# Analysis Report: RESPONSES TO THANKS (RTT)

Last updated: 28-03-2025	
Analysis carried out: Sep-Nov 2023, updated in 2024	
Data base: oDCT and wDCT data gathered at UNAM, Windhoek in 2023	
For RTT coding categories, see: <u>https://pub.uni-bielefeld.de/record/2992050</u>	
1 Conorol analysis	r
1. General analysis	Z
1.1. Head act strategies overall	
1.2. Addressers used evently	
1.3. Addressers used overall	
1.4. Differences obci versus wbci	2
2. Situation dependency of realization strategies	3
2.1. Head acts per DCT situation / correlated with micro-social factors	
2.2. Modifiers per DCT situation / correlated with micro-social factors	4
2.3. Addressers per DCT situation / correlated with micro-social factors	_
3. Co-occurrence between functional elements	5
3.1. Zero-realisations combined with modifiers	
3.2. Non-verbal communication co-occurrence patterns	
3.3. Single versus multiple head act utterances	
3.4. No modification, external and internal modification	6
3.5. Addressers co-occurrence patterns	
<ol><li>Interrelation demographic factors and realization strategy</li></ol>	
4.1. Language groups	
4.1.1 Differences head act choice	
4.1.2. Language group x situation	7
4.1.3. Differences modification choice	
4.1.4. Differences addressers used	8
4.2. Sex	9
4.2.1. Differences head act choice	
4.2.2. Differences modification choice	10
4.2.3. Differences addressers used	
4.3. Linguistic identity	
4.4. Cultural group membership	11
4.4.1. Differences head act choice	
4.4.2. Differences mod choice	12
4.5. Faculty and study programme	13
4.5.1. Differences head act choice by faculty	
4.5.2. Differences head act choice by study programme	14
4.6. Experience abroad	

### 1. General analysis

### 1.1. Head act strategies overall

Most frequent: WELCOME (36%), PLEASURE (19%), PROBLEM (13%), THANKS (5%), ANYTIME (4%), OKAY (4%), ZERO-REALISATION (4%) [multinomial test for equal proportions = p<.001] Head complexity: overall 2574, of these: Single heads: 2303 (89%), multi-heads: 226 (9%) Most common head act sequences: REJECT+THANKS (15), WELCOME+ANYTIME (14), WELCOME+PROBLEM (14), PROBLEM+WELCOME (12), PLEASURE+THANKS (9), WELCOME+PLEASURE (8), WELCOME+THANKS (8)  $\rightarrow$  overall rather infrequent (all sequences below 1% of answers)

### **1.2.** Modification strategies overall

**Most frequent:** MUTUAL (19%), RECIPROCATE (15%), COMMONPLACE (14%), JOY (13%), RELATIONSHIP (10%), CRITICISM (5%), AGAIN (5%), GROUNDER (5%), DOWNPLAY (5%)

[multinomial test for equal proportions = p<.001]

**Modified versus unmodified:** overall 2574, of these: 1777 unmodified (69%), 797 utterances modified (31%), 942 modifications overall (internal + external)

**Head complexity x modification:** Single head only: 1642 (64%), single head modified: 661 (26%), multihead only: 135 (5%), multi-head modified: 136 (5%) -> multi-heads (relatively) much more likely to be modified

## 1.3. Addressers used overall

**Most frequent:** TITLE-G: 623 (67%), TITLE-A: 128 (14%), NICK\_DEAR: 90 (10%), KIN: 35 (4%), NICK: 31 (3%) [multinomial test for equal proportions = p<.001]

**Frequency of addresser used:** 919 out of 2574 HAs overall (36%), 1665 HAs without (64%) **Combinations head act x address:** Not highly informative, all frequently used addressers combine most frequently with WELCOME; in relative terms, THANKS has a high frequency of addressers (61% with addresser, mostly TITLE-G); KIN and NICK more frequently combined with ANYTIME, OKAY (for KIN) and PROBLEM (for NICK), but numbers are quite small for all these (<12 occurrences)

**Combinations external modification x address:** Most common are MUTUAL: 74 (56% of answers with this external modification strategy has addressers), JOY: 33 (36%), COMMONPLACE: 22 (23%), RECIPROCATE: 21 (20%), AGAIN: 17 (49%), RELATIONSHIP: 16 (23%), WISH\_WELL: 11 (61%) and GROUNDER: 10 (29%)

ightarrow probably can be explained by mutual co-occurrence in specific DCT situations

