THE EFFECTS OF L2 PRAGMATIC AUTONOMOUS AND CONTROLLED MOTIVATIONS ON ENGAGEMENT WITH PRAGMATIC ASPECT

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Abstract: No study has investigated the relationship between student engagement per se and student motivation within second language (L2) pragmatics, notwithstanding the significance of engagement for L2 learning. The present study aimed to explore the effects of two global motivational orientations (autonomous and controlled motivations) on behavioral engagement within the perspective of L2 pragmatics by drawing on self-determination theory. A total of 76 college students agreed to participate and were requested to fill out a tailor-made, 34-item, 6-point Likert-scale questionnaire. The results of data analysis using standard multiple linear regression revealed that both Autonomous and Controlled Motivations significantly predicted and explained a large amount of variance in Engagement, $F(2, 71) = 161.28$, $p < .01$, $R^2 = .82$, adjusted $R^2 = .81$, and that the effect of Controlled Motivation, $B = .33$, $t(71) = 8.05$, $p < .01$, was twice as large as that of Autonomous Motivation, $B = .16$, $t(71) = 4.91$, $p < .01$. These findings indicate that students' controlled motivation is more powerful in enhancing their engagement in learning L2 pragmatics. Pedagogically, it implies that teachers should bolster students' motivation to learn L2 pragmatics, which can eventually lead to their increased engagement.

Keywords: pragmatic motivation, autonomous motivation, controlled motivation, pragmatic engagement, self-determination theory

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From the vantage point of the second language (L2) learning, engagement can be defined as cognitive, behavioral, social, and emotional involvement in an L2 learning activity in or outside of class directed toward the mastery of L2 (Hiver et al., 2021; Philp & Duchesne, 2016). It is not difficult to substantiate the

importance of engagement for L2 learning. It is a widely agreed-upon notion that success in L2 learning necessitates active involvement on the learners' part in meaningful L2 interaction over an extended period of time (e.g., Hiver et al., 2021; Mercer, 2019). Active involvement means participation encompassing the four distinct, yet interdependent dimensions of cognition, behavior, collaboration, and emotion (Philp & Duchesne, 2016). To gain L2 achievement, it is not enough for the learners to merely go through the motions; they need to focus their energy and attention on the L2 material, and they also need to be emotionally and socially involved (Dörnyei, 2019; Philp & Duchesne, 2016; Svalberg, 2018). Moreover, not less importantly, L2 learners also need to have some control over their learning process, a phenomenon dubbed by Reeve (2012), and Reeve and Shin (2020) as agentic engagement. In short, engagement constitutes a crucial element in L2 learning success. Brutt-Griffler and Jang (2022) found that behavioral engagement positively correlated with L2 proficiency (see also Dincer et al., 2019). The growing popularity of the concept of engagement in the field of SLA also pertains to its perceived malleability and amenability via pedagogical interventions (Fredricks et al., 2019; Skinner, 2016). In addition, theoretically, it is argued that "engagement has significant potential to inform understandings of language learning" (Henry & Thorsen, 2020, p. 460).

Motivation is one of the affective factors which can influence engagement (e.g., Oga-Baldwin, 2019; Reeve, 2012; Svalberg, 2018). In a study conducted to examine whether and how motivation and engagement differ, Martin et al. (2017), for example, found that motivation and engagement are two distinct constructs, with the former predicting the latter. Drawing on the self-determination theory (SDT) of human motivation (Ryan & Deci, 2017), Henry (2021, p. 222) similarly argued that engagement is "the behavioral outworkings" of motivation (see also Reeve et al., 2019). In addition, the unique relationship between motivation and engagement is succinctly captured by Reeve (2012, p. 151) as: "motivation is a private, unobservable, psychological, neural, and biological process that serves as an antecedent cause to the publicly observable behavior, that is engagement". Nevertheless, the relationship between motivation and engagement is not always straightforward. A high level of engagement is undoubtedly the "visible manifestation" of a high level of motivation (Skinner & Pitzer, 2012, p. 22), yet the high level of motivation does not always metamorphose into high level of engagement (Henry, 2021; Oga-Baldwin, 2019; Sang & Hiver, 2021). A highly motivated learner to learn English might somehow refuse to get actively engaged in an activity. As in the

words of Mercer (2019, p. 645), "learners need to be motivated and willing to engage, but the next step is whether they actually translate that willingness into sustained active engagement."

