig.	.890	.890	.060	.449	.318	.661	.393

Test Statistics[a,b]

	X32	X33	X34	X36	X37	X38	X39
Chi-Square	4.099	4.253	.489	.840	.233	2.116	2.156
df	2	2	2	2	2	2	2
Asymp. Sig.	.129	.119	.783	.657	.890	.347	.340

Test Statistics[a,b]

	X40	X41	X42	X43	X44	X45	X46
Chi-Square	1.648	.722	.840	.695	.803	.276	.193
df	2	2	2	2	2	2	2
Asymp. Sig.	.439	.697	.657	.706	.669	.871	.908

Test Statistics[a,b]

	X47	X48	X49	X51	X52	X55	Z1
Chi-Square	.840	.151	.000	.533	1.392	.476	2.905
df	2	2	2	2	2	2	2
Asymp. Sig.	.657	.927	1.000	.766	.498	.788	.234

Test Statistics[a,b]

	Z3	Z6	Z7	Z10	Z11	Z12	Z16
Chi-Square	.520	.878	.372	.812	.612	.992	1.559
df	2	2	2	2	2	2	2
Asymp. Sig.	.771	.645	.830	.666	.736	.609	.459

Test Statistics[a,b]

	Z18	Z19	Z20	Z21	Z22	Z23	Z24
Chi-Square	.950	.567	3.586	.635	3.883	1.789	2.155
df	2	2	2	2	2	2	2
Asymp. Sig.	.622	.753	.166	.728	.143	.409	.340

Test Statistics[a,b]

	Z26	Z27	Z28	Z29	Z30	Z31	Z32
Chi-Square	4.712	.922	4.758	2.493	.441	2.138	8.239
df	2	2	2	2	2	2	2
Asymp. Sig.	.095	.631	.093	.288	.802	.343	.016

Test Statistics[a,b]

	Z33	Z34	Z36	Z37	Z38	Z39	Z40
Chi-Square	3.462	.603	1.141	2.072	.567	1.959	1.243
df	2	2	2	2	2	2	2
Asymp. Sig.	.177	.740	.565	.355	.753	.375	.537

Test Statistics[a,b]

	Z41	Z42	Z43	Z44	Z45	Z46	Z47
Chi-Square	.586	2.198	1.191	1.148	3.790	2.519	3.724
df	2	2	2	2	2	2	2
Asymp. Sig.	.746	.333	.551	.563	.150	.284	.155

Test Statistics[a,b]

	Z48	Z49	Z51	Z52	Z55	Y1	Y3
Chi-Square	3.277	4.797	2.647	1.308	3.273	1.898	.268
df	2	2	2	2	2	2	2
Asymp. Sig.	.194	.091	.266	.520	.195	.387	.874

Test Statistics[a,b]

	Y6	Y7	Y10	Y11	Y12	Y16	Y18
Chi-Square	.007	1.740	.812	1.223	1.474	3.972	4.865
df	2	2	2	2	2	2	2
Asymp. Sig.	.996	.419	.666	.543	.479	.137	.088

Test Statistics[a,b]

	Y19	Y20	Y21	Y22	Y23	Y24	Y26
Chi-Square	9.336	5.658	2.992	4.213	.886	.573	2.531
df	2	2	2	2	2	2	2
Asymp. Sig.	.009	.059	.224	.122	.642	.751	.282

Test Statistics[a,b]

	Y27	Y28	Y29	Y30	Y31	Y32	Y33
Chi-Square	1.317	1.501	2.564	.609	1.321	.372	1.674
df	2	2	2	2	2	2	2
Asymp. Sig.	.518	.472	.277	.738	.517	.830	.433

Test Statistics[a,b]

	Y34	Y36	Y37	Y38	Y39	Y40	Y41
Chi-Square	2.943	3.401	1.903	.166	3.555	.173	1.150
df	2	2	2	2	2	2	2
Asymp. Sig.	.230	.183	.386	.920	.169	.917	.563

Test Statistics[a,b]

	Y42	Y43	Y44	Y45	Y46	Y47	Y48
Chi-Square	.093	.123	.150	1.988	.120	.968	1.720
df	2	2	2	2	2	2	2
Asymp. Sig.	.955	.940	.928	.370	.942	.616	.423

Test Statistics[a,b]

	Y49	Y51	Y52	Y55
Chi-Square	4.865	3.654	3.501	7.981
df	2	2	2	2
Asymp. Sig.	.088	.161	.174	.018

a. Kruskal Wallis Test

b. Grouping Variable: EXP

LAMPIRAN 6

ANALISIS DESKRIPTIF

Descriptives

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
X1	21	3.00	5.00	4.1429	.47809
X3	21	2.00	5.00	3.7619	.76842
X6	21	2.00	5.00	3.9524	.86465
X7	21	3.00	5.00	4.0952	.53896
X10	21	3.00	5.00	4.0476	.66904
X11	21	2.00	5.00	4.0952	.83095
X12	21	2.00	5.00	4.0952	.83095
X16	21	3.00	5.00	4.0952	.70034
X18	21	2.00	5.00	4.0952	.70034
X19	21	3.00	5.00	4.1429	.57321
X20	21	2.00	5.00	3.9524	.66904
X21	21	3.00	5.00	4.1905	.51177
X22	21	2.00	5.00	4.1905	.67964
X23	21	3.00	5.00	4.2857	.56061
X24	21	3.00	5.00	3.8571	.47809
X26	21	3.00	5.00	3.9048	.70034
X27	21	2.00	5.00	4.1905	.67964
X28	21	2.00	5.00	4.0952	.76842
X29	21	3.00	5.00	4.1905	.60159
X30	21	3.00	5.00	4.1905	.51177
X31	21	3.00	5.00	3.9524	.49761
X32	21	3.00	5.00	3.9524	.58959
X33	21	3.00	5.00	3.9048	.62488
X34	21	2.00	5.00	3.5238	.74960
X36	21	3.00	5.00	4.1429	.57321
X37	21	2.00	5.00	3.8571	.57321
X38	21	3.00	5.00	4.0952	.62488
X39	21	2.00	5.00	3.9524	.66904
X40	21	3.00	5.00	4.0952	.62488
X41	21	2.00	5.00	3.9524	.66904
X42	21	3.00	5.00	4.1429	.57321
X43	21	2.00	5.00	3.7619	.62488
X44	21	3.00	5.00	3.9524	.38421
X45	21	3.00	5.00	3.9048	.43644
X46	21	2.00	5.00	3.8095	.67964
X47	21	3.00	5.00	4.1429	.57321
X48	21	3.00	5.00	4.0476	.49761
X49	21	2.00	5.00	3.9524	.49761
X51	21	3.00	5.00	4.0952	.53896
X52	21	3.00	5.00	3.8571	.47809
X55	21	3.00	5.00	4.1905	.51177
Z1	21	3.00	5.00	4.2381	.70034
Z3	21	2.00	5.00	3.4762	1.03049
Z6	21	2.00	5.00	4.2381	.88909
Z7	21	3.00	5.00	4.2857	.64365
Z10	21	2.00	4.00	3.4762	.60159
Z11	21	2.00	5.00	3.8095	.81358
Z12	21	1.00	5.00	3.9048	.99523
Z16	21	2.00	5.00	4.3333	.96609
Z18	21	2.00	5.00	4.1905	.74960
Z19	21	3.00	5.00	4.1429	.72703
Z20	21	2.00	5.00	4.2381	.88909

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Z21	21	2.00	5.00	4.1905	.67964
Z22	21	2.00	5.00	4.0476	.80475
Z23	21	2.00	5.00	4.3810	.80475
Z24	21	2.00	5.00	3.8095	.74960
Z26	21	2.00	5.00	3.9048	.83095
Z27	21	2.00	5.00	4.1429	.79282
Z28	21	2.00	5.00	4.1429	.91026
Z29	21	3.00	5.00	4.2857	.71714
Z30	21	3.00	5.00	4.1905	.67964
Z31	21	3.00	5.00	3.9524	.58959
Z32	21	3.00	5.00	4.1429	.65465
Z33	21	3.00	5.00	4.0952	.76842
Z34	21	2.00	5.00	3.0000	1.09545
Z36	21	3.00	5.00	4.1429	.79282
Z37	21	1.00	5.00	3.7143	.95618
Z38	21	3.00	5.00	4.1429	.72703
Z39	21	2.00	5.00	4.3810	.80475
Z40	21	3.00	5.00	4.4286	.81064
Z41	21	2.00	5.00	4.0952	.83095
Z42	21	3.00	5.00	4.3333	.73030
Z43	21	2.00	5.00	3.9524	.80475
Z44	21	3.00	5.00	4.1905	.67964
Z45	21	2.00	5.00	4.1429	.85356
Z46	21	2.00	5.00	3.9524	.74001
Z47	21	3.00	5.00	4.1905	.74960
Z48	21	2.00	5.00	4.1905	.81358
Z49	21	2.00	5.00	4.0000	.54772
Z51	21	3.00	5.00	4.2381	.76842
Z52	21	2.00	5.00	4.0000	.83666
Z55	21	3.00	5.00	4.3333	.57735
Y1	21	2.00	5.00	3.8571	.57321
Y3	21	3.00	5.00	3.6667	.57735
Y6	21	2.00	5.00	3.9524	.86465
Y7	21	3.00	5.00	3.8095	.67964
Y10	21	2.00	4.00	3.4762	.60159
Y11	21	3.00	5.00	3.9048	.76842
Y12	21	2.00	5.00	3.7619	.70034
Y16	21	3.00	5.00	4.0476	.74001
Y18	21	2.00	5.00	3.9524	.58959
Y19	21	3.00	5.00	3.9524	.49761
Y20	21	2.00	5.00	4.0000	.77460
Y21	21	2.00	5.00	3.8571	.85356
Y22	21	2.00	5.00	4.0476	.92066
Y23	21	2.00	5.00	4.0000	.89443
Y24	21	2.00	5.00	3.7143	.64365
Y26	21	2.00	5.00	3.8571	.72703
Y27	21	2.00	5.00	3.8571	.85356
Y28	21	2.00	5.00	4.0000	.77460
Y29	21	3.00	5.00	4.1905	.67964
Y30	21	3.00	5.00	4.0000	.63246
Y31	21	3.00	5.00	4.0476	.58959
Y32	21	3.00	5.00	3.7143	.64365
Y33	21	3.00	5.00	3.6667	.65828
Y34	21	2.00	5.00	3.0476	.92066

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Y36	21	2.00	5.00	4.0000	.77460
Y37	21	2.00	5.00	3.8571	.72703
Y38	21	3.00	5.00	3.8571	.65465
Y39	21	2.00	5.00	4.0952	.83095
Y40	21	3.00	5.00	3.9048	.62488
Y41	21	2.00	5.00	3.7619	.70034
Y42	21	3.00	5.00	4.0476	.58959
Y43	21	2.00	5.00	3.8571	.72703
Y44	21	2.00	5.00	3.8095	.81358
Y45	21	3.00	5.00	3.8571	.72703
Y46	21	2.00	5.00	3.9048	.70034
Y47	21	3.00	5.00	4.0952	.70034
Y48	21	2.00	5.00	3.9048	.76842
Y49	21	1.00	5.00	3.9048	.76842
Y51	21	2.00	5.00	4.0476	.66904
Y52	21	3.00	5.00	3.7143	.64365
Y55	21	3.00	5.00	4.1429	.47809
Valid N (listwise)	21				