## 1.4. Differences oDCT versus wDCT

Head act strategies: Moderate differences in some strategies: WELCOME (oDCT: 33% <-> wDCT: 42%), PROBLEM (oDCT: 18% <-> wDCT: 13%), ZERO-REALISATION (oDCT: 3% <-> wDCT: 5%), THANKS (oDCT: 8% <-> wDCT: 4%); PLEASURE is basically the same (oDCT: 21% <-> wDCT: 20%) [multinomial homogeneity test chi square = p<.001]

**External mods:** Only minor differences (less than 3% from combined average) with the exception of RECIPROCATE (oDCT: 11% <-> wDCT: 17%)

#### Addressers: Not different in oDCT <-> wDCT (both 36%)

[multinomial homogeneity test chi square = p=.984]

#### 2. Situation dependency of realization strategies

Situation 2:	In between classes, a classmate you don't know very well used your phone to make an urgent phone call and, when returning it, says: "Thank you." You respond:
	Another option is to say nothing. If you prefer to say nothing in this situation, please explain why:
Situation 5:	You helped your lecturer carry some heavy equipment from class back to the office. When you leave the office, the lecturer says "Thank you." You respond:
	Another option is to say nothing. If you prefer to say nothing in this situation, please explain why:
Situation 11:	You and a classmate (who is your friend) are sharing a taxi. Your friend forgot to bring any money, so you pay for both of you. Your friend says "Thanks". You respond:
	Another option is to say nothing. If you prefer to say nothing in this situation, please explain why:
Situation 16:	Today is your first class with a new lecturer. You participated very actively in class. Afterwards, the lecturer comments on your contributions in class and says "Thank you." You respond:
	Another option is to say nothing. If you prefer to say nothing in this situation, please explain why:

Figure 1: RTT scenarios in the QSAE (Schröder, Sickinger & Schneider 2024: 7)

#### 2.1. Head acts per DCT situation / correlated with micro-social factors

**Influence of power difference:** Power is a moderately good predictor, but only if averaged across scenarios; only PLEASURE is divided along these lines for all four DCT scenarios (average proportion of PLEASURE = power:equal 12%, power:up 25%); the next biggest difference is for PROBLEM (power:equal 17%, power:up 8%), but here sit.2 and sit.5 are basically identical, whereas sit.11 and sit.16 are notably different; also notable is THANKS (power:equal 2%, power:up 9%), but primarily due to a spike for sit.16 (class)

[d-tree with target: power, feature: HA\_strategy splits along these lines with 0.615 test accuracy]

**Situation dependency:** More sensible to connect individual HA strategies to specific DCT scenarios:

WELCOME - phone (sit. 2) and carry (sit. 5) high, taxi (sit. 11) and class (sit. 16) low

PLEASURE - carry and class high, taxi low

PROBLEM - taxi high, class low

THANKS - class high, all others low

OKAY - taxi high, others low ANYTIME - taxi high, class low NONVERBAL - class high, others low MENTION & WORRY - taxi high, others low [contingency table strategy x situation chi square = p<.001 -> not equally distributed across situations]

### 2.2. Modifiers per DCT situation / correlated with micro-social factors

Situation dependency occurrence: Some situations far more frequently modified than others: Less in sit 2 (13%), sit 5 (15%) and sit 17d (11%), more in sit 11 (45%) and sit 16 (39%) → clearly not power difference but concrete communicative scenario relevant here [multinomial homogeneity test chi square = p<.001 -> not homogeneously distributed] Situation dependency type: Strong situation dependency for individual types: MUTUAL -> sit.16 (96% of occurrences) RECIPROCATE -> sit.11 (91%) COMMONPLACE -> sit.11 (63%) RELATIONSHIP -> sit.11 (66%) CRITICISM -> sit.2 (55%) GROUNDER -> sit.16 (60%) DOWNPLAY -> sit.16 (71%) JOY alone is rather evenly distributed, with most occurrences in sit.5 (39%) [contingency table top 5 frequent strategies x situation chi square = p<.001 -> not equally distributed

across situations]

