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# Modals and conditionals in instrumental practical reasoning: the case of Polish

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## Abstract

This paper investigates the relation between conditionals and modals in Polish. In particular, it looks into whether modalised indirect reports of conditionals – specifically, reports which involve the use of root modality verbs – reflect the number of alternative antecedents foregrounded in the context of the reported conditional utterance. It has been found that the root possibility modal *mogę* is preferred when many alternative antecedents are foregrounded (i.e. when  $p$  is interpreted as a sufficient but not necessary condition for  $q$ ), whereas the root necessity modal *muszę* is preferred in contexts where there are no alternative antecedents (i.e. when  $p$  is interpreted as a necessary condition for  $q$ ). The results are comparable to those obtained for English (c.f. Sztencel and Duffy 2018), thus providing initial support for their cross-linguistic generalisability. Furthermore, a parallel is drawn between the basic structure of instrumental practical reasoning (e.g. Walton 2007) and modalised indirect reports of conditionals. This parallel offers a rationale for the method of investigating instrumental practical reasoning by the proxy of indirect speech reports.

## 1 Introduction

Instrumental practical reasoning (henceforth, IPR) is a chaining of inferences in which an agent draws a conclusion about what state of affairs to bring about based on two premises: the goal premise, which states the agent's goal, and the conditional premise, which states a means of reaching that goal (Walton 2007, pp. 31-34). Following Walton (*ibid*; c.f. Kratzer 2012), we assume the basic structure of IPR in (1), where A and B represent states of affairs:

- (1) a. Bringing about A is my goal.
- b. Bringing about B is necessary (or in some cases sufficient) for bringing about A.
- c. Therefore I should bring about B.

Now consider (2), which follows the structure of (1).

- (2) a. I want to make Mary happy.

- b. (*q*) I will make Mary happy *only if* (*p*) I buy her a good book.
- c. Therefore, I *should* buy Mary a good book.

In (2), the agent reaches a conclusion about what state of affairs to bring about, namely, buy Mary a good book, given the goal premise (a) and the conditional premise (b), which state the agent's aim to make Mary happy and the necessity of buying Mary a good book for reaching this aim, respectively.

Assuming that *should* is a necessity expression (e.g. Kratzer 2012), the necessity of buying Mary a good book is stated in both (b) and (c). Indeed, observe that replacing the modal verb in (c) with a possibility modal such as *could* yields a semantically anomalous result. This anomaly can be explained if we assume the existence of a constraint which prevents a DISSONANCE OF MODALITIES between the conditional premise and the conclusion in practical reasoning – in this case the dissonance between the root possibility conveyed by *could* and the root necessity conveyed by *q only if p*. Given the acceptability of (2), hence the presumed CONSONANCE OF MODALITIES, it seems plausible to assume that *should* in (2) is indeed used to convey root necessity.

However, when used with the force of an injunction, prototypical (or 'strong') root necessity expressions, such as *have to do X*, communicate the speaker's expectation that the hearer will *do X* (e.g. Depraetere & Reed 2006; Palmer 2001; Coates 1983). In contrast, no such expectation is typically present in the case of injunctions that contain *should*. Accordingly, *should do X* is often taken to express the so-called 'weak' root necessity (e.g. Silk 2018; Matthewson & Truckenbrodt 2018; Vander Klok & Hohaus 2020), and communicate a strong suggestion or advice to *do X*, as opposed to placing an obligation upon the hearer.

Now, what *should do X* and *have to do X* have in common is that they both indicate the existence of some compelling reasons to *do X*, but only the latter also signals the absence of other alternatives than the one expressed in the prejacent (*X*). Assuming that strong necessity entails weak necessity (Silk 2018), the utterance of a weak necessity modal conversationally implicates that strong necessity does not obtain, but – crucially – such an utterance is not semantically inconsistent with strong necessity. Hence, it is plausible to assume that *should do X* can be used in strong necessity contexts (i.e. when no other alternatives to the one expressed in the prejacent are believed to exist) when (i) the absence of alternatives is (already) indicated in the context, as in (2b), or when (ii) speakers have some pragmatic reasons to avoid committing themselves to *strong* necessity. One such situation is when a

speaker wishes to avoid placing/appearing to place an obligation on the hearer to do X, i.e. wishes to avoid an imposition. In such a situation, choosing *should* over *have to* allows the speaker to mitigate a threat to the hearer's negative face-want (as defined in Brown & Levinson 1987). It is this pragmatic property of *should*, to trigger the scalar implicature, which accounts for its interpretive indeterminacy in deontic contexts.