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Nonparametric Correlations

Correlations

			X1	Z1	Y1
Spearman's rho	X1	Correlation Coefficient	1.000	.022	.319
		Sig. (2-tailed)	.	.926	.159
		N	21	21	21
	Z1	Correlation Coefficient	.022	1.000	-.068
		Sig. (2-tailed)	.926	.	.768
		N	21	21	21
	Y1	Correlation Coefficient	.319	-.068	1.000
		Sig. (2-tailed)	.159	.768	.
		N	21	21	21

Nonparametric Correlations

Correlations

			X3	Z3	Y3
Spearman's rho	X3	Correlation Coefficient	1.000	.557**	.448*
		Sig. (2-tailed)	.	.009	.042
		N	21	21	21
	Z3	Correlation Coefficient	.557**	1.000	.263
		Sig. (2-tailed)	.009	.	.249
		N	21	21	21
	Y3	Correlation Coefficient	.448*	.263	1.000
		Sig. (2-tailed)	.042	.249	.
		N	21	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Nonparametric Correlations

Correlations

			X6	Z6	Y6
Spearman's rho	X6	Correlation Coefficient	1.000	.639**	.692**
		Sig. (2-tailed)	.	.002	.001
		N	21	21	21
	Z6	Correlation Coefficient	.639**	1.000	.691**
		Sig. (2-tailed)	.002	.	.001
		N	21	21	21
	Y6	Correlation Coefficient	.692**	.691**	1.000
		Sig. (2-tailed)	.001	.001	.
		N	21	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

Spearman's rho			X7	Z7	Y7
	X7	Correlation Coefficient	1.000	.646**	.714**
		Sig. (2-tailed)	.	.002	.000
		N	21	21	21
	Z7	Correlation Coefficient	.646**	1.000	.709**
		Sig. (2-tailed)	.002	.	.000
		N	21	21	21
	Y7	Correlation Coefficient	.714**	.709**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	21	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

Spearman's rho			X10	Z10	Y10
	X10	Correlation Coefficient	1.000	.540*	.681**
		Sig. (2-tailed)	.	.011	.001
		N	21	21	21
	Z10	Correlation Coefficient	.540*	1.000	.833**
		Sig. (2-tailed)	.011	.	.000
		N	21	21	21
	Y10	Correlation Coefficient	.681**	.833**	1.000
		Sig. (2-tailed)	.001	.000	.
		N	21	21	21

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

Spearman's rho			X11	Z11	Y11
	X11	Correlation Coefficient	1.000	.634**	.754**
		Sig. (2-tailed)	.	.002	.000
		N	21	21	21
	Z11	Correlation Coefficient	.634**	1.000	.767**
		Sig. (2-tailed)	.002	.	.000
		N	21	21	21
	Y11	Correlation Coefficient	.754**	.767**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	21	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

			X12	Z12	Y12
Spearman's rho	X12	Correlation Coefficient	1.000	.739**	.570**
		Sig. (2-tailed)	.	.000	.007
		N	21	21	21
	Z12	Correlation Coefficient	.739**	1.000	.671**
		Sig. (2-tailed)	.000	.	.001
		N	21	21	21
	Y12	Correlation Coefficient	.570**	.671**	1.000
		Sig. (2-tailed)	.007	.001	.
		N	21	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

			X16	Z16	Y16
Spearman's rho	X16	Correlation Coefficient	1.000	.747**	.750**
		Sig. (2-tailed)	.	.000	.000
		N	21	21	21
	Z16	Correlation Coefficient	.747**	1.000	.660**
		Sig. (2-tailed)	.000	.	.001
		N	21	21	21
	Y16	Correlation Coefficient	.750**	.660**	1.000
		Sig. (2-tailed)	.000	.001	.
		N	21	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

			X18	Z18	Y18
Spearman's rho	X18	Correlation Coefficient	1.000	.293	.194
		Sig. (2-tailed)	.	.197	.400
		N	21	21	21
	Z18	Correlation Coefficient	.293	1.000	.549**
		Sig. (2-tailed)	.197	.	.010
		N	21	21	21
	Y18	Correlation Coefficient	.194	.549**	1.000
		Sig. (2-tailed)	.400	.010	.
		N	21	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

Spearman's rho			X19	Z19	Y19
Spearman's rho	X19	Correlation Coefficient	1.000	.657**	.531*
		Sig. (2-tailed)	.	.001	.013
		N	21	21	21
	Z19	Correlation Coefficient	.657**	1.000	.552**
		Sig. (2-tailed)	.001	.	.010
		N	21	21	21
	Y19	Correlation Coefficient	.531*	.552**	1.000
		Sig. (2-tailed)	.013	.010	.
		N	21	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Nonparametric Correlations

Correlations

Spearman's rho			X20	Z20	Y20
Spearman's rho	X20	Correlation Coefficient	1.000	.341	.437*
		Sig. (2-tailed)	.	.130	.047
		N	21	21	21
	Z20	Correlation Coefficient	.341	1.000	.641**
		Sig. (2-tailed)	.130	.	.002
		N	21	21	21
	Y20	Correlation Coefficient	.437*	.641**	1.000
		Sig. (2-tailed)	.047	.002	.
		N	21	21	21

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

Spearman's rho			X21	Z21	Y21
Spearman's rho	X21	Correlation Coefficient	1.000	.189	.414
		Sig. (2-tailed)	.	.411	.062
		N	21	21	21
	Z21	Correlation Coefficient	.189	1.000	.459*
		Sig. (2-tailed)	.411	.	.036
		N	21	21	21
	Y21	Correlation Coefficient	.414	.459*	1.000
		Sig. (2-tailed)	.062	.036	.
		N	21	21	21

*. Correlation is significant at the 0.05 level (2-tailed).

Nonparametric Correlations

Correlations

			X22	Z22	Y22
Spearman's rho	X22	Correlation Coefficient	1.000	.612**	.773**
		Sig. (2-tailed)	.	.003	.000
		N	21	21	21
	Z22	Correlation Coefficient	.612**	1.000	.759**
		Sig. (2-tailed)	.003	.	.000
		N	21	21	21
	Y22	Correlation Coefficient	.773**	.759**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	21	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

			X23	Z23	Y23
Spearman's rho	X23	Correlation Coefficient	1.000	.552**	.539*
		Sig. (2-tailed)	.	.009	.012
		N	21	21	21
	Z23	Correlation Coefficient	.552**	1.000	.816**
		Sig. (2-tailed)	.009	.	.000
		N	21	21	21
	Y23	Correlation Coefficient	.539*	.816**	1.000
		Sig. (2-tailed)	.012	.000	.
		N	21	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Nonparametric Correlations

Correlations

			X24	Z24	Y24
Spearman's rho	X24	Correlation Coefficient	1.000	.756**	.830**
		Sig. (2-tailed)	.	.000	.000
		N	21	21	21
	Z24	Correlation Coefficient	.756**	1.000	.917**
		Sig. (2-tailed)	.000	.	.000
		N	21	21	21
	Y24	Correlation Coefficient	.830**	.917**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	21	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

			X26	Z26	Y26
Spearman's rho	X26	Correlation Coefficient	1.000	.477*	.561**
		Sig. (2-tailed)	.	.029	.008
		N	21	21	21
	Z26	Correlation Coefficient	.477*	1.000	.668**
		Sig. (2-tailed)	.029	.	.001
		N	21	21	21
	Y26	Correlation Coefficient	.561**	.668**	1.000
		Sig. (2-tailed)	.008	.001	.
		N	21	21	21

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

			X27	Z27	Y27
Spearman's rho	X27	Correlation Coefficient	1.000	.391	.568**
		Sig. (2-tailed)	.	.080	.007
		N	21	21	21
	Z27	Correlation Coefficient	.391	1.000	.730**
		Sig. (2-tailed)	.080	.	.000
		N	21	21	21
	Y27	Correlation Coefficient	.568**	.730**	1.000
		Sig. (2-tailed)	.007	.000	.
		N	21	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

			X28	Z28	Y28
Spearman's rho	X28	Correlation Coefficient	1.000	.688**	.528*
		Sig. (2-tailed)	.	.001	.014
		N	21	21	21
	Z28	Correlation Coefficient	.688**	1.000	.593**
		Sig. (2-tailed)	.001	.	.005
		N	21	21	21
	Y28	Correlation Coefficient	.528*	.593**	1.000
		Sig. (2-tailed)	.014	.005	.
		N	21	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Nonparametric Correlations

Correlations

			X29	Z29	Y29
Spearman's rho	X29	Correlation Coefficient	1.000	.429	.891**
		Sig. (2-tailed)	.	.052	.000
		N	21	21	21
	Z29	Correlation Coefficient	.429	1.000	.568**
		Sig. (2-tailed)	.052	.	.007
		N	21	21	21
	Y29	Correlation Coefficient	.891**	.568**	1.000
		Sig. (2-tailed)	.000	.007	.
		N	21	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

			X30	Z30	Y30
Spearman's rho	X30	Correlation Coefficient	1.000	.338	.484*
		Sig. (2-tailed)	.	.134	.026
		N	21	21	21
	Z30	Correlation Coefficient	.338	1.000	.451*
		Sig. (2-tailed)	.134	.	.040
		N	21	21	21
	Y30	Correlation Coefficient	.484*	.451*	1.000
		Sig. (2-tailed)	.026	.040	.
		N	21	21	21

*. Correlation is significant at the 0.05 level (2-tailed).