### 2.3. Addressers per DCT situation / correlated with micro-social factors

**Situation dependency occurrence:** Clear interaction with situation (frequent in 5, 16, 17d – all power:up); power:up scenarios have addressers in 55% of utterances, power:equal in 14% [multinomial expected proportions test chi square = p<.001]

Generally, addressers are used in more than 50% of DCT answers only in sit.5 (59%) and sit.17d (58%), while sit.16 has an almost even split (49% addressers used); addressers are used in less than 20% of answers to sit.11 and less than 10% of sit.2

**Situation dependency type:** TITLE-A & TITLE-G are most frequent in sit 5, 16, 17d (all power:up), NICK\_DEAR, KIN and NICK in sit 2 and 11 (power:equal)

[contingency table type x situation chi square = p<.001 -> not equally distributed across situations] [d-tree with target: power, feature: address\_type splits with 0.995 test accuracy -> LN, TITLE-A & TITLE-G are "power\_up", everything else is "power\_equal"]

#### 3. Co-occurrence between functional elements

### 3.1. Zero-realisations combined with modifiers

Interaction type of modifier (replacing canonical head act) and situation: Most ZERO + modifier combinations in sit.16 (class) (50 modifiers, 38%) & sit.11 (taxi) (42 modifiers, 32%), but diverging types -> RECIPROCATE, CRITICISM and RELATIONSHIP in sit.11, MUTUAL, DOWNPLAY, COMMONPLACE and APPRECIATE in sit.16; JOY is frequent in sit.16, but equally so in sit.5 (carry), where it accounts for 55% of external modification, and overall the most frequent external modification paired with ZERO NB: Fairly low numbers for all these strategies, as total is 117 in utterances, 130 in modifiers [contingency table mod\_type x situation chi square = p<.001 -> not equally distributed across situations] [d-tree with target: sit 11 or 16, features: top 8 mod\_types (N>=9) splits with 0.938 test accuracy -> RECIPROCATE, CRITICISM and RELATIONSHIP are "sit 11", all else are "sit 16"]

#### 3.2. Non-verbal communication co-occurrence patterns

**Common types:** 96 occurrences overall, most common types are SMILE (44%), NO\_RESPONSE (33%), NOD+SMILE (11%) and NOD (8%)

**Situation dependency:** Large majority occurs in sit.16 (class) (71%), sit.16 also dominant for all individual types; least frequent in sit.11 (taxi) (3%)

**Co-occurrence with HA strategies:** Majority co-occur with HA realisation NONVERBAL (68%) – meaning no verbal HA occurs at all; SMILE co-occurs with WELCOME (21% of SMILE occurrences), PLEASURE (10%) and a variety of other HA realisations (in small numbers)

Looking at NONVERBAL as a HA realisation only, NO\_RESPONSE is the most frequent strategy here (44%), followed by SMILE (30%) and NOD+SMILE (16%); all of these occur predominantly in sit.16 (class) [multinomial nonverb\_count per situation chi square = p<.001 -> not equally distributed] [contingency table nonverb\_type x HA strategy chi square = p=0.011 -> not equally distributed, but at lower significance level]

# 3.3. Single versus multiple head act utterances – co-occurrence with HA types, situations, modifiers

**Frequency occurrence:** Single-heads: 2303, double-heads: 226, triple-heads: 38, only 7 above that; varies from 66% multi-head answers for REJECT to 12% multi for WELCOME and PLEASURE; ZERO has 100% single head, necessarily so; average occurrence of multi-head HAs is 45%, but that figure is boosted by low-frequency HA types (MIND and COURSE at 100% multi); THANKS is notably high at 51% multi-head use, WORRY at 57%

[multinomial multihead\_count x HA strategy chi square = p<.001 -> not equally distributed]

**Distribution situations:** Minor differences across situations, ranging from N=35 (sit 5) to N=79 (sit 11) for double-heads; appears not to be separated by power difference, but rather situations with higher R (value or extent of the thankable) trigger more multi-heads

Ranking: sit.11 (96) > sit.16 (63) > sit.2 (55) > sit.5 (40)

[multinomial expected proportions test chi square = p<.001]

# **Co-occurrence with modifiers:** 31% single-heads modified, 50% multi-heads modified (overall: 31% modified)

[binomial chi square = p<.001]