In relation to Polish, Jędrzejko (1987, cited in Rydzewska-Sięmiątkowska 2016) explains the difference between strong and weak root necessity modals in terms of implied incentives: whereas the strong necessity modal *muszę* foregrounds the negative consequences for the hearer of not performing a given action, the weak necessity modal *powinienem* foregrounds the positive consequences of performing that action. Even though this account does not explicitly rely on the presence/absence of alternatives other than the one expressed in the prejacent, it is consistent with our analysis of *should* as a potential negative face-threat mitigation marker.

Coming back to IPR, so far we have considered an example where the necessity of B for A, marked in the conclusion with *should*, is consonant with the necessity of B for A overtly marked in the conditional premise with the necessity expression *q only if p*. However, the question that we are interested in concerns the consonance of modalities in cases where the modality of the conditional premise is not overtly marked in that premise but is contextually available, as is the case with *if p, q* conditionals. In particular, we are concerned with two interpretations of *if p, q* – when *p* is necessary or when it is sufficient but not necessary for the truth of *q* – and the question of how these two interpretations interact with the modality of the conclusion in IPR.

The variable of alternative antecedents (e.g. Politzer 2004; Thompson 1994, 1995, 2000; von Stechow 2001) is crucial to answering this question and we distinguish two relevant conditions for this variable.

**No alternative antecedents condition.** If there are no antecedents other than *p* to make *q* true, then *p* is necessary for *q*. In relation to IPR, if there are no alternatives other than B to bring about A, then B is necessary, and the conclusion is predicted to express root necessity.

**Several alternative antecedents condition.** If there are some antecedents other than *p* to make *q* true, then *p* is sufficient but not necessary for *q*. In relation to IPR, if there are alternatives other than B to bring about A, then B is sufficient but not necessary, and the conclusion is predicted to express root possibility.

We have already discussed the use of *should* and *have to*, and their Polish counterparts *powinienem* and *muszę*, in root necessity contexts. As for root possibility, in English, it can be communicated with the modal verb *could* (Depraetere & Reed 2006). Accordingly, *could* may be used to make suggestions, but not strong suggestions as was the case with *should* (Palmer 2001). Similarly, the Polish verb *mogę*<sup>1</sup> can be used to communicate root possibility, where advice or a weak suggestion to do *X* is grounded in the existence of some enabling circumstances in the world (c.f. Brzdęk 2016). However, it is also plausible to assume that root possibility can be communicated by *should*, and its Polish counterpart *powinienem*, in contexts which involve the ranking of alternatives into better and worse (c.f. Kratzer 2012, p. 60). In such contexts, the use of *should do X*, and *powinienem zrobić X*, communicate that *X* is a better, though not necessary, option out of a set of others. Table 1 summarises the discussion so far.

Table 1. Root uses of *have to*, *should*, *could* and their Polish counterparts *muszę*, *powinienem*, *mogę*.

Modal verb	Root usage
<i>have to</i> ; <i>muszę</i>	- ‘strong’ root necessity
<i>should</i> ; <i>powinienem</i>	- ‘weak’ root necessity, where the absence of alternative antecedents is (already) specified in the context - ‘weak’ root necessity, where the speaker wishes to mitigate the threat to the hearer’s negative face - root possibility, where the prejacent expresses the most highly ranked alternative
<i>could</i> ; <i>mogę</i>	- root possibility

In the light of the above, we look into whether the necessity of  $p(B)$  for  $q(A)$  is lexicalised (with a modal in its root necessity use) in a modalised conclusion of IPR in cases where necessity is contextually available but not overtly represented in the conditional premise. Likewise, we are interested in whether the sufficiency<sup>2</sup> of  $p(B)$  for  $q(A)$  is lexicalised (with a modal in its root possibility use) in a modalised conclusion when sufficiency is foregrounded in the context of *if p, q* conditionals.