Nonparametric Correlations

Correlations

			X31	Z31	Y31
Spearman's rho	X31	Correlation Coefficient	1.000	.346	.508*
		Sig. (2-tailed)	.	.124	.019
		N	21	21	21
	Z31	Correlation Coefficient	.346	1.000	.581**
		Sig. (2-tailed)	.124	.	.006
		N	21	21	21
	Y31	Correlation Coefficient	.508*	.581**	1.000
		Sig. (2-tailed)	.019	.006	.
		N	21	21	21

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

			X32	Z32	Y32
Spearman's rho	X32	Correlation Coefficient	1.000	.509*	.592**
		Sig. (2-tailed)	.	.018	.005
		N	21	21	21
	Z32	Correlation Coefficient	.509*	1.000	.555**
		Sig. (2-tailed)	.018	.	.009
		N	21	21	21
	Y32	Correlation Coefficient	.592**	.555**	1.000
		Sig. (2-tailed)	.005	.009	.
		N	21	21	21

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

			X33	Z33	Y33
Spearman's rho	X33	Correlation Coefficient	1.000	.543*	.480*
		Sig. (2-tailed)	.	.011	.028
		N	21	21	21
	Z33	Correlation Coefficient	.543*	1.000	.773**
		Sig. (2-tailed)	.011	.	.000
		N	21	21	21
	Y33	Correlation Coefficient	.480*	.773**	1.000
		Sig. (2-tailed)	.028	.000	.
		N	21	21	21

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

			X34	Z34	Y34
Spearman's rho	X34	Correlation Coefficient	1.000	.464*	.204
		Sig. (2-tailed)	.	.034	.376
		N	21	21	21
	Z34	Correlation Coefficient	.464*	1.000	.648**
		Sig. (2-tailed)	.034	.	.002
		N	21	21	21
	Y34	Correlation Coefficient	.204	.648**	1.000
		Sig. (2-tailed)	.376	.002	.
		N	21	21	21

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

			X36	Z36	Y36
Spearman's rho	X36	Correlation Coefficient	1.000	.475*	.351
		Sig. (2-tailed)	.	.030	.118
		N	21	21	21
	Z36	Correlation Coefficient	.475*	1.000	.615**
		Sig. (2-tailed)	.030	.	.003
		N	21	21	21
	Y36	Correlation Coefficient	.351	.615**	1.000
		Sig. (2-tailed)	.118	.003	.
		N	21	21	21

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

			X37	Z37	Y37
Spearman's rho	X37	Correlation Coefficient	1.000	.714**	.552**
		Sig. (2-tailed)	.	.000	.010
		N	21	21	21
	Z37	Correlation Coefficient	.714**	1.000	.598**
		Sig. (2-tailed)	.000	.	.004
		N	21	21	21
	Y37	Correlation Coefficient	.552**	.598**	1.000
		Sig. (2-tailed)	.010	.004	.
		N	21	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

			X38	Z38	Y38
Spearman's rho	X38	Correlation Coefficient	1.000	.618**	.510*
		Sig. (2-tailed)	.	.003	.018
		N	21	21	21
	Z38	Correlation Coefficient	.618**	1.000	.434*
		Sig. (2-tailed)	.003	.	.049
		N	21	21	21
	Y38	Correlation Coefficient	.510*	.434*	1.000
		Sig. (2-tailed)	.018	.049	.
		N	21	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Nonparametric Correlations

Correlations

			X39	Z39	Y39
Spearman's rho	X39	Correlation Coefficient	1.000	.568**	.518*
		Sig. (2-tailed)	.	.007	.016
		N	21	21	21
	Z39	Correlation Coefficient	.568**	1.000	.544*
		Sig. (2-tailed)	.007	.	.011
		N	21	21	21
	Y39	Correlation Coefficient	.518*	.544*	1.000
		Sig. (2-tailed)	.016	.011	.
		N	21	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Nonparametric Correlations

Correlations

			X40	Z40	Y40
Spearman's rho	X40	Correlation Coefficient	1.000	.666**	.396
		Sig. (2-tailed)	.	.001	.076
		N	21	21	21
	Z40	Correlation Coefficient	.666**	1.000	.439*
		Sig. (2-tailed)	.001	.	.046
		N	21	21	21
	Y40	Correlation Coefficient	.396	.439*	1.000
		Sig. (2-tailed)	.076	.046	.
		N	21	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Nonparametric Correlations

Correlations

			X41	Z41	Y41
Spearman's rho	X41	Correlation Coefficient	1.000	.512*	.362
		Sig. (2-tailed)	.	.018	.107
		N	21	21	21
	Z41	Correlation Coefficient	.512*	1.000	.759**
		Sig. (2-tailed)	.018	.	.000
		N	21	21	21
	Y41	Correlation Coefficient	.362	.759**	1.000
		Sig. (2-tailed)	.107	.000	.
		N	21	21	21

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

			X42	Z42	Y42
Spearman's rho	X42	Correlation Coefficient	1.000	.546*	.546*
		Sig. (2-tailed)	.	.010	.011
		N	21	21	21
	Z42	Correlation Coefficient	.546*	1.000	.649**
		Sig. (2-tailed)	.010	.	.001
		N	21	21	21
	Y42	Correlation Coefficient	.546*	.649**	1.000
		Sig. (2-tailed)	.011	.001	.
		N	21	21	21

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

			X43	Z43	Y43
Spearman's rho	X43	Correlation Coefficient	1.000	.711**	.474*
		Sig. (2-tailed)	.	.000	.030
		N	21	21	21
	Z43	Correlation Coefficient	.711**	1.000	.701**
		Sig. (2-tailed)	.000	.	.000
		N	21	21	21
	Y43	Correlation Coefficient	.474*	.701**	1.000
		Sig. (2-tailed)	.030	.000	.
		N	21	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Nonparametric Correlations

Correlations

			X44	Z44	Y44
Spearman's rho	X44	Correlation Coefficient	1.000	.582**	.564**
		Sig. (2-tailed)	.	.006	.008
		N	21	21	21
	Z44	Correlation Coefficient	.582**	1.000	.784**
		Sig. (2-tailed)	.006	.	.000
		N	21	21	21
	Y44	Correlation Coefficient	.564**	.784**	1.000
		Sig. (2-tailed)	.008	.000	.
		N	21	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

			X45	Z45	Y45
Spearman's rho	X45	Correlation Coefficient	1.000	.528*	.590**
		Sig. (2-tailed)	.	.014	.005
		N	21	21	21
	Z45	Correlation Coefficient	.528*	1.000	.713**
		Sig. (2-tailed)	.014	.	.000
		N	21	21	21
	Y45	Correlation Coefficient	.590**	.713**	1.000
		Sig. (2-tailed)	.005	.000	.
		N	21	21	21

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

			X46	Z46	Y46
Spearman's rho	X46	Correlation Coefficient	1.000	.714**	.622**
		Sig. (2-tailed)	.	.000	.003
		N	21	21	21
	Z46	Correlation Coefficient	.714**	1.000	.560**
		Sig. (2-tailed)	.000	.	.008
		N	21	21	21
	Y46	Correlation Coefficient	.622**	.560**	1.000
		Sig. (2-tailed)	.003	.008	.
		N	21	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

			X47	Z47	Y47
Spearman's rho	X47	Correlation Coefficient	1.000	.477*	.707**
		Sig. (2-tailed)	.	.029	.000
		N	21	21	21
	Z47	Correlation Coefficient	.477*	1.000	.605**
		Sig. (2-tailed)	.029	.	.004
		N	21	21	21
	Y47	Correlation Coefficient	.707**	.605**	1.000
		Sig. (2-tailed)	.000	.004	.
		N	21	21	21

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

			X48	Z48	Y48
Spearman's rho	X48	Correlation Coefficient	1.000	.670**	.630**
		Sig. (2-tailed)	.	.001	.002
		N	21	21	21
	Z48	Correlation Coefficient	.670**	1.000	.775**
		Sig. (2-tailed)	.001	.	.000
		N	21	21	21
	Y48	Correlation Coefficient	.630**	.775**	1.000
		Sig. (2-tailed)	.002	.000	.
		N	21	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

			X49	Z49	Y49
Spearman's rho	X49	Correlation Coefficient	1.000	.398	.372
		Sig. (2-tailed)	.	.074	.097
		N	21	21	21
	Z49	Correlation Coefficient	.398	1.000	.592**
		Sig. (2-tailed)	.074	.	.005
		N	21	21	21
	Y49	Correlation Coefficient	.372	.592**	1.000
		Sig. (2-tailed)	.097	.005	.
		N	21	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

			X51	Z51	Y51
Spearman's rho	X51	Correlation Coefficient	1.000	.657**	.301
		Sig. (2-tailed)	.	.001	.185
		N	21	21	21
	Z51	Correlation Coefficient	.657**	1.000	.514*
		Sig. (2-tailed)	.001	.	.017
		N	21	21	21
	Y51	Correlation Coefficient	.301	.514*	1.000
		Sig. (2-tailed)	.185	.017	.
		N	21	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Nonparametric Correlations

Correlations

			X52	Z52	Y52
Spearman's rho	X52	Correlation Coefficient	1.000	.600**	.245
		Sig. (2-tailed)	.	.004	.284
		N	21	21	21
	Z52	Correlation Coefficient	.600**	1.000	.686**
		Sig. (2-tailed)	.004	.	.001
		N	21	21	21
	Y52	Correlation Coefficient	.245	.686**	1.000
		Sig. (2-tailed)	.284	.001	.
		N	21	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

Nonparametric Correlations

Correlations

			X55	Z55	Y55
Spearman's rho	X55	Correlation Coefficient	1.000	.576**	.454*
		Sig. (2-tailed)	.	.006	.039
		N	21	21	21
	Z55	Correlation Coefficient	.576**	1.000	.692**
		Sig. (2-tailed)	.006	.	.001
		N	21	21	21
	Y55	Correlation Coefficient	.454*	.692**	1.000
		Sig. (2-tailed)	.039	.001	.
		N	21	21	21

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

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ANALISIS REGRESI

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z1, X1[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y1

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.446[a]	.199	.110	.54066

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.199	2.240	2	18	.135	2.580

a. Predictors: (Constant), Z1, X1

b. Dependent Variable: Y1

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.310	2	.655	2.240	.135[a]
	Residual	5.262	18	.292		
	Total	6.571	20			

a. Predictors: (Constant), Z1, X1

b. Dependent Variable: Y1

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.834	1.259		1.457	.162
	X1	.534	.253	.445	2.110	.049
	Z1	-.045	.173	-.055	-.259	.799

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-.810	4.478
	X1	.002	1.066
	Z1	-.408	.318

a. Dependent Variable: Y1

Coefficient Correlations[a]

Model			Z1	X1
1	Correlations	Z1	1.000	-.043
		X1	-.043	1.000
	Covariances	Z1	.030	-.002
		X1	-.002	.064

a. Dependent Variable: Y1

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.2574	4.3255	3.8571	.25590	21
Residual	-1.25745	1.20851	.00000	.51292	21
Std. Predicted Value	-2.343	1.830	.000	1.000	21
Std. Residual	-2.326	2.235	.000	.949	21

a. Dependent Variable: Y1

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z3, X3[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y3

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.489[a]	.239	.155	.53084

Model Summary[b]

	Change Statistics					
Model	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.239	2.829	2	18	.085	1.873

a. Predictors: (Constant), Z3, X3

b. Dependent Variable: Y3

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.594	2	.797	2.829	.085[a]
	Residual	5.072	18	.282		
	Total	6.667	20			

a. Predictors: (Constant), Z3, X3

b. Dependent Variable: Y3

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.273	.603		3.772	.001
	X3	.355	.182	.472	1.950	.067
	Z3	.017	.136	.030	.124	.902

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	1.007	3.539
	X3	-.028	.737
	Z3	-.268	.302

a. Dependent Variable: Y3

Coefficient Correlations[a]

Model			Z3	X3
1	Correlations	Z3	1.000	-.529
		X3	-.529	1.000
	Covariances	Z3	.018	-.013
		X3	-.013	.033

a. Dependent Variable: Y3

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.0164	4.1319	3.6667	.28235	21
Residual	-1.11498	.86814	.00000	.50360	21
Std. Predicted Value	-2.303	1.648	.000	1.000	21
Std. Residual	-2.100	1.635	.000	.949	21

a. Dependent Variable: Y3

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z6, X6[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y6

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.802[a]	.643	.603	.54474

Model Summary[b]