#### 3.4. No modification, external and internal modification

**Frequency occurrence:** 2574 heads total, 1777 (69%) without modification, 552 (21%) ext\_mod only, 175 (7%) int\_mod only, 70 (3%) ext+int\_mod

**Int\_mod across situations:** Internal modification distributed quite homogenously across situations (ranges from 58 to 61) and almost all are INTENSIFIERS (212 out of 250 total), followed by EMOTION (36/250)

**Ext\_mod across situations:** Varies strongly across situations (cf. 2.2), ranking based on proportion of DCT answers with ext\_mod: sit.11 (45%) – sit.16 (39%) – sit.5 (15%) – sit.2 (13%) – sit.17d (11%) [multinomial chi square = p<.001]

#### 3.5. Addressers co-occurrence patterns

Co-occurrence with situation and power (count and type) reported in 2.3

**Co-occurrence with HA types:** Notable variation by HA type (relative to HA type frequency) -> highest percentage for THANKS (60%), followed by ANYTIME (48%), REJECT (46%) and WELCOME (41%); lowest percentage combined with addresser for ZERO (16%), WORRY (20%), SURE (20%) and MENTION (25%) [contingency table HA\_type x address\_present chi square = p<.001 -> significantly contingent on HA type for first head act x first addresser]

**Combinations address type and HA types:** TITLE-A, TITLE-G and NICK\_DEAR most commonly combined with WELCOME, but not for KIN (ANYTIME & OKAY) and NICK (PROBLEM); probably interacts with situation, KIN and NICK are most common in sit.11 (taxi), TITLE-A and TITLE-G in sit.5 (carry) and sit.16 (class); NICK DEAR is most common in sit.11 (taxi), followed by sit.2 (phone)

[contingency table HA\_type x address\_type chi square =  $p<.001 \rightarrow significantly contingent on HA type for 7 most frequently combined HA types x 5 most frequent addressers]$ 

[d-tree with target: address type, features: situation & HA type splits successfully, but only with 0.198 test accuracy; situation is identified as the much more relevant feature [83.97]; HA type only further subdivides in branch with sit11 and sit2]

#### 4. Interrelation demographic factors and realization strategy

#### 4.1. Language groups

### 4.1.1 Differences head act choice

Notable relative differences between groups, with WELCOME highest (42% only L1 & 40% combined) and PLEASURE lowest (both 17%) for Bantu speakers, the opposite true for speakers with Afrikaans as an L1 (WELCOME 19%, PLEASURE 29%); PLEASURE is similarly high for Germanic L1 only (27%) with WELCOME at 24%; PROBLEM (21%) is highest for Germanic L1 only, followed by Afrikaans speakers (20%); the Khoisan plus any other L1s group use PLEASURE as frequently as the Afrikaans L1 group (29%), but have a higher percentage of WELCOME (25%)

[contingency table with main language groups chi square p<.001, see below]

[d-tree is unstable and has very low test accuracy]

#### 4.1.2. Language group x situation

Contingency table HA choice with the main language groups (Bantu, Khoisan, Germanic, Bantu+Khoisan, Bantu+Germanic, Khoisan+Germanic) is overall highly significant (p<.001), but the specific situation is a major interacting factor in this: The test is highly significant for sit.2 (phone – p=.006), significant for sit.11 (taxi – p=.016), not significant for sit.16 (class – p=.167) and clearly not significant for sit.5 (carry – p=.328)

Looking at all speakers of a language versus all others (variable "Bantu\_in\_it" etc.), all are highly significant in total (p<.001) but differ according to situation:

**Bantu language speakers' HA choice** differs highly significantly in sit11 (p<.001) and sit16 (p=.008), significantly in sit2 (p=.033) and not significantly in sit5 (p=.203)

**Khoisan language speakers** differ significantly in sit11 (p=.018) and sit16 (p=.05), but not in sit2 (p=.703) and sit5 (p=.382)

**Germanic language speakers** differ highly significantly in sit2 (p<.001), sit11 (p=.001) and sit5 (p=.009), but not in sit16 (p=.246)

**Afrikaans speakers** have the same trend as the Germanic group, with all situations highly significant (p<.001) and sit16 slightly less so, but still significant for this group (p=.013)