<sup>1</sup> The forms of the Polish modals used in this section correspond to those in the questionnaire: *muszę* (1<sup>st</sup> sg, pres.); *powinienem* (1<sup>st</sup> sg, m.); *mogę* (1<sup>st</sup> sg, pres.). In Scenario 4, *powinienem* is in its feminine form *powinnam*.

<sup>2</sup> For conciseness, we use ‘sufficient’ in the sense of ‘sufficient and not necessary’.

For English, Sztencel and Duffy (2018) found that, given the choice of *have to*, *should* and *could*, the verb *have to* is preferred in modalised conclusions of IPR where the necessity of  $p(B)$  for  $q(A)$  is contextually foregrounded (75.7% of cases), whereas *could* when sufficiency is so foregrounded (69.6%). *Should* was the second most frequent choice for both conditions, with 30.4% cases in necessity and 20% in sufficiency contexts.

In this paper, we extend this research further by investigating whether comparable results are obtained in Polish.

## 2 Indirect reporting as a proxy of IPR

The assumption underpinning the study is that in order to investigate the relation between conditionals and modals in IPR, examples of such reasoning can be embedded in the context of indirect speech reports, whereby a reporting speaker  $S'$  uses an utterance  $U'$  to report on the utterance  $U$  made by the reported speaker  $S$ . Crucial to this assumption is the notion of *pragmatic same-saying*: for  $S'$  to successfully report on  $U$ , the reported utterance ( $U$ ) and the reporting utterance ( $U'$ ) do not need the same linguistic form; rather, they need to match at the level of speaker meaning (e.g. Cresswell 2000; Capone 2013, 2016; Wieland 2016).

Let us now embed (2) in the context of an indirect speech report.

(3) Paul wants to buy his friend, Mary, a birthday present. He decides to consult Mary's sister, Joanne, on this matter. Joanne tells Paul: ( $U$ ) "Mary will be happy *only if* you buy her a good book." Paul wants to tell Frank, his roommate, what Joanne has advised. He says to Frank: ( $U'$ ) "Joanne said that I *should* buy Mary a good book if I want to make her happy".

It is plausible to assume that embedded in  $U'$  is a conclusion (*I should buy Mary a good book*) that Paul reached based on two premises: (a) that Joanne knows that he wants to make Mary happy (because he told her so) and that Joanne thinks that buying Mary a good book is necessary for Paul to make her happy (he assumes so based on the *q only if p* construction in Joanne's  $U$ ). Paul's reasoning can be represented schematically as follows:

- (4) a. *x knows that* bringing about A is my goal  
b. *x thinks that* bringing about B is necessary for bringing about A  
c. *x thinks that* I should bring about B

The italicised expressions in (4) signal second-order reasoning (e.g. Meijering et al. 2010). Importantly, the main clause verbs (*knows*, *thinks*) introduce subordinate clauses that parallel

the premises (a, b) and the conclusion (c) in Walton's basic structure of IPR, as represented in (1). It is this parallel which licenses our assumption that the relation between conditionals and modals in IPR can be studied by the proxy of indirect speech reports, such that U represents the conditional premise and U' embeds the conclusion.

Let us now move on to *if p, q* conditionals and their necessity and sufficiency interpretations arising where the necessity or sufficiency of B for A is foregrounded in the context of the conditional premise (U).

Imagine the following two variants of (3):

(5) Paul wants to buy his friend, Mary, a birthday present. He decides to consult Mary's sister, Joanne, on this matter. Joanne tells Paul that Mary loves good literature and doesn't appreciate presents other than good books. She then says to Paul:

If you buy Mary a good book, she'll be happy.

(6) Paul wants to buy his friend, Mary, a birthday present. He decides to consult Mary's sister, Joanne, on this matter. Joanne tells Paul about the many hobbies that Mary has, such as good literature, classical music, horse-riding, and hiking. She then says to Paul:

If you buy Mary a good book, she'll be happy.