	Change Statistics					
Model	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.643	16.195	2	18	.000	.793

a. Predictors: (Constant), Z6, X6

b. Dependent Variable: Y6

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.611	2	4.806	16.195	.000[a]
	Residual	5.341	18	.297		
	Total	14.952	20			

a. Predictors: (Constant), Z6, X6

b. Dependent Variable: Y6

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.406	.635		.640	.530
	X6	.442	.189	.442	2.338	.031
	Z6	.425	.184	.437	2.314	.033

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-.928	1.741
	X6	.045	.838
	Z6	.039	.811

a. Dependent Variable: Y6

Coefficient Correlations[a]

Model			Z6	X6
1	Correlations	Z6	1.000	-.666
		X6	-.666	1.000
	Covariances	Z6	.034	-.023
		X6	-.023	.036

a. Dependent Variable: Y6

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.1393	4.7387	3.9524	.69322	21
Residual	-.87224	.70286	.00000	.51678	21
Std. Predicted Value	-2.615	1.134	.000	1.000	21
Std. Residual	-1.601	1.290	.000	.949	21

a. Dependent Variable: Y6

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z7, X7[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y7

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.795[a]	.631	.590	.43498

Model Summary[b]

	Change Statistics					
Model	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.631	15.413	2	18	.000	1.541

a. Predictors: (Constant), Z7, X7

b. Dependent Variable: Y7

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.832	2	2.916	15.413	.000[a]
	Residual	3.406	18	.189		
	Total	9.238	20			

a. Predictors: (Constant), Z7, X7

b. Dependent Variable: Y7

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.467	.779		-.600	.556
	X7	.609	.234	.483	2.599	.018
	Z7	.416	.196	.394	2.118	.048

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-2.105	1.170
	X7	.117	1.102
	Z7	.003	.828

a. Dependent Variable: Y7

Coefficient Correlations[a]

Model			Z7	X7
1	Correlations	Z7	1.000	-.638
		X7	-.638	1.000
	Covariances	Z7	.039	-.029
		X7	-.029	.055

a. Dependent Variable: Y7

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.6077	4.6578	3.8095	.54002	21
Residual	-.65776	.39232	.00000	.41265	21
Std. Predicted Value	-2.226	1.571	.000	1.000	21
Std. Residual	-1.512	.902	.000	.949	21

a. Dependent Variable: Y7

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z10, X10[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y10

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.896[a]	.802	.780	.28193

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.802	36.532	2	18	.000	2.464

a. Predictors: (Constant), Z10, X10

b. Dependent Variable: Y10

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.807	2	2.904	36.532	.000[a]
	Residual	1.431	18	.079		
	Total	7.238	20			

a. Predictors: (Constant), Z10, X10

b. Dependent Variable: Y10

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.017	.427		-.040	.968
	X10	.265	.114	.295	2.329	.032
	Z10	.696	.127	.696	5.494	.000

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-.914	.879
	X10	.026	.505
	Z10	.430	.962

a. Dependent Variable: Y10

Coefficient Correlations[a]

Model			Z10	X10
1	Correlations	Z10	1.000	-.562
		X10	-.562	1.000
	Covariances	Z10	.016	-.008
		X10	-.008	.013

a. Dependent Variable: Y10

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.1708	4.0934	3.4762	.53886	21
Residual	-.82814	.60258	.00000	.26746	21
Std. Predicted Value	-2.423	1.145	.000	1.000	21
Std. Residual	-2.937	2.137	.000	.949	21

a. Dependent Variable: Y10

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z11, X11[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y11

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.811[a]	.658	.621	.47335

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.658	17.353	2	18	.000	1.771

a. Predictors: (Constant), Z11, X11

b. Dependent Variable: Y11

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.776	2	3.888	17.353	.000[a]
	Residual	4.033	18	.224		
	Total	11.810	20			

a. Predictors: (Constant), Z11, X11

b. Dependent Variable: Y11

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.674	.563		1.197	.247
	X11	.331	.177	.358	1.874	.077
	Z11	.492	.181	.521	2.722	.014

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-.509	1.857
	X11	-.040	.703
	Z11	.112	.871

a. Dependent Variable: Y11

Coefficient Correlations[a]

Model			Z11	X11
1	Correlations	Z11	1.000	-.694
		X11	-.694	1.000
	Covariances	Z11	.033	-.022
		X11	-.022	.031

a. Dependent Variable: Y11

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.3204	4.7901	3.9048	.62355	21
Residual	-.96685	.70166	.00000	.44906	21
Std. Predicted Value	-2.541	1.420	.000	1.000	21
Std. Residual	-2.043	1.482	.000	.949	21

a. Dependent Variable: Y11

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z12, X12[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y12

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.758[a]	.574	.527	.48161

Model Summary[b]

Model	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
	Change Statistics					
1	.574	12.146	2	18	.000	2.004

a. Predictors: (Constant), Z12, X12

b. Dependent Variable: Y12

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.634	2	2.817	12.146	.000[a]
	Residual	4.175	18	.232		
	Total	9.810	20			

a. Predictors: (Constant), Z12, X12

b. Dependent Variable: Y12

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.548	.541		2.861	.010
	X12	.093	.215	.111	.434	.669
	Z12	.469	.179	.667	2.616	.018

Coefficients[a]

		95% Confidence Interval for B	
Model		Lower Bound	Upper Bound
1	(Constant)	.411	2.685
	X12	-.358	.545
	Z12	.092	.846

a. Dependent Variable: Y12

Coefficient Correlations[a]

Model			Z12	X12
1	Correlations	Z12	1.000	-.798
		X12	-.798	1.000
	Covariances	Z12	.032	-.031
		X12	-.031	.046

a. Dependent Variable: Y12

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.2037	4.3601	3.7619	.53078	21
Residual	-.79770	.76471	.00000	.45689	21
Std. Predicted Value	-2.936	1.127	.000	1.000	21
Std. Residual	-1.656	1.588	.000	.949	21

a. Dependent Variable: Y12

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z16, X16[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y16

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.776[a]	.603	.559	.49170

Model Summary[b]

	Change Statistics					
Model	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.603	13.651	2	18	.000	2.029

a. Predictors: (Constant), Z16, X16

b. Dependent Variable: Y16

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.601	2	3.300	13.651	.000[a]
	Residual	4.352	18	.242		
	Total	10.952	20			

a. Predictors: (Constant), Z16, X16

b. Dependent Variable: Y16

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.744	.652		1.142	.269
	X16	.624	.243	.591	2.568	.019
	Z16	.172	.176	.225	.977	.342

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-.625	2.114
	X16	.114	1.135
	Z16	-.198	.542

a. Dependent Variable: Y16

Coefficient Correlations[a]

Model			Z16	X16
1	Correlations	Z16	1.000	-.764
		X16	-.764	1.000
	Covariances	Z16	.031	-.033
		X16	-.033	.059

a. Dependent Variable: Y16

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.9619	4.7274	4.0476	.57448	21
Residual	-1.10293	.89707	.00000	.46647	21
Std. Predicted Value	-1.890	1.183	.000	1.000	21
Std. Residual	-2.243	1.824	.000	.949	21

a. Dependent Variable: Y16

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z18, X18[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y18

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.715[a]	.511	.457	.43458

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.511	9.406	2	18	.002	1.842

a. Predictors: (Constant), Z18, X18

b. Dependent Variable: Y18

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.553	2	1.776	9.406	.002[a]
	Residual	3.400	18	.189		
	Total	6.952	20			

a. Predictors: (Constant), Z18, X18

b. Dependent Variable: Y18

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.358	.642		2.116	.049
	X18	.143	.164	.170	.870	.396
	Z18	.479	.153	.610	3.124	.006

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	.010	2.707
	X18	-.202	.488
	Z18	.157	.802

a. Dependent Variable: Y18

Coefficient Correlations[a]

Model			Z18	X18
1	Correlations	Z18	1.000	-.535
		X18	-.535	1.000
	Covariances	Z18	.024	-.013
		X18	-.013	.027

a. Dependent Variable: Y18

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.6029	4.4697	3.9524	.42148	21
Residual	-.84746	.67312	.00000	.41228	21
Std. Predicted Value	-3.202	1.227	.000	1.000	21
Std. Residual	-1.950	1.549	.000	.949	21

a. Dependent Variable: Y18

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z19, X19[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y19

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.616[a]	.379	.310	.41336

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.379	5.492	2	18	.014	1.573

a. Predictors: (Constant), Z19, X19

b. Dependent Variable: Y19

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.877	2	.938	5.492	.014[a]
	Residual	3.076	18	.171		
	Total	4.952	20			

a. Predictors: (Constant), Z19, X19

b. Dependent Variable: Y19

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.812	.683		2.654	.016
	X19	.264	.217	.304	1.217	.239
	Z19	.253	.171	.369	1.479	.156

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	.377	3.246
	X19	-.192	.719
	Z19	-.106	.612

a. Dependent Variable: Y19

Coefficient Correlations[a]

Model			Z19	X19
1	Correlations	Z19	1.000	-.668
		X19	-.668	1.000
	Covariances	Z19	.029	-.025
		X19	-.025	.047

a. Dependent Variable: Y19

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.3618	4.3953	3.9524	.30633	21
Residual	-.62577	1.12144	.00000	.39215	21
Std. Predicted Value	-1.928	1.446	.000	1.000	21
Std. Residual	-1.514	2.713	.000	.949	21

a. Dependent Variable: Y19

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z20, X20[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y20

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.762[a]	.581	.535	.52834

Model Summary[b]

	Change Statistics					
Model	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.581	12.494	2	18	.000	1.174

a. Predictors: (Constant), Z20, X20

b. Dependent Variable: Y20

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.975	2	3.488	12.494	.000[a]
	Residual	5.025	18	.279		
	Total	12.000	20			

a. Predictors: (Constant), Z20, X20

b. Dependent Variable: Y20

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.598	.744		.803	.432
	X20	.316	.207	.273	1.526	.144
	Z20	.508	.156	.583	3.253	.004

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-.966	2.161
	X20	-.119	.752
	Z20	.180	.836

a. Dependent Variable: Y20

Coefficient Correlations[a]

Model			Z20	X20
1	Correlations	Z20	1.000	-.524
		X20	-.524	1.000
	Covariances	Z20	.024	-.017
		X20	-.017	.043

a. Dependent Variable: Y20

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.2459	4.7183	4.0000	.59057	21
Residual	-1.40186	.91462	.00000	.50123	21
Std. Predicted Value	-2.970	1.216	.000	1.000	21
Std. Residual	-2.653	1.731	.000	.949	21

a. Dependent Variable: Y20

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z21, X21[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y21

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.647[a]	.419	.354	.68595

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.419	6.484	2	18	.008	1.883

a. Predictors: (Constant), Z21, X21

b. Dependent Variable: Y21

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.102	2	3.051	6.484	.008[a]
	Residual	8.470	18	.471		
	Total	14.571	20			

a. Predictors: (Constant), Z21, X21

b. Dependent Variable: Y21

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.049	1.462		-.717	.482
	X21	.530	.305	.318	1.742	.099
	Z21	.640	.229	.510	2.792	.012