-> it can be argued that dividing the population by comparing the Afrikaans L1 speakers with everyone else gives us the most significant differences in HA choice across situations; in comparison, Bantu language speakers are not that distinct from the others in sit5, Khoisan language speakers in sit2 and sit5 and Germanic language speakers in sit16

### 4.1.3. Differences modification choice

RTT modified externally in 28% of cases, fairly evenly spread across language groups (ranging from 25% Bantu only to 33% Germanic combined)

Viewed as **differences in frequency of occurrence per 100 RTT between groups**, there are hardly any noteworthy differences to report, with the average difference between MIN and MAX across groups and mod types at 1.44 (per 100 utterances); biggest differences in frequency (between MIN and MAX across groups) is for MUTUAL (Khoisan only: 8.00 <-> Bantu only: 4.49 -> difference: 3.51) followed by COMMONPLACE (Bantu combined: 4.07 <-> Khoisan only: 1.6 -> difference: 2.66)

Viewed as the **percentage of each external modification type against the total external modifications used within each language group**, only three stand out (in the sense of a notable divergence from the overall average):

MUTUAL here makes up 29% of exmods for Khoisan only <-> 18% for Bantu only (average: 23%) COMMONPLACE is at 15% for Bantu only <-> 5% for Afrikaans only, 6% Khoisan only (average: 10%) WISH\_WELL is at 7% for Khoisan combined <-> 1% Germanic only (average: 3%)

[contingency table main language groups x exmod type is not significant, p=0.556]

[contingency table main language groups x exmod types with N>=18 is not significant either, p=0.297; same exmod types x **situation** is significant at p<.001!]

[contingency table for only MUTUAL+COMMONPLACE+WISH\_WELL x main language groups is significant, p=.017 with same exmods x situation still at p<.001]

[d-tree with MUTUAL+COMMONPLACE+WISH\_WELL as targets and main language groups and situation as features achieves test accuracy of .76, but does not split by language group at all – sit.16 -> MUTUAL,

sit.5 -> WISH\_WELL, all other sits -> COMMONPLACE; feature importance is situation = 92.36%, language group = 7.64%]

[d-tree with MUTUAL+COMMONPLACE+WISH\_WELL as targets and only main language groups as feature splits twice at a test accuracy of .6, with COMMONPLACE sorted with Bantu+Germanic and Khoisan+Germanic]



Figure 2: Decision tree MUTUAL + COMMONPLACE + WISH\_WELL (targets) with main language group and DCT situation as factors



Figure 3: Decision tree MUTUAL + COMMONPLACE + WISH\_WELL (targets) with main language group as factor

### 4.1.4. Differences addressers used:

(all below just for first addresser used, which covers a large majority of all addressers in the data) Relative differences in frequency of addresser type usage exist; percentages for addresser types (N>=5) in main language groups range from 29% (Germanic only & Afrikaans only) to 42% (Khoisan+Germanic), with the largest group close towards the higher end (Bantu only = 36%)

Type of addresser preferred by L1 group differs notably, with TITLE-G least used in the Bantu group (65% of this group's addressers), most by Khoisan (83%) followed by Germanic and Afrikaans (both 82%) The Bantu group conversely has most uses of TITLE-A (16% of this group's addressers), with the Khoisan+Germanic group at 0 occurrences (0%)

NICK\_DEAR is used most by the Khoisan+Germanic group (18%), least by Bantu+Germanic (4%) KIN and NICK, by contrast, are used most by Bantu+Germanic (9% and 6%), whereas KIN has no occurrences in Khoisan (0%) and NICK is very low overall, with no occurrences in Afrikaans only (0%) Overall, the data is heavily skewed towards TITLE-G (ranging from 24% to 31%), which makes the overall analysis less informative

[contingency table main language groups x address type main three (TITLE-G, TITLE-A, NICK\_DEAR) chi square p<.001, but with small Cramer's V at .134]

[same contingency table with sex as layer shows that language group is highly significant for female, p<.001 and not significant for male, p=.556]

[d-tree with address type main three as targets and main language groups, HA 1 used and DCT situation as features **splits only for situation, with 97.33% feature relevance** -> implies that this is the one factor that determines addresser use, specifically sit11 and sit2 -> NICK\_DEAR, the other three -> TITLE-G; it appears the split is clearly based on P differing across situations, also see above]



Figure 4: Decision tree TITLE\_A + TITLE\_G + NICK\_DEAR (targets) with main language group, HA1 and DCT situation as factors