In (5), the co-text of U specifies that buying Mary a good book as a present is necessary for Paul to make her happy. Hence, in reporting on U with a modalised U', Paul would be likely to say that, according to Joanne, he *has to* or *should* buy Mary a good book. In (6), however, the co-text lists other sufficient guarantors of making Mary happy. In this context, Paul is likely to assign the sufficiency interpretation to U and so report it with a modalised U' such as *Joanne said that I could buy Mary a good book*. In the case of (5) and (6), same-saying would be achieved pragmatically by virtue of a match between the interpretation of the conditional premise in the context (here co-text) in which it was uttered and the relevant expression in the conclusion.

### **3 The study**

For the current study, the instrument used by Sztencel and Duffy (2018) was translated into Polish.<sup>3</sup> In the Method section below, the English version of the questionnaire is provided; the interested reader is directed to the Appendix for the Polish version.

### **3.1 Method**

#### ***Participants***

170 participants took part in this study. 73 participants were female, 96 were male, and 1 was non-binary. There was an age range of 14 to 75 years and a mean age of 27 years. We excluded two participants for reporting their L1 was not Polish. We removed an additional 10 participants for not ordering their responses. This resulted in the following: 46 in Scenario 1; 39 in Scenario 2; 34 in Scenario 3; 39 in Scenario 4. 15 participants had a BA and 6 an MA degree in linguistics or philosophy. Participants were recruited online via social media postings.

#### ***Materials and procedure***

The participants were working under one of two experimental conditions: Condition I, with several alternative antecedents mentioned in the co-text, and Condition II, with no alternative antecedents mentioned in the co-text (see below). Each condition comprised two scenarios, one involving conditional advice and the other a conditional promise. The survey was created using Google Forms and the social media postings advertising the study contained a hyperlink to the survey.

On the opening page, participants were informed that the study formed part of a larger investigation into the reporting of other people's speech. Following informed consent, participants were asked to choose a random numerical option (1-4), which redirected them to one of the four scenarios. A between-subject design was used to mitigate the effect of metalinguistic awareness on the results (Galambos and Goldin-Meadow 1990). As such, each participant responded to one test question.

#### **Condition I: several alternative antecedents**

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<sup>3</sup> It must be noted that Sztencel and Duffy's (2018) study was exploratory in nature, not confirmatory (e.g. Stebbins 2001). In particular, in order to identify potential variables that may interact with the choice of modals in conclusions and thus become a focus of further study, the scenarios chosen for the experiment varied with respect to a range of socio-pragmatic variables (age or social relation between the interlocutors) and pragma-linguistic variables (illocutionary pluralism). The interested reader is directed to the 2018 paper for a discussion of potential effects of these variables on the English results. For the current study, a Polish version of the same instrument was used to allow the comparison of the English and the Polish data. Any unexpected differences found between the two sets of data may suggest further variables that should be taken into account when developing the instrument in the future.



**Scenario 1:** Paul wants to buy his friend, Mary, a birthday present. He decides to consult Mary's sister, Joanne. Joanne tells Paul about the many hobbies that Mary has, such as good literature, classical music, horse-riding, and hiking. She then says to Paul:

If you buy Mary a good book, she'll be happy.

Paul wants to tell Frank, his roommate, what Joanne said.

**Scenario 2:** Tom is at his Grandma's and he's looking for a way to earn £5. Grandma tells Tom that there are many things he could do to earn £5, such as vacuuming, doing the laundry, doing the dishes, mowing the lawn or doing the shopping. She then says to Tom<sup>4</sup>:

If you mow the lawn, I'll give you £5.

Tom wants to tell his mum what Grandma said.

## **Condition II: no alternative antecedents**

**Scenario 3:** Little Bill is irritated. He's kept a pot of water near the fire for an hour, thinking that the water would boil. But it didn't. His mum says:

If you heat the water up to 100°C, it'll boil.

Little Bill wants to tell his friend what his mum said.

**Scenario 4:** A teenage girl<sup>5</sup> wants to go out. Her father, annoyed with the constant mess in the girl's room, says:

If you clean your room, I'll let you go out.