While motivation has received a considerable amount of scholarly attention within the field of SLA (Boo et al., 2015), engagement tends to be overlooked (Oga-Baldwin, 2019), and hence research on engagement in SLA is still in its infancy (Henry & Thorsen, 2020; Mercer, 2019). The extant studies into engagement in the SLA field have, by and large, investigated the effect of task types on learners' engagement (Aubrey et al., 2020; Dao, 2021; Lambert & Zhang, 2019; Marcos Miguel, 2021; Nakamura et al., 2021). Other studies have delved into learners' engagement with written corrective feedback (Han, 2017; Han & Hyland, 2015), agentic engagement (Henry & Thorsen, 2020), the effect of performance scoring rubrics on learners' engagement (Stroud, 2017), teachers' perception of students' engagement (Mystkowska-Wiertelak, 2020), and the effect of proficiency pairing on engagement in peer interaction (Dao & McDonough, 2018). Within the realm of interlanguage pragmatics, previous studies into the individual learner's characteristics which predict L2 pragmatics acquisition success has predominantly "examined proficiency impact on pragmatic competence and [there is] a smaller body of studies looking at other factors (e.g., gender, age, motivation, cognitive abilities, personality, and identity)" (Taguchi, 2019, p. 6; see also Takahashi, 2019). The very few studies addressing the issue of motivation have examined its effect on pragmalinguistic awareness (Takahashi, 2005, 2012, 2015), and pragmatic production (Tajeddin & Moghadam, 2012). Research on the role of motivation in interlanguage pragmatics, in fact, has been scarce (Taguchi & Roever, 2017), and research which specifically examines the effects of controlled and autonomous motivations on pragmatic engagement is non-existent (see Mercer, 2019).

To fill the above-mentioned gap, the present study was aimed at investigating the effects of motivation on engagement from the perspective of L2 pragmatics. For the purpose of the present study, the concept of engagement is confined to students' engagement with the pragmatic aspect of the L2, that is, the extent to which they will expend their energy and cognitive resources on the pragmatic aspect of the L2 when they are involved in a communicative event in and outside of class. Accordingly, the present study was narrowly concerned with a domain-specific type of engagement (cf. Svalberg, 2018), which is typical of L2 engagement research (Hiver et al., 2021; Philp & Duchesne, 2016). Following O'Donnell and Reschly (2020, p. 55), "the assessment of student engagement may facilitate educators' ability to determine … what types of

interventions may be most effective for students" (see also Hofkens & Ruzek, 2019). By the same token, the assessment of L2 pragmatic engagement may provide us with information whether L2 learners need interventions, and whether such interventions have something to do with the promotion of their motivation. It has been noted above that engagement is a necessary condition for L2 learning, and for L2 pragmatics learning to occur. The motivation construct in the present study refers to the extent to which students are motivated to learn the pragmatic aspect of the L2, in this case English.

The present investigation is anchored within SDT (Ryan & Deci, 2017, 2020), according to which human beings have three fundamental psychological needs −competence, relatedness, and autonomy −and the extent to which those needs are satisfied or thwarted determines the type of motivational regulation people have which, in turn, predicts the intensity of engagement in their L2 learning process (Mercer, 2019; Noels et al., 2019b). Within SDT, human motivational orientations are considered to fall along a continuum of self-determination (arranged in order of decreasing degree of self-determination): intrinsic, integrated, identified, introjected, and external regulation, as well as amotivation. For discussion of these regulations and their application in SLA, see, inter alia, Noels et al. (2019b) and McEown and Oga-Baldwin (2019). The five motivational regulations could be categorized into two major groups, namely autonomous motivation (intrinsic, integrated, and identified regulations) and controlled motivation (introjected and external regulations), the categorization that has found empirical support in SLA studies (e.g., Alamer, 2021). Autonomous motivation refers to motivation which drives behaviors "performed out of interest and for which the primary 'reward' is the spontaneous feelings of effectance and enjoyment that accompany the behaviors," whereas controlled motivation is the driving force of behaviors compelled by "externally imposed reward or punishment contingencies" (Ryan & Deci, 2017, p. 14). There is a proliferation of research on the issues of autonomous and controlled motivations in general education (e.g., Bureau et al., 2022; Mouratidis et al., 2021; Wijsman et al., 2018). These studies showed how the two types of motivation play a role in academic achievement. Surprisingly, there has been a scarcity of research on the issues of autonomous and controlled motivations in SLA, let alone in interlanguage pragmatics. Thus, very little is known about the extent to which they play a role on L2 pragmatic learning. The present study was particularly aimed at exploring the effect of the two global motivational orientations (autonomous and controlled motivations) on behavioral engagement within the perspective of L2 pragmatics.