### 4.2. Sex

### 4.2.1. Differences head act choice

Not considering the few participants who chose "prefer not to disclose", HA strategy choice is significantly different between male and female participants (p<.001), but not equally so in all situations; gender differences are significant in sit.2 (p=.011), sit.11 (p=.024) and sit.5 (p=.039), but not sit.16 (p=.8) Compared relatively, the differences are rather limited: All major HA strategies are less than 3% apart, except for WELCOME (f: 40% m: 36%) and PLEASURE (f: 19% m: 23%) -> could be co-dependent with language groups, but numbers across language groups are fairly evenly distributed

[contingency table HA strategy x sex with main L1 group as layers is highly significant overall p<.001, and

significant for all groups **except Bantu only speakers**, p=.23, Cramer's V=.088] [d-tree with target HA strategy and features sex and main NL group splits for language group first, splitting off Bantu for WELCOME, then subdivides all other L1 groups for sex with m=PLEASURE, f= WELCOME – but test accuracy is subpar at .048 and tree varies on repetition; relative feature importance is L1 = 82%, sex = 18%]



Figure 5: Decision tree HA strategy (targets) with main language groups and participant sex as factors

## 4.2.2. Differences modification choice

Differences between female and male are not significant (p=.55); male participants use relatively more JOY (residual at +5.4) and RELATIONSHIP (+3.5), female participants more MUTUAL (residual at +6) and RECIPROCATE (+4.7)

[contingency table exmod type x sex -> chi square is significant at p=.55]

[d-tree with target exmod type and sex and situation as features has low test accuracy and splits only for situation, with feature importance at 0% for sex]

### 4.2.3. Differences addressers used

Differences in use of main three addresser types (TITLE-G, TITLE-A and NICK\_DEAR) not significant between f and m in contingency table (p=.281); there is an interaction of sex and language group, though, see 4.1.4.

### 4.3. Linguistic identity

4.3.1. Differences head act choice:

Only linguistic identity groups with N HA1 > 80 considered in the analysis (and group names not standardised and consolidated yet):

Group size linguistic identity based on first HAs only			
Identity Language 1	Count of IdentityL_1		
English	930		
Oshiwambo	544		
Afrikaans	194		
Oshikwanyama	182		
Otjiherero	110		
Oshindonga	87		
Khoekhoegowab	86		

Percentage of use relative to HAs per group is notably varied only for the three most frequent HA strategies (max difference between groups > 10%):

WELCOME (36% overall) is used with higher than average frequency by Oshikwanyama (50%), Oshindonga (45%), Oshiwambo (42%) and Otjiherero (42%); low use for Afrikaans (18%), English (34%) and KKG (27%) are in between

PLEASURE (19% overall) conversely is used most by Afrikaans group (38%), least by Oshiwambo (15%), Oshikwanyama (16%) and Otjiherero (17%); English, Oshindonga and KKG are in between, with English group equal to the overall average

PROBLEM (12% overall) is used more than average by Afrikaans group (18%), Otjiherero (17%) and English group (16%); it is least used by Oshikwanyama (6%) and Oshindonga (6%), with Oshiwambo and KKG in between

[contingency table with identity language groups >80 HAs total and HA strategies >50 occurrences -> chi square p<.001)

## 4.4. Cultural group membership

## 4.4.1. Differences head act choice

Largely similar to language groups, but more differentiated due to more fine-grained categorisation into demographic groups; note that some group sizes are fairly small due to this, though

Biggest divergence between groups for WELCOME (36% overall): High for Subia (50%), Kavango (43%), Owambo and Herero (both 40%), with others also at 40%; low for Baster (21%) and Colored (22%) and extremely low for Afrikaner (4%)

PLEASURE (19% overall) is particularly low for Caprivian (10%), with Owambo at 17%; highest occurrence for Afrikaner group (39%), high for Baster (34%), Himba (33%) and Colored (28%)

PROBLEM (12% overall) is used most frequently by Baster group (32%), with fairly frequent use by Afrikaner group (25%), Caprivian (23%) and Colored (22%); low for Owambo (11%), KKG (8%), Subia (6%) and no occurrences for Himba (0%)