The teenager is on the phone with her friend. She wants to tell her friend what her father said.

After each scenario, participants were presented with three sentences (in randomised order) which contained *mogę* (could), *powinienem* (should), or *muszę* (have to) in the consequent and the goal premise in the antecedent. They were asked which option the character would be most likely to use to report the original utterance. The following example from Scenario 1 illustrates this:

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<sup>4</sup> Based on the comments gathered in the piloting stage, 'She then says to Tom' was translated as 'She then adds' as a more acceptable translation, which retains neutrality with respect to the illocutionary point (suggestion, request, etc.).

<sup>5</sup> Based on the pilot, the character in the Polish version was assigned a name (Natalia) for stylistic reasons.

Which of the following sentences would Paul be *most likely* to use? You can tick more than one if you feel it's appropriate – if so, please indicate your first/second/third choice.

- a) Joanne said that I could buy Mary a good book if I want to make her happy.
- b) Joanne said that I should buy Mary a good book if I want to make her happy.
- c) Joanne said that I have to buy Mary a good book if I want to make her happy.

Participants answered the test question by ticking their choice(s). Immediately below, there was a comment box for ordering multiple responses. As a small number of informants provided multiple responses (20.3%), only their first choices were included in the analysis.

On the final page, participants provided demographic information: age, gender, native language(s), and country of residence. They then indicated whether or not they had studied linguistics and/or philosophy at university level and, if so, their highest level of study.

**Predictions**

Both scenarios in Condition I foregrounded many alternative antecedents. Hence, we predicted a high preference for *mogę* (could) in both Scenarios 1 and 2. As for Condition II, the lack of alternative antecedents is part of general knowledge (Scenario 3) or is contextually suggested by the father's annoyance (Scenario 4). Hence, we predicted a high preference for *muszę* (have to) in both cases.

**3.2 Results and discussion**

**Condition I: sufficiency contexts (Scenarios 1 and 2)**

In line with our predictions, a chi-square goodness of fit test revealed a reliable difference in preferred response to the question – i.e. *mogę* (could), *powinienem* (should), or *muszę* (have to) – among participants responding to Scenario 1 ( $\chi^2(2,46) = 36.04$ ;  $p < 0.0001$ ), as well as participants responding to Scenario 2 ( $\chi^2(2,39) = 24.15$ ;  $p < 0.0001$ ) (see Table 2). Specifically, as predicted, for both scenarios, participants demonstrated a preference for *mogę* (could), which we attribute to the presence of several alternative antecedents and thus the lack of necessity of *p* for *q*.

Table 2: Responses for Condition I.

	<i>mogę</i> (could)	<i>powinienem</i> (should)	<i>muszę</i> (have to)
Scenario 1	71.73%	28.26%	0.00%
Scenario 2	66.67%	2.56%	30.77%

The results obtained for Scenario 1 are comparable with the English findings for Scenario 1 (c.f. Sztencel and Duffy 2018: *could* 65.7%; *should* 34.3%). Accordingly, we attribute the *powinienem* (should) responses in Scenario 1 to the participants' interpretation of Joanne's U as indicating that getting Mary a good book (*p*) is the better alternative out of the ones mentioned in the co-text.

However, responses to Scenario 2 were more ambivalent than in the English study for Scenario 2 (c.f. Sztencel and Duffy 2018: *could* 85.7%; *should* 5.7%; *have to* 8.6%). The higher number of *muszę* (have to) responses among the Polish participants suggests that root necessity interpretation of the character's (i.e. Grandma's) utterance cannot be ruled out. It may be that Grandma's listing of alternative antecedents (*vacuuming, doing the laundry, etc.*) was taken to represent her "thinking aloud" and Grandma's U to indicate the end point in her process of decision making – i.e. her decision that (*p*) is actually necessary for the current purposes, in the current circumstances. On this interpretation, the choice of *muszę* (have to) over *powinienem* (should) could suggest the participants' lack of attribution of facework intentions to Grandma, which may be due to the asymmetric adult-child context.