Accumulating evidence generated by work on engagement in educational psychology has consistently attested to the strong link only between behavioral engagement and academic success (Skinner, 2016). This study specifically aimed to answer the following research question: "*Can L2 pragmatic autonomous and controlled motivations predict behavioral engagement with pragmatic aspect of the L2?*" This paper is structured as follows: after the description of the issues pertaining to the method of the study (participants, instrument, procedure, and data analysis) in the following section, the findings will be presented and subsequently discussed in light of the previous research findings and the theoretical framework. The paper concludes with a discussion of pedagogical implications and suggestions for further research.

METHOD

Participants

Participants of the study were 76 Indonesian-speaking sophomores (18 males; 58 females) aged between 19 and 21 years (M = 20 years, SD = .46 years) recruited from three different classes taught by the first author. This sample size has met the minimum sample size required for multiple linear regression analysis with two predictor variables and a medium size of the expected effect (Field, 2009). The participants were enrolled in a four-year undergraduate degree program majoring in International Business Management at a public polytechnic located in the Southern part of Bali. Since the majority of the participants (86.3%) reported that they had never taken any standardized English proficiency test (TOEFL, TOEIC, or IELTS), they were asked to self-assess their current English proficiency level; 46 (60.5%) students perceived their English proficiency level to be at intermediate level, 28 (36.8%) thought that their English proficiency level was beginner, and only 2 (2.6%) considered themselves as advanced speakers of English. Students' perceptions of their English proficiency level were by and large corroborated by the teacher's observation while teaching the three classes. None of the participants reported having visited an English-speaking country, let alone staying there for an extended period of time. They were not paid, yet extra credit was awarded to them for their participation.

Instrument

The instrument employed to gather the data is an online, tailor-made 34-item survey questionnaire, consisting of six items measuring the participants'

degree of engagement and 28 items tapping into the quality of their motivation (i.e., motivational regulations).[1] Given the relatively unique issue investigated in the present study, we thought that using a tailor-made questionnaire was more appropriate; after all, we found no study that investigated L2 pragmatics learning motivation and engagement as operationalized in the present study. Autonomous Motivation was measured using 15 items (Intrinsic Motivation, $k = 6$; Identified Motivation, $k = 9$), while Controlled Motivation was measured using 13 items (Introjected Motivation, $k = 7$; External Motivation, $k = 6$). Finally, Engagement was measured using six items.

The questionnaire was constructed using a free survey administration application developed by Google: Google Forms. All items in the questionnaire are framed within the context of comparison between the pragmatic and grammatical aspect of English (e.g., *I'm more interested in learning how to use English politely than learning how to use grammar properly; I think harder when I try to understand how to use English politely than when I try to understand how to use English grammar properly*). All of the items were built using a 6-point Likert scale where the participants were required to indicate their degree of agreement along the following spectrum: *strongly disagree*, *disagree*, *slightly disagree*, *slightly agree*, *agree*, and *strongly agree*. Finally, to facilitate ease of comprehension and/or to avoid unnecessary misunderstanding, all of the items and instructions were written in the native language of the participants, that is Indonesian.

As has been noted above, the present study was narrowly focused on one type of engagement, namely behavioral engagement which "concerns involvement in learning and academic tasks and includes behaviors such as effort, persistence, concentration, attention, asking questions, and contributing to class discussion" (Fredricks et al., 2004, p. 62). It is to be borne in mind that the construct of behavioral engagement in the present study was expanded to cover not only classroom context, but also non-classroom context. The participants were asked to indicate to what extent they would direct their attention to the pragmatic aspect (instead of the grammatical aspect) of the English language in the following contexts: watching an English TV program (one item), reading an English novel (one item), and communicating with a native speaker of English (one item). They were also required to indicate whether

[1] The research instrument can be accessed through the following link: https://docs.google.com/document/d/1QmFssjYkbmO2MR8zjK-rHeQPhB6QKNyG/edit?usp=sharing&ouid=114301221149205013491&rtpof=true&sd=true

they would ask their English teacher in class questions about the pragmatic aspect of English (one item), whether they would expend more time to learn the pragmatic aspect of English (one item), and whether they would think harder when trying to understand the pragmatic aspect of English (one item). The internal consistency of the engagement scale measured using Cronbach's α is .90. This reliability coefficient has exceeded the minimum adequate reliability coefficient, that is .70 (see Dörnyei & Taguchi, 2010), indicating that the Engagement scale is internally consistent.