# As for the smaller categories, THANKS (5% overall) stands out for the Himba group at 20%, and WORRY (2% overall) is markedly high for Afrikaner group (14%)

[contingency table with cultural groups > 20 HAs and realisation strategies >50 -> chi square p<.001 overall, but differs by DCT situation: Highly significant in sit.2 (p=.005), significant for sit.5 (p=.014), almost significant for sit.16 (p=.069), clearly not significant for sit.11 (p=.343)]

% of	Size cultural groups in number	Cultural group	N of HA1s	Preferences HA choice (based on percentage of
total	of participants			mods used by respective group)
55%	331	Owambo	1416	+ WELCOME, - PLEASURE, -PROBLEM
10%	58	Nama/Damara	257	- WELCOME, + PLEASURE, + PROBLEM
7%	44	Herero	190	- PLEASURE, + PROBLEM
7%	40	Other	167	+ WELCOME, + PROBLEM
4%	26	Kavango	112	+ WELCOME, + PROBLEM
3%	20	N/I	83	- WELCOME, + ZERO
3%	17	Baster	70	WELCOME, ++ PLEASURE, ++ PROBLEM
2%	14	Colored	62	- WELCOME, + PLEASURE, + PROBLEM
2%	14	Caprivian	59	WELCOME, - PLEASURE, ++ PROBLEM, + ZERO, +
				ANYTIME
1%	8	KKG	33	- WELCOME, + PLEASURE, - PROBLEM
1%	7	Subia	29	++ WELCOME, - PROBLEM
1%	6	Himba	26	WELCOME, ++ PLEASURE, - PROBLEM, - ZERO, ++
				THANKS, + ANYTIME
1%	6	Afrikaner	25	WELCOME, ++ PLEASURE, ++ PROBLEM, +
				WORRY
1%	5	Shona	20	
0%	2	German	8	
0%	1	English	5	
0%	1	South African	4	
	Total participants: 600	Total HAs:	2566	

#### **Overview preferences HA realisation per cultural group:**

### 4.4.2. Differences mod choice:

Pronounced differences for all (frequent) mod strategies due to the fact that in each case at least one group has 0 occurrences; distribution differs quite strongly between groups, too

Note that overall percentages are strongly influenced by (and similar to) Owambo group which has 55% of participants in it

Overall frequency of modification per RTT HA varies between 0.38 for Subia and 0.13 for Kavango (overall average at 0.27); KKG is also low at 0.18, Caprivian (0.37) also quite high

MUTUAL (19% overall) is most pronounced in that it is quite high relative to total modification strategies per cultural group for Afrikaner (40%), Baster (39%) and KKG (36%); it is at 0 for Subia (0%), low for Caprivian (5%) and Kavango (7%)

GROUNDER (5% overall) is very high for Subia (33%) and high for Afrikaner (20%), at 0% for 6 other groups

RECIPROCATE (15% overall) is notably high for Colored (28%), at 0% for Subia and Afrikaner group COMMONPLACE (14% overall) is highest for Herero (24%) followed by Afrikaner (20%), with Baster and Himba at 0%

JOY (13% overall) is markedly high only for Caprivian group (23%), at 0% for Subia and Afrikaner RELATIONSHIP (10% overall) is higher for Kavango (20%) and Nama/Damara (19%), followed by Subia (17%); it is at 0% for KKG, Himba and Afrikaner

CRITICISM (5% overall) is markedly high for Kavango (27%) and high for Subia (17%), Caprivian (14%) and Himba (13%), low or at 0 for most other groups

[contingency table with cultural groups >20 HAs and mod strategies >20 occurrences -> significant with chi square p=.023; significant for female participants (p=.048) but not for male participants (p=.198)]

Overview	preferences	modification	per	cultural	group:
over view	prererences	mouncation	PC.	curturur	Promb.