Alternatively, if, as we have argued, *should* can also be used where the absence of alternative antecedents is contextually specified (see Table 1), then the presence of alternatives in the co-text of Scenario 2 would make *powinienem* (should) a dispreferred option for the root necessity interpretation.

### Condition II: necessity contexts (Scenarios 3 and 4)

A chi-square goodness of fit test revealed a reliable difference in preferred response to the question – i.e. *mogę* (could), *powinienem* (should), or *muszę* (have to) – among participants responding to Scenario 3 ( $\chi^2(2,34) = 26.88$  ;  $p < 0.0001$ ), as well as participants responding to Scenario 4 ( $\chi^2(2,39) = 74.08$  ;  $p < 0.0001$ ) (see Table 3). Specifically, for both scenarios participants demonstrated a preference for *muszę* (have to).

Table 3: Responses for Condition II.

	<i>mogę</i> (could)	<i>powinienem</i> (should)	<i>muszę</i> (have to)
Scenario 3	2.94%	23.53%	73.53%
Scenario 4	0.0%	2.56%	97.44%

The responses to Scenario 3 were less ambivalent when compared with the English data for Scenario 3 (c.f. Sztencel and Duffy 2018: *should* 51.5%; *have to* 48.5%), which may be reflecting a difference in the participants' attribution of facework strategies in parental advice-giving. Alternatively, it may be that a greater number of Polish respondents interpreted U in Scenario 3 as a statement of general truth rather than an act of advising. Note that only the latter interpretation would trigger the application of facework strategies.

As for Scenario 4, the results were comparable to those obtained for English for Scenario 4 (c.f. Sztencel and Duffy 2018: *should* 11.1%; *have to* 88.9%). The high number of *muszę* (have to) is attributed to the father's annoyance and thus the suspension of any facework considerations on his part.

### Conditions I and II: Compared responses

A Fisher's Exact test revealed a reliable difference in preferred response to the question – i.e. *mogę* (could), *powinienem* (should), or *muszę* (have to) – between participants in Conditions I and II ( $p < 0.0001$ ), with *mogę* (could) being preferred among participants in Condition I, the sufficiency context (69.41%), and *muszę* (have to) being preferred among participants in Condition II, the necessity context (86.30%) (see Table 4).

Table 4: Compared responses for Conditions I and II.

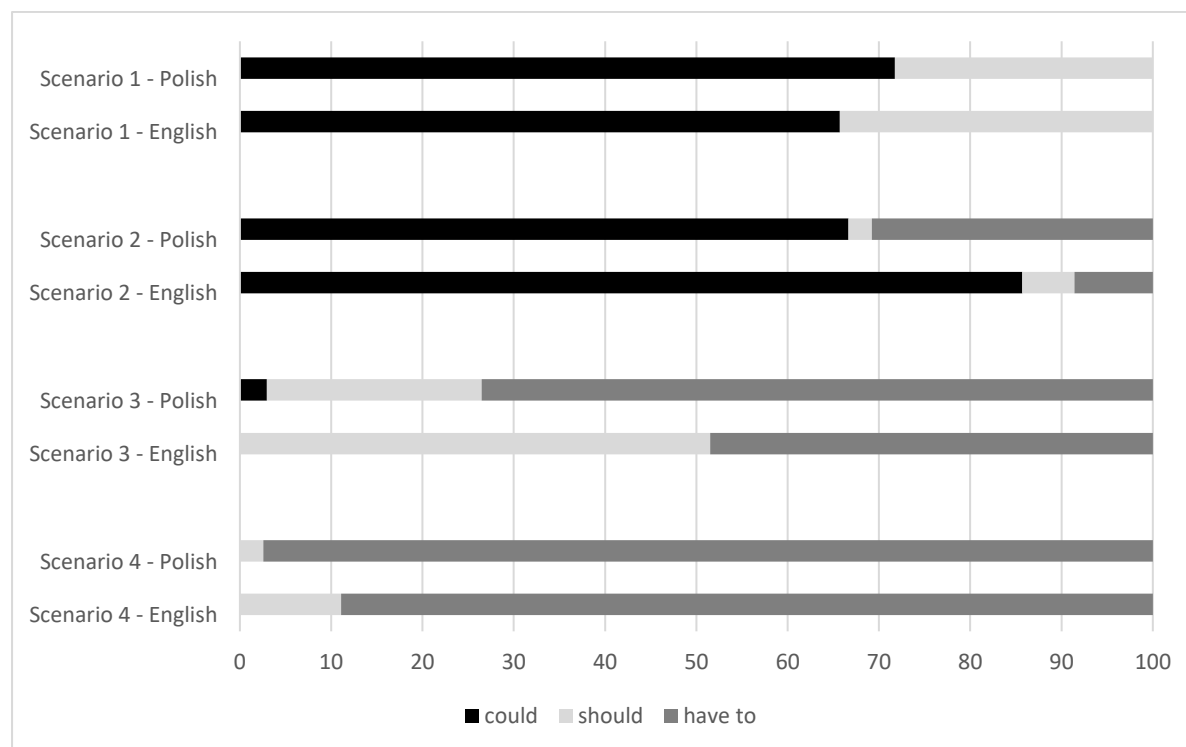
	<i>mogę</i> (could)	<i>powinienem</i> (should)	<i>muszę</i> (have to)
Condition I (Scenarios 1 and 2)	69.41%	16.47%	14.12%
Condition II (Scenarios 3 and 4)	1.37%	12.33%	86.30%