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-4.121	2.023
	X21	-.109	1.170
	Z21	.158	1.122

a. Dependent Variable: Y21

Coefficient Correlations[a]

Model			Z21	X21
1	Correlations	Z21	1.000	-.178
		X21	-.178	1.000
	Covariances	Z21	.053	-.012
		X21	-.012	.093

a. Dependent Variable: Y21

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.3537	4.8049	3.8571	.55235	21
Residual	-1.16463	1.36585	.00000	.65075	21
Std. Predicted Value	-2.722	1.716	.000	1.000	21
Std. Residual	-1.698	1.991	.000	.949	21

a. Dependent Variable: Y21

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z22, X22[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y22

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.860[a]	.739	.710	.49592

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.739	25.464	2	18	.000	1.726

a. Predictors: (Constant), Z22, X22

b. Dependent Variable: Y22

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.525	2	6.263	25.464	.000[a]
	Residual	4.427	18	.246		
	Total	16.952	20			

a. Predictors: (Constant), Z22, X22

b. Dependent Variable: Y22

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.693	.699		-.991	.335
	X22	.575	.233	.424	2.466	.024
	Z22	.576	.197	.504	2.928	.009

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-2.162	.776
	X22	.085	1.064
	Z22	.163	.990

a. Dependent Variable: Y22

Coefficient Correlations[a]

Model			Z22	X22
1	Correlations	Z22	1.000	-.714
		X22	-.714	1.000
	Covariances	Z22	.039	-.033
		X22	-.033	.054

a. Dependent Variable: Y22

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.6088	5.0617	4.0476	.79137	21
Residual	-.91071	1.08929	.00000	.47048	21
Std. Predicted Value	-3.082	1.281	.000	1.000	21
Std. Residual	-1.836	2.196	.000	.949	21

a. Dependent Variable: Y22

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z23, X23[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y23

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.839[a]	.703	.670	.51370

Model Summary^b

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.703	21.316	2	18	.000	2.133

a. Predictors: (Constant), Z23, X23

b. Dependent Variable: Y23

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.250	2	5.625	21.316	.000^a
	Residual	4.750	18	.264		
	Total	16.000	20			

a. Predictors: (Constant), Z23, X23

b. Dependent Variable: Y23

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.500	.890		-.562	.581
	X23	.188	.265	.118	.708	.488
	Z23	.844	.184	.759	4.575	.000

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-2.369	1.369
	X23	-.369	.744
	Z23	.456	1.231

a. Dependent Variable: Y23

Coefficient Correlations[a]

Model			Z23	X23
1	Correlations	Z23	1.000	-.633
		X23	-.633	1.000
	Covariances	Z23	.034	-.031
		X23	-.031	.070

a. Dependent Variable: Y23

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.7500	4.6563	4.0000	.75000	21
Residual	-.65625	.53125	.00000	.48734	21
Std. Predicted Value	-3.000	.875	.000	1.000	21
Std. Residual	-1.277	1.034	.000	.949	21

a. Dependent Variable: Y23

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z24, X24[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y24

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.943[a]	.889	.876	.22629

Model Summary[b]

	Change Statistics					
Model	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.889	71.903	2	18	.000	2.247

a. Predictors: (Constant), Z24, X24

b. Dependent Variable: Y24

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.364	2	3.682	71.903	.000[a]
	Residual	.922	18	.051		
	Total	8.286	20			

a. Predictors: (Constant), Z24, X24

b. Dependent Variable: Y24

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.183	.419		-.436	.668
	X24	.443	.162	.329	2.736	.014
	Z24	.574	.103	.668	5.552	.000

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-1.063	.697
	X24	.103	.784
	Z24	.357	.791

a. Dependent Variable: Y24

Coefficient Correlations[a]

Model			Z24	X24
1	Correlations	Z24	1.000	-.757
		X24	-.757	1.000
	Covariances	Z24	.011	-.013
		X24	-.013	.026

a. Dependent Variable: Y24

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.2957	4.9043	3.7143	.60679	21
Residual	-.46087	.13043	.00000	.21468	21
Std. Predicted Value	-2.338	1.961	.000	1.000	21
Std. Residual	-2.037	.576	.000	.949	21

a. Dependent Variable: Y24

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z26, X26[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y26

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.758[a]	.574	.527	.50016

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.574	12.130	2	18	.000	2.426

a. Predictors: (Constant), Z26, X26

b. Dependent Variable: Y26

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.069	2	3.034	12.130	.000[a]
	Residual	4.503	18	.250		
	Total	10.571	20			

a. Predictors: (Constant), Z26, X26

b. Dependent Variable: Y26

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.764	.680		1.124	.276
	X26	.278	.184	.268	1.509	.149
	Z26	.514	.155	.588	3.310	.004

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-.664	2.192
	X26	-.109	.665
	Z26	.188	.840

a. Dependent Variable: Y26

Coefficient Correlations[a]

Model			Z26	X26
1	Correlations	Z26	1.000	-.499
		X26	-.499	1.000
	Covariances	Z26	.024	-.014
		X26	-.014	.034

a. Dependent Variable: Y26

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.6264	4.7247	3.8571	.55085	21
Residual	-.72472	.83146	.00000	.47449	21
Std. Predicted Value	-2.234	1.575	.000	1.000	21
Std. Residual	-1.449	1.662	.000	.949	21

a. Dependent Variable: Y26

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z27, X27[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y27

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.807[a]	.651	.613	.53116

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.651	16.824	2	18	.000	1.057

a. Predictors: (Constant), Z27, X27

b. Dependent Variable: Y27

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.493	2	4.747	16.824	.000[a]
	Residual	5.078	18	.282		
	Total	14.571	20			

a. Predictors: (Constant), Z27, X27

b. Dependent Variable: Y27

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.359	.776		-.463	.649
	X27	.376	.218	.300	1.728	.101
	Z27	.637	.187	.592	3.414	.003

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-1.989	1.271
	X27	-.081	.834
	Z27	.245	1.029

a. Dependent Variable: Y27

Coefficient Correlations[a]

Model			Z27	X27
1	Correlations	Z27	1.000	-.597
		X27	-.597	1.000
	Covariances	Z27	.035	-.024
		X27	-.024	.047

a. Dependent Variable: Y27

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.6677	4.7078	3.8571	.68895	21
Residual	-1.07066	.92934	.00000	.50390	21
Std. Predicted Value	-3.178	1.235	.000	1.000	21
Std. Residual	-2.016	1.750	.000	.949	21

a. Dependent Variable: Y27

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z28, X28[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y28

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.737[a]	.543	.492	.55193

Model Summary[b]

	Change Statistics					
Model	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.543	10.696	2	18	.001	1.821

a. Predictors: (Constant), Z28, X28

b. Dependent Variable: Y28

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.517	2	3.258	10.696	.001[a]
	Residual	5.483	18	.305		
	Total	12.000	20			

a. Predictors: (Constant), Z28, X28

b. Dependent Variable: Y28

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.055	.675		1.563	.135
	X28	.314	.250	.312	1.258	.224
	Z28	.400	.211	.470	1.898	.074

Coefficients[a]

		95% Confidence Interval for B	
Model		Lower Bound	Upper Bound
1	(Constant)	-.363	2.472
	X28	-.210	.839
	Z28	-.043	.843

a. Dependent Variable: Y28

Coefficient Correlations[a]

Model			Z28	X28
1	Correlations	Z28	1.000	-.766
		X28	-.766	1.000
	Covariances	Z28	.044	-.040
		X28	-.040	.062

a. Dependent Variable: Y28

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.4838	4.6274	4.0000	.57082	21
Residual	-.62743	1.08711	.00000	.52360	21
Std. Predicted Value	-2.656	1.099	.000	1.000	21
Std. Residual	-1.137	1.970	.000	.949	21

a. Dependent Variable: Y28

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z29, X29[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y29

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.914[a]	.836	.818	.29002

Model Summary[b]

	Change Statistics					
Model	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.836	45.916	2	18	.000	2.247

a. Predictors: (Constant), Z29, X29

b. Dependent Variable: Y29

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.724	2	3.862	45.916	.000[a]
	Residual	1.514	18	.084		
	Total	9.238	20			

a. Predictors: (Constant), Z29, X29

b. Dependent Variable: Y29

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.499	.501		-.995	.333
	X29	.871	.121	.771	7.223	.000
	Z29	.243	.101	.256	2.404	.027

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-1.552	.554
	X29	.617	1.124
	Z29	.031	.455

a. Dependent Variable: Y29

Coefficient Correlations[a]

Model			Z29	X29
1	Correlations	Z29	1.000	-.447
		X29	-.447	1.000
	Covariances	Z29	.010	-.005
		X29	-.005	.015

a. Dependent Variable: Y29

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.8417	5.0687	4.1905	.62145	21
Residual	-.71223	.80176	.00000	.27514	21
Std. Predicted Value	-2.170	1.413	.000	1.000	21
Std. Residual	-2.456	2.765	.000	.949	21

a. Dependent Variable: Y29

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z30, X30[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y30

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.571[a]	.326	.251	.54720

Model Summary[b]

	Change Statistics					
Model	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.326	4.359	2	18	.029	1.581

a. Predictors: (Constant), Z30, X30

b. Dependent Variable: Y30

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.610	2	1.305	4.359	.029[a]
	Residual	5.390	18	.299		
	Total	8.000	20			

a. Predictors: (Constant), Z30, X30

b. Dependent Variable: Y30

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.812	1.107		.734	.473
	X30	.432	.253	.350	1.713	.104
	Z30	.328	.190	.353	1.726	.101

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-1.514	3.139
	X30	-.098	.963
	Z30	-.071	.728

a. Dependent Variable: Y30

Coefficient Correlations[a]

Model			Z30	X30
1	Correlations	Z30	1.000	-.322
		X30	-.322	1.000
	Covariances	Z30	.036	-.015
		X30	-.015	.064

a. Dependent Variable: Y30

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.4226	4.6158	4.0000	.36127	21
Residual	-1.18332	.81668	.00000	.51912	21
Std. Predicted Value	-1.598	1.705	.000	1.000	21
Std. Residual	-2.162	1.492	.000	.949	21

a. Dependent Variable: Y30

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z31, X31[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y31

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.677[a]	.458	.398	.45745

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.458	7.612	2	18	.004	2.047

a. Predictors: (Constant), Z31, X31

b. Dependent Variable: Y31

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.186	2	1.593	7.612	.004[a]
	Residual	3.767	18	.209		
	Total	6.952	20			

a. Predictors: (Constant), Z31, X31

b. Dependent Variable: Y31

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.513	.930		.552	.588
	X31	.434	.218	.366	1.991	.062
	Z31	.460	.184	.460	2.502	.022

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-1.440	2.466
	X31	-.024	.892
	Z31	.074	.847

a. Dependent Variable: Y31

Coefficient Correlations[a]