The construction of the Motivation scale (k = 28) for the present study was guided by SDT. Human motivation falls along the following continuum: intrinsic, integrated, identified, introjected, and external regulations. The Motivation scale for the present study, however, consists of four sub-scales, namely Intrinsic scale (six items), Identified scale (nine items), Introjected scale (seven items), and External scale (six items). Integrated motivation was not included into the Motivation scale, as it is not relevant to the participants in the present study. The internal consistency (Cronbach's α) coefficients of the four scales making up the Motivation scale are as follows: .85 (Intrinsic scale), .91 (Identified scale), .84 (Introjected scale), and .83 (External scale). Since all the scales making up the Motivation questionnaire have Cronbach's α coefficients greater than the .70 threshold (see Dörnyei & Taguchi, 2010), all the scales can be considered good in terms of internal consistency.

Procedure

The questionnaire was administered online in late June 2021 during an English class session by the first author, an English teacher. The link to the questionnaire was sent to the class WhatsApp group exclusively created for the purpose of the English class. Prior to the administration of the questionnaire, the participants were informed via a WhatsApp message that they were participating in a study on students' English learning preferences and that their participation was voluntary, meaning that they could withdraw their participation at any time they wished. However, they were not made aware of the exact purpose of the study, that the study was conducted to examine the effect of students' motivation and their engagement. While they were completing the questionnaire, the participants were told that the administrator was available to be contacted via WhatsApp should they have any questions regarding the comprehensibility of the statements included in the questionnaire. It turned out that none of the participants contacted the administrator suggesting that the wording of the statements was clear enough for them. The questionnaire administration was not

timed and the participants took between 10 to 15 minutes to complete the questionnaire. After all of the participants submitted their completed questionnaire, a virtual meeting was conducted on Google Meet to discuss further issues regarding the comprehensibility of the statements in the questionnaire. They were specifically asked whether or not they could understand them with ease and whether the statements were free from ambiguity. None of the participants mentioned that they found any difficulty in comprehending the statements pointing to the clear wording of the statements.

Data Analysis

The data gathered from the questionnaire were coded as follows: 1 = *strongly disagree*; 2 = *disagree*; 3 = *slightly disagree*; 4 = *slightly agree*; 5 = *agree*; 6 = *strongly agree*. Informed by SDT, the present study aimed to explore the effect of student motivation on engagement. In line with the conceptualization of human motivation in SDT, the four types of student motivation examined in the present study were categorized into two global categories, namely autonomous motivation (intrinsic and identified regulations) and controlled motivation (introjected and external regulations). Accordingly, these two motivation categories constitute the predictor variables, while Engagement is the outcome variable. The data were analyzed using the standard multiple linear regression analysis, wherein the two predictor variables were entered using the forced entry method into the regression equation at once (Field, 2009). The decision to choose this type of multiple regression was to a great extent motivated by the aim of the study per se, that is, to examine whether the two types of student motivation together and independently could predict engagement. All analyses were conducted with the help of SPSS version 23.

FINDINGS AND DISCUSSION

Findings

Preliminary Analyses

As noted above, standard multiple linear regression analysis using the forced entry method was employed to answer the research question. However, prior to conducting such inferential statistical analysis, a series of diagnostics tests were performed to ensure that the data for the present study met the following assumptions associated with multiple linear regression analysis: the

absence of univariate and multivariate outliers, the absence of multicollinearity, independent errors or the absence of autocorrelation, normal distribution of errors, non-zero variance, homoscedasticity, and linearity (Field, 2009). Meeting all of these assumptions is important if we want to generalize our regression model beyond the sample in the present study (Field, 2009).