The results of the study corroborate our prediction that root necessity or possibility modals in indirect reports of *if p, q* conditionals in Polish are determined by the absence or presence of alternative antecedents in the context of the reported conditional, respectively. The overall results are comparable with the English findings (see Fig. 1). In particular:

- the results obtained for Condition I (*mogę* 69.4%; *could* 75.7%) indicate that root possibility modals are favoured in indirect reports of *if p, q* conditionals when alternative antecedents are present in the context of the reported conditional; and
- the results obtained for Condition II (*muszę* 86.3%; *have to* 69.6%) indicate that strong root necessity modals are preferred in indirect reports of *if p, q* conditionals

when the absence of alternative antecedents is indicated by the context of the reported conditional.

Figure 1: Polish responses in comparison to English responses (cf. Sztencel and Duffy 2018: 214-215) for Scenarios 1 to 4.



The differences found at the level of specific scenarios, in particular, more occurrences of *muszę* (than *have to*) in Scenarios 2 and 3 in the Polish data compared to the English data, require further investigation, as do the *powinienem* (*should*) cases in both conditions.

Furthermore, assuming, as we have argued, that IPR can be investigated by the proxy of indirect reports, the study has also demonstrated that the necessity/sufficiency in the conclusion (c) of IPR is determined by the absence/presence of alternative antecedents in the context of the conditional premise (b), given the goal premise (a).

#### 4 Conclusion

The study has shown that, in Polish, modalised indirect reports of conditionals reflect the number of alternative antecedents foregrounded in the context of the reported conditional utterance. We have found that the root possibility modal *mogę* (*could*) is preferred when alternative antecedents are foregrounded (i.e. when *p* is interpreted as a sufficient but not necessary condition for *q*), whereas the strong root necessity modal *muszę* (*have to*) is preferred in contexts where there are no alternative antecedents (i.e. when *p* is interpreted as a necessary condition for *q*). The findings are comparable to those obtained for English

(Sztencel and Duffy 2018), which provides initial support for their cross-linguistic generalisability. In addition, we have argued that the parallel between the basic structure of instrumental practical reasoning (as in e.g. Walton 2007) and the structure of second-order reasoning involved in modalised indirect reports of conditionals warrants the investigation of instrumental practical reasoning by the proxy of indirect speech reports.

The reported study was exploratory in nature, which limits the cross-linguistic generalizability of the results. Future, confirmatory research should control for a range of socio-pragmatic variables like age or social distance between the interlocutors in the devised scenarios, as well as pragma-linguistic variables such as speech acts or modal flavours.