Model			Z31	X31
1	Correlations	Z31	1.000	-.333
		X31	-.333	1.000
	Covariances	Z31	.034	-.013
		X31	-.013	.048

a. Dependent Variable: Y31

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.1960	4.5505	4.0476	.39910	21
Residual	-.62986	1.34370	.00000	.43398	21
Std. Predicted Value	-2.134	1.260	.000	1.000	21
Std. Residual	-1.377	2.937	.000	.949	21

a. Dependent Variable: Y31

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z32, X32[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y32

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.685[a]	.469	.410	.49451

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.469	7.941	2	18	.003	2.118

a. Predictors: (Constant), Z32, X32

b. Dependent Variable: Y32

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.884	2	1.942	7.941	.003[a]
	Residual	4.402	18	.245		
	Total	8.286	20			

a. Predictors: (Constant), Z32, X32

b. Dependent Variable: Y32

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.434	.830		.523	.607
	X32	.478	.222	.438	2.151	.045
	Z32	.336	.200	.341	1.676	.111

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-1.310	2.178
	X32	.011	.945
	Z32	-.085	.756

a. Dependent Variable: Y32

Coefficient Correlations[a]

Model			Z32	X32
1	Correlations	Z32	1.000	-.537
		X32	-.537	1.000
	Covariances	Z32	.040	-.024
		X32	-.024	.049

a. Dependent Variable: Y32

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.8754	4.5028	3.7143	.44068	21
Residual	-1.16723	.49719	.00000	.46914	21
Std. Predicted Value	-1.904	1.789	.000	1.000	21
Std. Residual	-2.360	1.005	.000	.949	21

a. Dependent Variable: Y32

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z33, X33[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y33

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.771[a]	.594	.549	.44231

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.594	13.150	2	18	.000	1.061

a. Predictors: (Constant), Z33, X33

b. Dependent Variable: Y33

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.145	2	2.573	13.150	.000[a]
	Residual	3.522	18	.196		
	Total	8.667	20			

a. Predictors: (Constant), Z33, X33

b. Dependent Variable: Y33

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.641	.666		.962	.349
	X33	.174	.188	.165	.927	.366
	Z33	.573	.153	.668	3.743	.001

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-.759	2.041
	X33	-.221	.570
	Z33	.251	.894

a. Dependent Variable: Y33

Coefficient Correlations[a]

Model			Z33	X33
1	Correlations	Z33	1.000	-.540
		X33	-.540	1.000
	Covariances	Z33	.023	-.016
		X33	-.016	.035

a. Dependent Variable: Y33

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.8818	4.3756	3.6667	.50721	21
Residual	-.80306	.62436	.00000	.41961	21
Std. Predicted Value	-1.547	1.398	.000	1.000	21
Std. Residual	-1.816	1.412	.000	.949	21

a. Dependent Variable: Y33

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z34, X34[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y34

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.696[a]	.484	.427	.69704

Model Summary[b]

	Change Statistics					
Model	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.484	8.445	2	18	.003	1.125

a. Predictors: (Constant), Z34, X34

b. Dependent Variable: Y34

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.207	2	4.103	8.445	.003[a]
	Residual	8.746	18	.486		
	Total	16.952	20			

a. Predictors: (Constant), Z34, X34

b. Dependent Variable: Y34

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.472	.759		1.940	.068
	X34	-.066	.230	-.054	-.287	.777
	Z34	.603	.157	.717	3.831	.001

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-.122	3.067
	X34	-.549	.417
	Z34	.272	.933

a. Dependent Variable: Y34

Coefficient Correlations[a]

Model			Z34	X34
1	Correlations	Z34	1.000	-.426
		X34	-.426	1.000
	Covariances	Z34	.025	-.015
		X34	-.015	.053

a. Dependent Variable: Y34

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.4136	4.2214	3.0476	.64058	21
Residual	-1.01618	1.52039	.00000	.66127	21
Std. Predicted Value	-.990	1.832	.000	1.000	21
Std. Residual	-1.458	2.181	.000	.949	21

a. Dependent Variable: Y34

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z36, X36[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y36

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.667[a]	.444	.383	.60858

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.444	7.200	2	18	.005	1.393

a. Predictors: (Constant), Z36, X36

b. Dependent Variable: Y36

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.333	2	2.667	7.200	.005[a]
	Residual	6.667	18	.370		
	Total	12.000	20			

a. Predictors: (Constant), Z36, X36

b. Dependent Variable: Y36

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.778	1.024		.760	.457
	X36	.222	.275	.164	.809	.429
	Z36	.556	.199	.569	2.798	.012

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-1.373	2.928
	X36	-.355	.799
	Z36	.138	.973

a. Dependent Variable: Y36

Coefficient Correlations[a]

Model			Z36	X36
1	Correlations	Z36	1.000	-.503
		X36	-.503	1.000
	Covariances	Z36	.039	-.027
		X36	-.027	.075

a. Dependent Variable: Y36

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.1111	4.6667	4.0000	.51640	21
Residual	-1.11111	1.11111	.00000	.57735	21
Std. Predicted Value	-1.721	1.291	.000	1.000	21
Std. Residual	-1.826	1.826	.000	.949	21

a. Dependent Variable: Y36

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z37, X37[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y37

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.693[a]	.480	.422	.55277

Model Summary[b]

	Change Statistics					
Model	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.480	8.299	2	18	.003	2.557

a. Predictors: (Constant), Z37, X37

b. Dependent Variable: Y37

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.071	2	2.536	8.299	.003[a]
	Residual	5.500	18	.306		
	Total	10.571	20			

a. Predictors: (Constant), Z37, X37

b. Dependent Variable: Y37

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.000	.925		1.081	.294
	X37	.500	.391	.394	1.279	.217
	Z37	.250	.234	.329	1.067	.300

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-.944	2.944
	X37	-.321	1.321
	Z37	-.242	.742

a. Dependent Variable: Y37

Coefficient Correlations[a]

Model			Z37	X37
1	Correlations	Z37	1.000	-.834
		X37	-.834	1.000
	Covariances	Z37	.055	-.076
		X37	-.076	.153

a. Dependent Variable: Y37

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.2500	4.7500	3.8571	.50356	21
Residual	-1.00000	1.00000	.00000	.52440	21
Std. Predicted Value	-3.192	1.773	.000	1.000	21
Std. Residual	-1.809	1.809	.000	.949	21

a. Dependent Variable: Y37

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z38, X38[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y38

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.552[a]	.305	.228	.57533

Model Summary[b]

	Change Statistics					
Model	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.305	3.948	2	18	.038	2.076

a. Predictors: (Constant), Z38, X38

b. Dependent Variable: Y38

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.613	2	1.307	3.948	.038[a]
	Residual	5.958	18	.331		
	Total	8.571	20			

a. Predictors: (Constant), Z38, X38

b. Dependent Variable: Y38

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.378	.891		1.546	.140
	X38	.401	.265	.383	1.513	.148
	Z38	.202	.228	.225	.889	.386

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-.495	3.251
	X38	-.156	.957
	Z38	-.276	.680

a. Dependent Variable: Y38

Coefficient Correlations[a]

Model			Z38	X38
1	Correlations	Z38	1.000	-.629
		X38	-.629	1.000
	Covariances	Z38	.052	-.038
		X38	-.038	.070

a. Dependent Variable: Y38

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.1870	4.3931	3.8571	.36148	21
Residual	-.99237	1.20992	.00000	.54580	21
Std. Predicted Value	-1.854	1.483	.000	1.000	21
Std. Residual	-1.725	2.103	.000	.949	21

a. Dependent Variable: Y38

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z39, X39[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y39

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.684[a]	.467	.408	.63925

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.467	7.897	2	18	.003	.735

a. Predictors: (Constant), Z39, X39

b. Dependent Variable: Y39

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.454	2	3.227	7.897	.003[a]
	Residual	7.356	18	.409		
	Total	13.810	20			

a. Predictors: (Constant), Z39, X39

b. Dependent Variable: Y39

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.572	.899		.637	.532
	X39	.506	.293	.407	1.724	.102
	Z39	.348	.244	.337	1.426	.171

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-1.315	2.460
	X39	-.111	1.122
	Z39	-.165	.860

a. Dependent Variable: Y39

Coefficient Correlations[a]

Model			Z39	X39
1	Correlations	Z39	1.000	-.685
		X39	-.685	1.000
	Covariances	Z39	.060	-.049
		X39	-.049	.086

a. Dependent Variable: Y39

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.2796	4.8404	4.0952	.56807	21
Residual	-1.33462	.66538	.00000	.60645	21
Std. Predicted Value	-3.196	1.312	.000	1.000	21
Std. Residual	-2.088	1.041	.000	.949	21

a. Dependent Variable: Y39

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z40, X40[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y40

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.490[a]	.240	.155	.57432

Model Summary[b]

	Change Statistics					
Model	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.240	2.838	2	18	.085	1.400

a. Predictors: (Constant), Z40, X40

b. Dependent Variable: Y40

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.872	2	.936	2.838	.085[a]
	Residual	5.937	18	.330		
	Total	7.810	20			

a. Predictors: (Constant), Z40, X40

b. Dependent Variable: Y40

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.031	.864		2.350	.030
	X40	.140	.290	.140	.484	.634
	Z40	.293	.223	.381	1.313	.206

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	.215	3.848
	X40	-.469	.749
	Z40	-.176	.763

a. Dependent Variable: Y40

Coefficient Correlations[a]

Model			Z40	X40
1	Correlations	Z40	1.000	-.705
		X40	-.705	1.000
	Covariances	Z40	.050	-.046
		X40	-.046	.084

a. Dependent Variable: Y40

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.3321	4.1993	3.9048	.30596	21
Residual	-1.19926	.94096	.00000	.54485	21
Std. Predicted Value	-1.872	.963	.000	1.000	21
Std. Residual	-2.088	1.638	.000	.949	21

a. Dependent Variable: Y40

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z41, X41[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y41

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.814[a]	.663	.626	.42848

Model Summary[b]

	Change Statistics					
Model	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.663	17.715	2	18	.000	2.135

a. Predictors: (Constant), Z41, X41

b. Dependent Variable: Y41

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.505	2	3.252	17.715	.000[a]
	Residual	3.305	18	.184		
	Total	9.810	20			

a. Predictors: (Constant), Z41, X41

b. Dependent Variable: Y41

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.989	.592		1.672	.112
	X41	-.020	.186	-.019	-.108	.915
	Z41	.697	.150	.826	4.651	.000

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-.254	2.232
	X41	-.411	.371
	Z41	.382	1.011

a. Dependent Variable: Y41

Coefficient Correlations[a]

Model			Z41	X41
1	Correlations	Z41	1.000	-.638
		X41	-.638	1.000
	Covariances	Z41	.022	-.018
		X41	-.018	.035

a. Dependent Variable: Y41

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.3418	4.3912	3.7619	.57030	21
Residual	-.69461	.60884	.00000	.40649	21
Std. Predicted Value	-2.490	1.103	.000	1.000	21
Std. Residual	-1.621	1.421	.000	.949	21

a. Dependent Variable: Y41

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z42, X42[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y42

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.694[a]	.482	.425	.44727

Model Summary[b]