Examination of the standardized residuals was carried out to check if there was any case that lied beyond the -3.29 – 3.29 range, i.e., a univariate outlier (Field, 2009), and one case with a standardized residual of -3.56 was detected. This case was excluded from subsequent analyses. The data set (N = 75) was then checked for the presence of multivariate outliers, and the test showed that one case was a multivariate outlier (Mahalanobis Distance, p = .0009), so this case was also excluded from subsequent analysis. The new data set (N = 74) met the assumption of collinearity (Autonomous, Tolerance = .46, VIF = 2.20; Controlled, Tolerance = .46, VIF = 2.20). No autocorrelation was detected in the data (Durbin-Watson = 2.37), indicating that the data met the assumption of independent errors. Kolmogorov-Smirnov test of normality was run on the standardized residuals to check whether the data satisfied the normal distribution of errors assumption. The result showed that the assumption was indeed satisfied (D (74) = .07, p > .05). Finally, the assumption of non-zero variance was also met (Autonomous, variance = 110.49; Controlled, variance = 71.73), as were the assumptions of linearity (see Figure 1) and homoscedasticity (see Figure 2).

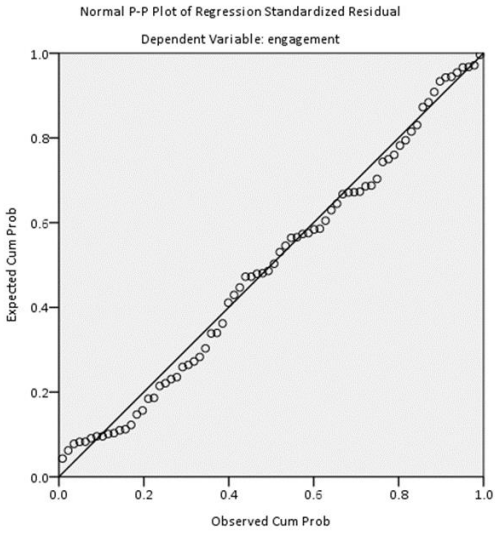

Figure 1. Result of linearity test

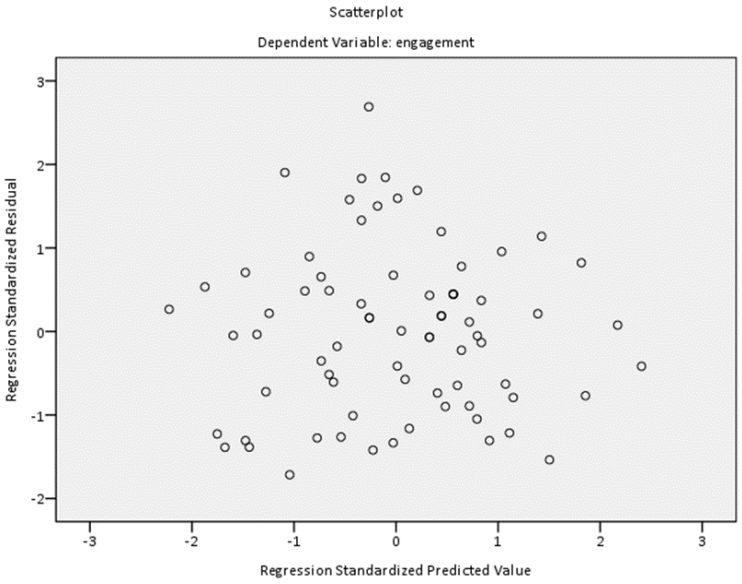

Figure 2. Result of homoscedasticity test

Descriptive Statistics

It is necessary at the outset to reiterate that the final number of cases (i.e., data points) analyzed in this and following sections is 74 (N = 74) out of the initial sample size (N = 76), since two cases turned out to be outliers, one being a univariate outlier and the other being a multivariate outlier. Outliers need to be removed from the statistical analyses, both descriptive and inferential, since they violate the assumption of absence of univariate and multivariate outliers (Field, 2009) (see the section Preliminary Analyses above). Table 1 below shows the descriptive statistics for the three variables in the present study (Autonomous Motivation, Controlled Motivation, and Engagement).

Table 1. Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Autonomous	74	40	90	67.61	10.39
Controlled	74	41	78	58.54	8.42
Engagement	74	17	36	26.77	4.62