% of	Size cultural groups in number	Cultural group	N of HA1s	Preferences mod choice per group (based on
total	of participants			difference to overall percentage)
55%	331	Owambo	1416	close to overall average, rather balanced spread
10%	58	Nama/Damara	257	more MUTUAL & RELATIONSHIP, less
				COMMONPLACE
7%	44	Herero	190	more MUTUAL & RECIPROCATE
7%	40	Other	167	more COMMONPLACE, less MUTUAL
4%	26	Kavango	112	more CRITICISM & RELATIONSHIP, less MUTUAL
3%	20	N/I	83	more HUMOUR & RECIPROCATE, less
				COMMONPLACE
3%	17	Baster	70	more MUTUAL & RECIPROCATE, less
				COMMONPLACE & RELATIONSHIP
2%	14	Colored	62	more MUTUAL, RECIPROCATE & AGAIN, less
				COMMONPLACE
2%	14	Caprivian	59	more DOWNPLAY, CRITICISM & COMMONPLACE,
				less MUTUAL
1%	8	KKG	33	more GROUNDERS, less MUTUAL & RECIPROCATE
				(etc)
1%	7	Subia	29	more MUTUAL, less RELATIONSHIP
1%	6	Himba	26	more WISH_WELL, CRITICISM & MUTUAL, less
				RECIPROCATE (etc)
1%	6	Afrikaner	25	more MUTUAL, EXTENSION & COMMONPLACE,
				less RECIPROCATE (etc)
1%	5	Shona	20	
0%	2	German	8	
0%	1	English	5	
0%	1	South African	4	
	Total participants: 600	Total HAs:	2566	

#### 4.5. Faculty and study programme

### 4.5.1. Differences head act choice by faculty

Only faculty groups with N HA1 >= 80 considered in the analysis (and entries for faculty not standardised and consolidated yet):

Group size faculties based on first HAs only			
Faculty	Count of Faculty		
Education & Human Sciences	1201		
Commerce, Management & Law	482		
Medicine	235		
Health Sciences & Veterinary Medicine	86		
Agriculture, Engineering & Natural Sciences	80		

Some notable divergences between faculty groups for HA strategies > 100 occurrences (max difference between groups > 5%):

WELCOME (36% overall) highest for Agriculture, Engineering & Natural Sciences (49%), lowest for Medicine (33%), other groups slightly higher than average

PLEASURE (19% overall) highest for Medicine (26%) and Agriculture, Engineering & Natural Sciences (23%), lowest for Health Sciences & Veterinary Medicine (12%), roughly at average for the others

# PROBLEM (12% overall) slightly higher for Commerce, Management & Law (15%) and slightly lower for Agriculture, Engineering & Natural Sciences (9%)

# OKAY-D (4% overall) markedly high for Health Sciences & Veterinary Medicine (10%), all other groups close to average

[contingency table with faculty groups >= 80 HAs and realisation strategies >100 -> chi square p=.002; highly significant for female participants (p=.003) and for male participants (p=.009)] [contingency table with faculty groups >= 80 HAs and realisation strategies >50 -> chi square p=.009; significant for female participants (p=.01), but not for male participants (p=.17)]

# 4.5.2. Differences head act choice by study programme

Only faculty groups with N HA1 >= 50 considered in the analysis (and entries for faculty not standardised and fully consolidated yet):

Group size programme based on first HAs only		
Programme	Count of Progr.	
Psychology	290	
English	102	
LLB	80	
Education	56	

Notable differences in HA strategy preference for several strategies with > 50 occurrences overall; strongest divergence for Education group

WELCOME (36% overall) is slightly below overall average for the other three groups, above average for Education (41%)

PLEASURE (19% overall) is higher for Psychology (23%), much higher for Education (38%), close to average for the other two

PROBLEM (12% overall) is moderately higher for all groups except for Education (2%)

ANYTIME (4% overall) is markedly higher for Education (13%), at or slightly above average for all other groups

English group has more SURE than average (7% > 2%), LLB has more WORRY than average (7% > 2%), Psychology more OKAY-D than average (7% > 4%)

[contingency table with programme groups > 50 HAs and realisation strategies >50 -> chi square p=.002]

# 4.6. Experience abroad

Basic comparison between those not indicating living outside Namibia at all (value "0" for variable "Lived\_outside1") versus all other entries; counting first HAs only, 2241 are produced by participants with no experience abroad (87% of HA1s) versus 325 with experience abroad (13%)

Comparison even between most frequent HA realisation strategies (for HA 1 to 3) does not show any noteworthy differences:

WELCOME is at average (36%) for those with experience abroad, slightly higher (38%) or those without PLEASURE is at average for those without experience abroad (19%), slightly higher for those with (20%) All other differences are 2 percentage points or less from average, therefore this factor is not considered relevant to HA strategy choice for our group of informants