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## Appendix

**Scenario 1:** Paweł chce kupić swojej koleżance, Marysi, prezent urodzinowy. Postanawia skonsultować to z siostrą Marysi, Joanną. Joanna wylicza hobby Marysi, takie jak dobra literatura, muzyka poważna, jazda konna czy piesze wycieczki. Następnie mówi do Pawła:

Jeśli kupisz Marysi dobrą książkę, będzie zadowolona.

Paweł chce przekazać Filipowi, swojemu współlokatorowi, co powiedziała Joanna. Którego z poniższych zdań Paweł **najprawdopodobniej** użyje? Możesz zaznaczyć więcej niż jedno zdanie, jeśli uważasz, że jest to właściwe – w takim przypadku, wskaż swój pierwszy/drugi/trzeci wybór.

- a) Joanna powiedziała, że jeśli chcę, żeby Marysia była zadowolona, to mogę jej kupić książkę.
- b) Joanna powiedziała, że jeśli chcę, żeby Marysia była zadowolona, to powinienem jej kupić książkę.
- c) Joanna powiedziała, że jeśli chcę, żeby Marysia była zadowolona, to muszę jej kupić książkę.

**Scenario 2:** Tomek jest u babci i szuka sposobu, aby zarobić 30 zł. Babcia mówi Tomkowi, że jest wiele czynności, które mógłby wykonać, aby zarobić 30 zł, takich jak odkurzanie, zrobienie prania, umycie naczyń, skoszenie trawnika czy pójście po zakupy. Następnie dodaje:

Jeśli skosisz trawnik, dam ci 30 zł.

Tomek chce przekazać mamie, co powiedziała babcia. Którego z poniższych zdań Tomek **najprawdopodobniej** użyje? Możesz zaznaczyć więcej niż jedno zdanie, jeśli uważasz, że jest to właściwe – w takim przypadku, wskaż swój pierwszy/drugi/trzeci wybór.

- a) Babcia powiedziała, że jeśli chcę zarobić 30 zł, to mogę skosić trawnik.
- b) Babcia powiedziała, że jeśli chcę zarobić 30 zł, to powinienem skosić trawnik.



- c) Babcia powiedziała, że jeśli chcę zarobić 30 zł, to muszę skosić trawnik.

**Scenario 3:** Filipek jest rozdrażniony. Przez godzinę trzymał garnek z wodą w pobliżu ogniska, myśląc, że woda się zagotuje. Tak się jednak nie stało. Jego mama mówi:

Jeśli podgrzejesz wodę do temperatury 100°C, zagotuje się.

Filipek chce przekazać swojemu koledze, co powiedziała mama. Którego z poniższych zdań Filipek **najprawdopodobniej** użyje? Możesz zaznaczyć więcej niż jedno zdanie, jeśli uważasz, że jest to właściwe – w takim przypadku, wskaż swój pierwszy/drugi/trzeci wybór.

- a) Mama powiedziała, że jeśli chcę zagotować wodę, to mogę ją podgrzać do 100°C.
- b) Mama powiedziała, że jeśli chcę zagotować wodę, to powinienem ją podgrzać do 100°C.
- c) Mama powiedziała, że jeśli chcę zagotować wodę, to muszę ją podgrzać do 100°C.

**Scenario 4:** Siedemnastoletnia Natalia chce wyjść na miasto. Jej ojciec, zirytowany ciągłym bałaganem w pokoju dziewczyny, mówi:

Jeśli posprzątasz swój pokój, pozwolę ci wyjść.

Nastolatka rozmawia przez telefon ze swoją koleżanką. Chce jej przekazać, co powiedział ojciec. Którego z poniższych zdań nastolatka najprawdopodobniej użyje? Możesz zaznaczyć więcej niż jedno zdanie, jeśli uważasz, że jest to właściwe – w takim przypadku, wskaż swój pierwszy/drugi/trzeci wybór.

- a) Ojciec powiedział, że jeśli chcę wyjść, to mogę posprzątać swój pokój.
- b) Ojciec powiedział, że jeśli chcę wyjść, to powinnam posprzątać swój pokój.
- c) Ojciec powiedział, że jeśli chcę wyjść, to muszę posprzątać swój pokój.