Although the students' autonomous motivation looks stronger than their controlled motivation in Table 1 above, in actuality they are identical; it is to be

borne in mind that the two motivation measures contain different numbers of items, Autonomous (k = 15) and Controlled (k = 13) (see Instrument of the Method section above). To verify whether or not one motivational orientation is stronger than the other, we need to divide the mean value by the respective total number of items. The results of such computation revealed that the values for both motivational orientations were identical, Autonomous (M = 4.51) versus Controlled (M = 4.50). It means that on average, the students' response to each item in the Autonomous and Controlled measure was 4.51 and 4.50, respectively, both of which are located somewhere between *slightly agree* and *agree* (see the coding system mentioned in the Analysis of the Method section). The responses indicate that when it comes to learning English pragmatics, operationalized in the present study as learning how to use English appropriately according to contexts, the students were motivated by internal rewards (e.g., perceived value, enjoyment) to the same extent as by external ones (e.g., career, grades). The fact that their average response to each item in the Motivation measure was between *slightly agree* and *agree* implies that the students in the present study were not very motivated to learn how to use English appropriately according to contexts. Arguably, we can claim that their motivation is high if their average response to the Motivation items is at least *agree* (M = 5.00).

Turning now to the students' engagement measured using six items, a similar result was found: on average, their response to each item in the Engagement measure was 4.46, slightly lower than the average value for Motivation items, which also lies somewhere between *slightly agree* and *agree*, which could be taken to mean that the students in the present study were not quite fully engaged in a learning activity involving how to use English politely. In short, both students' motivation and their engagement in learning how to use English appropriately are relatively low.

To see whether one motivational regulation was greater than the other in each of the two global categories of motivation (autonomous and controlled motivation), the data displayed in Table 1 above was broken down into Intrinsic and Identified Regulations for autonomous motivation, and into introjected and external regulations for controlled motivation, as shown in the following table.

Table 2. Breakdown of Autonomous and Controlled Motivation

	N	Minimum	Maximum	Mean	Std. Deviation
Intrinsic	74	15	36	28.70	4.07
Identified	74	22	54	38.91	6.86
Introjected	74	20	42	31.86	4.94
External	74	17	36	26.68	4.10

Again, we need to interpret the data in Table 2 above by taking into account the number of items in each measure: Intrinsic (k = 6), Identified (k = 9), Introjected (k = 7), and External (k = 6). Dividing the mean values by the respective number of items produced the following results: Intrinsic Regulation, M = 4.78; Identified Regulation, M = 4.32; Introjected Regulation, M = 4.55; and External Regulation, M = 4.45. These findings indicate that the students in the present study were motivated to learn how to use English appropriately according to contexts mostly because they found it enjoyable, interesting, or fun, although the degree of such motivation was not very high. By comparison, they were less likely to perceive learning how to use English appropriately as personally meaningful to themselves, or in other words, they did not quite see that learning how to use English appropriately was of particular value for themselves. Finally, the students were motivated to learn how to use English appropriately more because of their ego-involvement (e.g., because they feared being perceived as incompetent) than because of the external forces (e.g., because they wanted to land a desired job).

Zero-order Correlations

The following table shows zero-order correlations among the three variables in the present study: Autonomous Motivation, Controlled Motivation and Engagement.

Table 3. Zero-order correlations among variables

	Autonomous	**Controlled**	**Engagement**
Autonomous	1.00	.74*	.81*
Controlled	.74*	1.00	.87*
Engagement	.81*	.87*	1.00

* $p < .01$

As can be seen from the above table, all correlations are positive and statistically significant at $p < .01$, indicating that as the value of one variable increased, the value of the variable with which it correlated also increased. It is striking to note that the correlation between Controlled Motivation and Engagement (Pearson $r = .87$) was slightly higher than that between Autonomous Motivation and Engagement (Pearson $r = .81$), which could be taken as an early indication that students' controlled motivation might exert a larger effect on their engagement in comparison with their autonomous motivation. The correlation between the two predictor variables (Autonomous Motivation and Controlled

Motivation) (Pearson r = .74) also reached statistical significance, but the correlation coefficient did not approach .90, which would otherwise have been an indication of the presence of multicollinearity (Field, 2009, p. 224). This confirms the absence of multicollinearity as mentioned earlier in the discussion of multiple linear regression analysis assumption in the Preliminary Analysis section. These two motivational orientations indeed constitute two different motivational traits, or psychometrically, this could also suggest that the items included in the two measures (Autonomous and Controlled measures) tapped into two different motivational orientations, although the latter claim needs to be further validated through a more complex statistical analysis, which is beyond the scope of the current article.