	Change Statistics					
Model	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.482	8.377	2	18	.003	1.566

a. Predictors: (Constant), Z42, X42

b. Dependent Variable: Y42

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.352	2	1.676	8.377	.003[a]
	Residual	3.601	18	.200		
	Total	6.952	20			

a. Predictors: (Constant), Z42, X42

b. Dependent Variable: Y42

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.146	.757		1.514	.147
	X42	.284	.218	.276	1.306	.208
	Z42	.398	.171	.493	2.332	.032

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-.444	2.736
	X42	-.173	.741
	Z42	.039	.757

a. Dependent Variable: Y42

Coefficient Correlations[a]

Model			Z42	X42
1	Correlations	Z42	1.000	-.597
		X42	-.597	1.000
	Covariances	Z42	.029	-.022
		X42	-.022	.047

a. Dependent Variable: Y42

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.1922	4.5565	4.0476	.40936	21
Residual	-.87434	.72756	.00000	.42431	21
Std. Predicted Value	-2.090	1.243	.000	1.000	21
Std. Residual	-1.955	1.627	.000	.949	21

a. Dependent Variable: Y42

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z43, X43[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y43

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.757[a]	.573	.525	.50081

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.573	12.075	2	18	.000	1.355

a. Predictors: (Constant), Z43, X43

b. Dependent Variable: Y43

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.057	2	3.028	12.075	.000[a]
	Residual	4.515	18	.251		
	Total	10.571	20			

a. Predictors: (Constant), Z43, X43

b. Dependent Variable: Y43

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.164	.685		1.701	.106
	X43	-.007	.282	-.006	-.025	.980
	Z43	.688	.219	.762	3.144	.006

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-.274	2.602
	X43	-.599	.585
	Z43	.228	1.148

a. Dependent Variable: Y43

Coefficient Correlations[a]

Model			Z43	X43
1	Correlations	Z43	1.000	-.772
		X43	-.772	1.000
	Covariances	Z43	.048	-.048
		X43	-.048	.079

a. Dependent Variable: Y43

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.5262	4.5763	3.8571	.55031	21
Residual	-.88824	1.11176	.00000	.47511	21
Std. Predicted Value	-2.419	1.307	.000	1.000	21
Std. Residual	-1.774	2.220	.000	.949	21

a. Dependent Variable: Y43

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z44, X44[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y44

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.808[a]	.653	.614	.50531

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.653	16.923	2	18	.000	2.123

a. Predictors: (Constant), Z44, X44

b. Dependent Variable: Y44

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.642	2	4.321	16.923	.000[a]
	Residual	4.596	18	.255		
	Total	13.238	20			

a. Predictors: (Constant), Z44, X44

b. Dependent Variable: Y44

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.226	1.168		-1.050	.308
	X44	.423	.371	.200	1.140	.269
	Z44	.802	.210	.670	3.820	.001

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-3.679	1.228
	X44	-.357	1.204
	Z44	.361	1.243

a. Dependent Variable: Y44

Coefficient Correlations[a]

Model			Z44	X44
1	Correlations	Z44	1.000	-.611
		X44	-.611	1.000
	Covariances	Z44	.044	-.048
		X44	-.048	.138

a. Dependent Variable: Y44

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.4513	4.9025	3.8095	.65734	21
Residual	-.67688	.54875	.00000	.47938	21
Std. Predicted Value	-2.066	1.663	.000	1.000	21
Std. Residual	-1.340	1.086	.000	.949	21

a. Dependent Variable: Y44

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z45, X45[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y45

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.720[a]	.518	.464	.53216

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.518	9.665	2	18	.001	1.734

a. Predictors: (Constant), Z45, X45

b. Dependent Variable: Y45

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.474	2	2.737	9.665	.001[a]
	Residual	5.097	18	.283		
	Total	10.571	20			

a. Predictors: (Constant), Z45, X45

b. Dependent Variable: Y45

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.159	1.072		.148	.884
	X45	.485	.333	.291	1.454	.163
	Z45	.436	.170	.512	2.558	.020

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-2.093	2.411
	X45	-.216	1.185
	Z45	.078	.794

a. Dependent Variable: Y45

Coefficient Correlations[a]

Model			Z45	X45
1	Correlations	Z45	1.000	-.575
		X45	-.575	1.000
	Covariances	Z45	.029	-.033
		X45	-.033	.111

a. Dependent Variable: Y45

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.4846	4.7615	3.8571	.52316	21
Residual	-.84103	.72308	.00000	.50485	21
Std. Predicted Value	-2.624	1.729	.000	1.000	21
Std. Residual	-1.580	1.359	.000	.949	21

a. Dependent Variable: Y45

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z46, X46[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y46

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.724[a]	.524	.471	.50952

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.524	9.893	2	18	.001	1.087

a. Predictors: (Constant), Z46, X46

b. Dependent Variable: Y46

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.137	2	2.568	9.893	.001[a]
	Residual	4.673	18	.260		
	Total	9.810	20			

a. Predictors: (Constant), Z46, X46

b. Dependent Variable: Y46

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.955	.672		1.420	.173
	X46	.462	.266	.448	1.737	.099
	Z46	.301	.244	.318	1.232	.234

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-.458	2.368
	X46	-.097	1.021
	Z46	-.212	.814

a. Dependent Variable: Y46

Coefficient Correlations[a]

Model			Z46	X46
1	Correlations	Z46	1.000	-.776
		X46	-.776	1.000
	Covariances	Z46	.060	-.050
		X46	-.050	.071

a. Dependent Variable: Y46

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.4810	4.7701	3.9048	.50678	21
Residual	-.77014	.99289	.00000	.48337	21
Std. Predicted Value	-2.809	1.708	.000	1.000	21
Std. Residual	-1.512	1.949	.000	.949	21

a. Dependent Variable: Y46

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z47, X47[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y47

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.775[a]	.601	.557	.46620

Model Summary^b

Model	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
			Change Statistics			
1	.601	13.567	2	18	.000	1.971

a. Predictors: (Constant), Z47, X47

b. Dependent Variable: Y47

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.897	2	2.949	13.567	.000^a
	Residual	3.912	18	.217		
	Total	9.810	20			

a. Predictors: (Constant), Z47, X47

b. Dependent Variable: Y47

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.024	.793		.030	.976
	X47	.644	.212	.527	3.033	.007
	Z47	.335	.162	.359	2.067	.053

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-1.643	1.691
	X47	.198	1.089
	Z47	-.006	.676

a. Dependent Variable: Y47

Coefficient Correlations[a]

Model			Z47	X47
1	Correlations	Z47	1.000	-.515
		X47	-.515	1.000
	Covariances	Z47	.026	-.018
		X47	-.018	.045

a. Dependent Variable: Y47

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.9605	4.9183	4.0952	.54302	21
Residual	-.93942	.72520	.00000	.44228	21
Std. Predicted Value	-2.090	1.516	.000	1.000	21
Std. Residual	-2.015	1.556	.000	.949	21

a. Dependent Variable: Y47

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z48, X48[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y48

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.836[a]	.700	.666	.44397

Model Summary[b]

Model	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
	Change Statistics					
1	.700	20.957	2	18	.000	.979

a. Predictors: (Constant), Z48, X48

b. Dependent Variable: Y48

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.262	2	4.131	20.957	.000[a]
	Residual	3.548	18	.197		
	Total	11.810	20			

a. Predictors: (Constant), Z48, X48

b. Dependent Variable: Y48

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.123	.819		.150	.883
	X48	.225	.286	.145	.784	.443
	Z48	.686	.175	.726	3.914	.001

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-1.598	1.844
	X48	-.377	.826
	Z48	.318	1.054

a. Dependent Variable: Y48

Coefficient Correlations[a]

Model			Z48	X48
1	Correlations	Z48	1.000	-.717
		X48	-.717	1.000
	Covariances	Z48	.031	-.036
		X48	-.036	.082

a. Dependent Variable: Y48

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.1677	4.6737	3.9048	.64271	21
Residual	-.76347	.55090	.00000	.42118	21
Std. Predicted Value	-2.703	1.196	.000	1.000	21
Std. Residual	-1.720	1.241	.000	.949	21

a. Dependent Variable: Y48

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z49, X49[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y49

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.865[a]	.748	.720	.40635

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.748	26.760	2	18	.000	1.620

a. Predictors: (Constant), Z49, X49

b. Dependent Variable: Y49

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.837	2	4.419	26.760	.000[a]
	Residual	2.972	18	.165		
	Total	11.810	20			

a. Predictors: (Constant), Z49, X49

b. Dependent Variable: Y49

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.458	.753		-1.936	.069
	X49	.542	.269	.351	2.015	.059
	Z49	.806	.244	.574	3.299	.004

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-3.041	.125
	X49	-.023	1.106
	Z49	.293	1.319

a. Dependent Variable: Y49

Coefficient Correlations[a]

Model			Z49	X49
1	Correlations	Z49	1.000	-.734
		X49	-.734	1.000
	Covariances	Z49	.060	-.048
		X49	-.048	.072

a. Dependent Variable: Y49

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.2361	4.7361	3.9048	.66473	21
Residual	-.93056	1.06944	.00000	.38550	21
Std. Predicted Value	-4.015	1.251	.000	1.000	21
Std. Residual	-2.290	2.632	.000	.949	21

a. Dependent Variable: Y49

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z51, X51[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y51

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.562[a]	.316	.239	.58345

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.316	4.149	2	18	.033	1.708

a. Predictors: (Constant), Z51, X51

b. Dependent Variable: Y51

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.825	2	1.412	4.149	.033[a]
	Residual	6.128	18	.340		
	Total	8.952	20			

a. Predictors: (Constant), Z51, X51

b. Dependent Variable: Y51

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.843	1.003		1.838	.083
	X51	.065	.325	.052	.200	.844
	Z51	.458	.228	.525	2.008	.060

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-.264	3.949
	X51	-.617	.747
	Z51	-.021	.936

a. Dependent Variable: Y51

Coefficient Correlations[a]

Model			Z51	X51
1	Correlations	Z51	1.000	-.667
		X51	-.667	1.000
	Covariances	Z51	.052	-.049
		X51	-.049	.106

a. Dependent Variable: Y51

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.4100	4.4550	4.0476	.37582	21
Residual	-1.41000	1.06750	.00000	.55351	21
Std. Predicted Value	-1.697	1.084	.000	1.000	21
Std. Residual	-2.417	1.830	.000	.949	21

a. Dependent Variable: Y51

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z52, X52[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y52

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.709[a]	.502	.447	.47869

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.502	9.080	2	18	.002	1.671

a. Predictors: (Constant), Z52, X52

b. Dependent Variable: Y52

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.161	2	2.081	9.080	.002[a]
	Residual	4.125	18	.229		
	Total	8.286	20			

a. Predictors: (Constant), Z52, X52

b. Dependent Variable: Y52

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.897	.871		3.328	.004
	X52	-.487	.287	-.362	-1.699	.107
	Z52	.674	.164	.876	4.113	.001

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	1.068	4.726
	X52	-1.090	.115
	Z52	.330	1.018

a. Dependent Variable: Y52

Coefficient Correlations[a]