Multiple Linear Regression Analysis

The next analysis conducted on the data (N = 74) was to determine whether or not the two predictor variables (Autonomous Motivation and Controlled Motivation) could predict the outcome variable (Engagement), either simultaneously or in isolation, or both. This was done, as has been mentioned earlier, using the forced entry method of the standard multiple regression analysis. The results revealed that the two predictor variables (Autonomous and Controlled Motivations) together could significantly predict the outcome variable (Engagement). That is, the simultaneous effect of Autonomous Motivation and Controlled Motivation on Engagement was statistically significant, F (2, 71) = 161.28, p < .01. The magnitude of the effect size of the two predictor variables was considerably large, R^2 = .82, Adjusted R^2 = .815, F^2 = 4.56.[2] This means that 82% of the variance in Engagement could be explained together by Autonomous Motivation and Controlled Motivation. These findings led us to inquire whether one or both of the predictor variables brought about such an effect on the outcome variable. The following table shows the results.

Table 4. Independent effects of predictor variables

Model		Unstandardized coefficients		Standardized coefficients	t
		B	**Std. Error**	**β**	
1	(Constant)	-3.53*	1.70	-	-2.07
	Autonomous	.16**	.03	.37	4.91

[2] F^2 was computed using the formula $F^2 = \frac{R^2}{1-R^2}$

Model		Unstandardized coefficients		Standardized coefficients	t
		B	Std. Error	β	
	Controlled	.33**	.04	.60	8.05

* $p < .05$
** $p < .01$

As can be seen from Table 4, the independent effect of both predictor variables was indeed statistically significant, and that the magnitude of the effect of Controlled Motivation was twice as large as the effect of Autonomous Motivation, $B = .33$, $t\ (71) = 8.05$, $p < .01$ versus $B = .16$, $t\ (71) = 4.91$, $p < .01$, respectively. As shown by the values of β for Autonomous Motivation ($\beta = .37$, $p < .05$) and for Controlled Motivation ($\beta = .60$, $p < .05$), both of the predictor variables brought about a significantly large effect on Engagement (Keith, 2019, p. 62).

Since the two predictor variables were each composed of two different motivational regulations, another round of standard multiple linear regression analysis was conducted where the four motivational regulations (Intrinsic, Identified, Introjected, and External regulations) were entered using the forced entry method into the regression equation as the predictor variables. The results of the analysis are shown in Table 5 below.

Table 5. The effect of Intrinsic, Identified, Introjected, and External Orientations

Model		Unstandardized coefficients		Standardized coefficients	t
		B	Std. Error	β	
1	(Constant)	-4.66*	2.02	-	-2.31
	Intrinsic	.25*	.10	.22	2.62
	Identified	.09	.08	.13	1.12
	Introjected	.28**	.08	.30	3.73
	External	.45**	.10	.40	4.64

* $p < .05$
** $p < .01$

As Table 5 above shows, it turned out that Identified Regulation failed to bring about any significant effect on Engagement. Interestingly, while the effect of Intrinsic Regulation was statistically significant, the magnitude of the effect now became moderate. Meanwhile, the effects of Introjected and External Regulations were statistically significant, with the latter exerting a greater effect

on Engagement. These findings indicate that the students' engagement in L2 pragmatics learning activity is for the most part determined by "externally imposed rewards and punishments" (Ryan & Deci, 2020, p. 2).

Finally, to see how well the multiple linear regression model derived from the data in the present study cross-validates, that is whether or not the model generated from the data can predict a consistent outcome in different sets of samples (Field, 2009), we manually computed the adjusted R^2 using the formula following Field's (2009, p. 222) recommendation:

$$\text{Adjusted } R^2 = 1 - \left[\left(\frac{n-1}{n-k-1}\right)\left(\frac{n-2}{n-k-2}\right)\left(\frac{n+1}{n}\right)\right](1 - R^2)$$

We found that the value of the adjusted R^2 (adjusted R^2 = .81) was very close to the value of R^2 and identical with the value of adjusted R^2 calculated by SPSS (see above) as well. The fact that the value of the adjusted R^2 was very close to the value of R^2 (R^2 = .82) gives us confidence that the regression model generated from the data in the present study cross-validates well, or less technically speaking, we can be quite confident that the finding of the present study can be generalized across different sets of samples within the same population to which the participants of the present study belong.

Summary of Findings

The results of the statistical analysis presented in the preceding sub-section can be summarized as follows: (1) students' motivation and their engagement in the L2 pragmatics learning activity were rather low; (2) together Autonomous and Controlled Motivations could predict, and explained a large amount of variance in, Engagement; and (3) within the Autonomous Motivation only Intrinsic Regulation could predict Engagement, while within the Controlled Motivation Introjected and External Regulations could both predict Engagement, although the magnitude of the effect of the latter was larger. These three major findings will be discussed below.