Model			Z52	X52
1	Correlations	Z52	1.000	-.625
		X52	-.625	1.000
	Covariances	Z52	.027	-.029
		X52	-.029	.082

a. Dependent Variable: Y52

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.7839	4.3187	3.7143	.45613	21
Residual	-.64469	.86813	.00000	.45412	21
Std. Predicted Value	-2.040	1.325	.000	1.000	21
Std. Residual	-1.347	1.814	.000	.949	21

a. Dependent Variable: Y52

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Z55, X55[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Y55

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.727[a]	.529	.476	.34603

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.529	10.090	2	18	.001	1.859

a. Predictors: (Constant), Z55, X55

b. Dependent Variable: Y55

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.416	2	1.208	10.090	.001[a]
	Residual	2.155	18	.120		
	Total	4.571	20			

a. Predictors: (Constant), Z55, X55

b. Dependent Variable: Y55

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.415	.681		2.076	.052
	X55	.071	.193	.076	.368	.717
	Z55	.561	.171	.677	3.283	.004

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-.017	2.846
	X55	-.334	.476
	Z55	.202	.920

a. Dependent Variable: Y55

Coefficient Correlations[a]

Model			Z55	X55
1	Correlations	Z55	1.000	-.620
		X55	-.620	1.000
	Covariances	Z55	.029	-.020
		X55	-.020	.037

a. Dependent Variable: Y55

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.3104	4.5743	4.1429	.34758	21
Residual	-.57428	.49667	.00000	.32827	21
Std. Predicted Value	-2.395	1.241	.000	1.000	21
Std. Residual	-1.660	1.435	.000	.949	21

a. Dependent Variable: Y55

Graph

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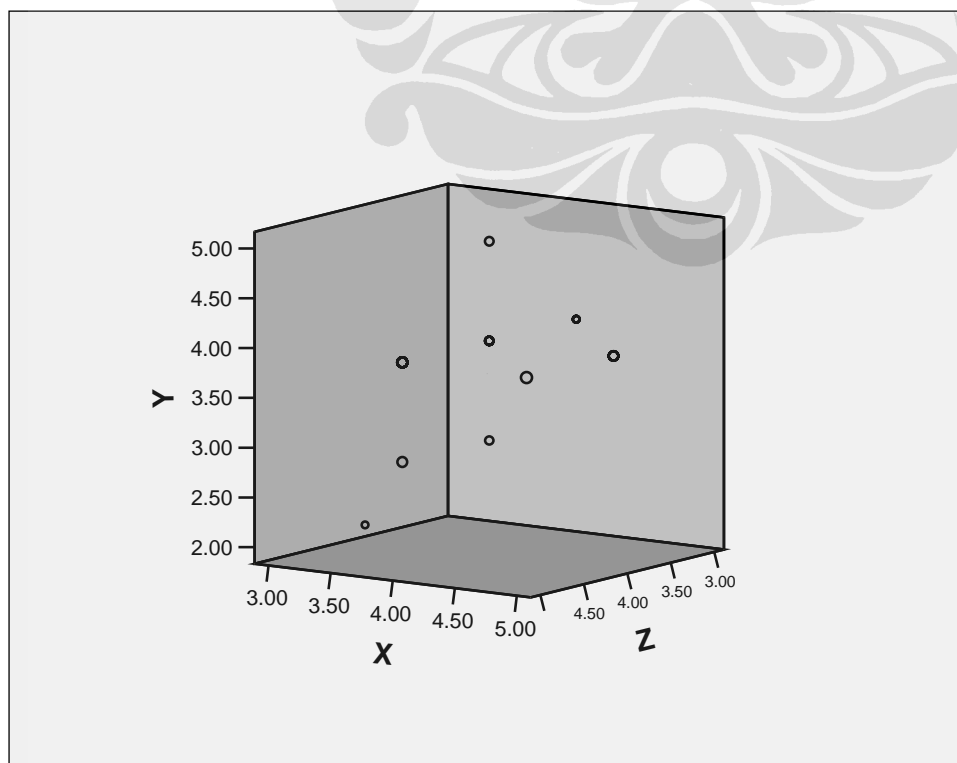
PROGRAM STUDI : TEKNIK SIPIL

PROGRAM PENDIDIKAN : S1-Reg

PERNYATAAN PERBAIKAN SKRIPSI

Dengan ini dinyatakan bahwa pada :

Hari / Tanggal : Senin / 22 Desember 2008
Jam : 15.00 s/d Selesai
Tempat : P.Int Lt.5 DTS

Telah berlangsung Ujian **Skripsi** Semester Ganjil 2008/2009 Program Studi Teknik Sipil, Kekhususan Ilmu Manajemen

Konstruksi, Program S1 Reguler, Universitas Indonesia dengan peserta :

Nama Mahasiswa : Hanifah Mardiana

Nomor Mahasiswa : 040401026Y

Judul Skripsi : Pengaruh Tingkat Pemahaman Manajer Proyek Dalam Aspek Manajemen
Komunikasi Terhadap Mutu Pelaksanaan Proyek Konstruksi

Dan dinyatakan harus menyelesaikan perbaikan Skripsi yang diminta oleh Dosen Penguji, yaitu :

No	NAMA DOSEN PENGUJI	PERBAIKAN YANG DIMINTA
1	Leni Sagita, ST, MT	
2	Dr. Ir. Yusuf Latief, MT	terlampir
3	Alin Veronika, ST, MT	

Perbaikan tersebut harus sudah selesai pada tanggal .....30 Des 08...... dan dinyatakan dengan surat dari Dosen
Pembimbing atau Dosen yang ditunjuk, yaitu ....
Buku Skripsi dengan Hard Cover sesuai standard harus diserahkan selambat-lambatnya tanggal...........................

Apabila pada tanggal tersebut diatas persyaratan belum dipenuhi, maka mahasiswa yang bersangkutan dapat
dikenakan sanksi administrative dan/atau semua urusan administrasi pendidikan mahasiswa yang bersangkutan di
Fakultas Teknik Universitas Indonesia tidak dilayani.

Depok, 22 Desember 2008
Mahasiswa ybs,

Hanifah Mardiana

Ketua Sidang Ujian Skripsi

Leni Sagita, ST, MT

Skripsi ini telah selesai diperbaiki sesuai dengan keputusan sidang Ujian Skripsi tanggal ...5/1 9... dan telah mendapat
persetujuan dari dosen pembimbing.

Depok, ..., 2008

Menyetujui :
Pembimbing 1 ,

(Leni Sagita, ST, MT)

Pembimbing 2

(Dr.Ir. Yusuf Latief, MT)

Catatan : *) Coret yang tidak perlu

UNIVERSITAS INDONESIA
FAKULTAS TEKNIK

Dengan ini dinyatakan bahwa pada :

Hari   : Senin, 22 Desember 2008

Jam   : 16.00 – 17.00

Tempat   : Kampus UI - Depok

Telah berlangsung Ujian Skripsi Semester Ganjil 2008/2009 Program Studi Teknik Sipil, Kekhususan Manajemen Konstruksi, Fakultas Teknik Universitas Indonesia dengan peserta:

Nama Mahasiswa   : Hanifah Mardiana

No. Mahasiswa   : 04 04 01 026 Y

Judul Skripsi   : Pengaruh Tingkat Pemahaman Manajer Proyek Dalam Aspek Manajemen Komunikasi Terhadap Mutu Pekerjaan Proyek Konstruksi (Studi Kasus PT. X)

Dan dinyatakan harus menyelesaikan perbaikan Skripsi yang diminta oleh Dosen
Penguji, yaitu:

Dosen Pembimbing : Leni Sagita, ST. MT.

No	Pertanyaan	Keterangan
1	Abstrak diperbaiki sesuai Pedoman Rektor	Telah disesuaikan
2	Batasan penelitian mengapa memilih gedung dan pekerjaan pondasi	Telah disampaikan pada Bab 1
3	Keaslian penelitian dipaparkan	Telah disesuaikan pada Bab 1
4	Tabel dengan *header*nya	Telah disesuaikan
5	Perbaiki gambar 3.1	Telah disesuaikan
6	Fomat validasi pakar	Telah dimasukkan dalam lampiran
7	Kaitkan argumentasi dengan literatur yang relevan pada Bab 6	Telah disampaikan pada Bab 6

Dosen Penguji : Alin Veronika, ST. MT

No	Pertanyaan	Keterangan
1	Cek urutan Bab 3	Telah diperbaiki
2	Penulisan judul Bab 6	Telah disesuaikan pada Bab 6
3	Ganti judul format kuesioer	Telah disesuaikan
4	Lengkapi sumber referensi	Telah disesuaikan
5	Harus ada hubungan antara rumusan masalah, signifikansi masalah, serta tujuan penelitian	Telah disesuaikan pada Bab 1
6	Perbaiki kalimat pada halaman 5	Telah disesuaikan pada halaman 5
7	Cek penulisan referensi	Telah disesuaikan

No	Pertanyaan	Keterangan
8	Tabel yang berulang ada *header*nya	Telah dilakukan perbaikan
9	Cek kalimat hipotesanya	Telah diperbaiki
10	Perbaiki kalimat pada halaman 66	Telah disesuaikan pada halaman 66
11	Dijelaskan mengenai uji reabilitas	Telah dipaparkan pada Bab 3 dan Bab 5
12	Dijelaskan mengenai pengumpulan data 3 tahap	Telah dipaparkan pada Bab 3 dan Bab 5
13	Dijelaskan mengapa menggunakan metode *Kruskal-Wallis*	Telah dipaparkan pada Bab 5
14	Dijelaskan hasil pada halaman 62	Telah diperbaiki pada halaman 62
15	Dijelaskan hasil pada halaman 66	Telah diperbaiki pada halaman 66
16	Referensi angka untuk uji korelasi	Telah dipaparkan pada Bab 5
17	Penulisan tabel dicek sesuai format	Telah dilakukan penyesuaian format
18	Maksud dari halaman 78, contohnya bagaimana	Telah dipaparkan pada Bab 5 halaman 78
19	Pengujian hipotesa ditambahkan	Telah ditambahkan

Dosen Penguji : Dr. Ir. Yusuf Latief, MT

No	Pertanyaan	Keterangan
1	Perjelas lampirannya	Telah dilakukan perbaikan
2	Perjelas topik penelitiannya	Telah diperbaiki, hanya mengacu pada tingkat pemahaman saja
3	Standar penulisan SK Rektor	Telah disesuaikan pada keseluruhan skripsi
4	Model penelitian dan gambarnya	Telah dipaparkan pada Bab 5 dan Bab 6
5	Perbaiki Bab 5	Telah dilakukan perbaikan

Skripsi ini telah selesai diperbaiki sesuai dengan keputusan sidang Ujian Skripsi tanggal 22 Desember 2008 dan telah mendapatkan persetujuan dari dosen pembimbing.

Depok, Desember 2008
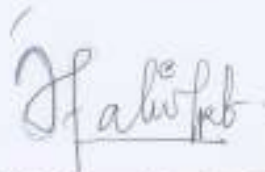
Menyetujui,

Pembimbing 1

(Leni Sagita, ST. MT)

Pembimbing 2

(Dr. Ir. Yusuf Latief, MT)

Penguji

(Alin Veronika, ST. MT)