Discussion

The present study aimed to investigate the effect of autonomous and controlled motivational orientations on behavioral engagement in the context of L2 pragmatics learning. Overall, we found that both types of motivational orientation combined to predict engagement, and that the magnitude of the effect sizes of both motivational orientations was considerably large. This suggests that

the extent to which students are keen to get actively engaged in an L2 pragmatics learning activity seems to a large extent to be determined by their autonomous and controlled motivation. The findings also provide empirical support for the perceived superiority of motivation over other factors in L2 learning (see Dörnyei & Ryan, 2015). The study also found that the quality of students' motivation to learn English pragmatics paralleled the intensity of their engagement in such learning activities. Statistically speaking, there was a significant positive and strong correlation between both autonomous and controlled motivational orientations and engagement. The students' motivation to learn English pragmatics, operationalized as learning how to use English in a polite manner, was not quite high and their level of engagement in an English pragmatics learning activity was correspondingly rather low. This finding lends empirical support to the conception put forth within SDT. According to Noels et al. (2019a, p. 823), motivational orientations "frame the quality of the learning experience and can differentially predict the intensity of engagement" (see also Ryan & Deci, 2017).

The fact that the students' motivation to learn English pragmatics was not quite high can be explained by the nature of their previous formal English language learning experiences in schools. In Indonesia, like in other foreign language learning contexts where the target language is not used as a means of communication on a daily basis at large, the teaching of English puts greater emphasis on the formal (e.g., grammar), instead of the functional (i.e., pragmatics), aspects of English (Zein et al., 2020), which is quite understandable given the main purpose of the English pedagogy; students are not expected to be able to use English in real communicative events outside of class – in fact, opportunities to use English communicatively outside of class is rare – but rather to prepare them to excel on the English national exam. Such previous learning experiences might have shaped the students' belief that learning how to use English appropriately is not quite useful since they are not going to use it to communicate with other people outside of class, which adversely affects their motivation to learn English for functional purposes.

Another important finding of the study was that Controlled Motivational Orientation brought about an effect which was twice as large as the effect exerted by Autonomous Motivational Orientation on Engagement. We place importance on this latter finding because, to the best of our knowledge, the present study is the first study to document an empirical finding showing the differential degrees of effects of the two motivational orientations on Engagement in the context of L2 pragmatics learning. This finding suggests that as opposed to those adopting

autonomous motivational orientation, students with controlled motivational orientation are twice as likely to get actively engaged in a learning activity that centers around using English appropriately according to contexts. For example, students who find learning English pragmatics fun, enjoyable, or personally meaningful to themselves might get involved in the learning activity less eagerly compared with those who perceive learning English pragmatics as particularly economically beneficial to themselves.

The finding of the present study that Identified Regulation had no significant effect on Engagement is consistent with the study conducted by Chen and Kraklow (2015). It is important to notice here that there is a similarity vis-à-vis the learning context in which the students participating in the present study (Indonesia) and those participating in the Chen and Kraklow's (2015) study (Taiwan); both groups of students learned English in the context where English is not used as a daily means of communication. It seems that Identified Regulation may not constitute the determining factor which influences the extent to which students learning English in foreign language learning contexts are willing to actively get engaged in an English learning activity. However, age might also play a significant role here. Oga-Baldwin and Nakata (2017) found that fifth-year students who had more intrinsically regulated motivation (i.e., intrinsic, integrated and identified regulations) were likely to demonstrate active engagement in an English class. Obviously, more research needs to be carried out to unveil this issue.

The fact that external regulation imposed the strongest effect on engagement in the present study could also be explained by the nature of the learning context in which the students in the present study reside. In foreign language learning contexts, like Indonesia, English is greatly valued for employment purposes. Being able to communicate in English effectively in order to get a well-paid (or dream) job lies at the heart of students' learning of English in these contexts. Again, learning context might not be the only factor determining which motivational regulation influences engagement more than the others. The study conducted by Chen and Kraklow (2015) mentioned earlier found that Intrinsic Motivation had a much stronger effect than External Regulation on Engagement, a finding which seemingly contradicts the claim we made above. Nevertheless, there is a significant difference between the present study and the study by Chen and Kraklow (2015) vis-à-vis the object of students' engagement. We specifically examined to what extent students were engaged in the pragmatic aspect of English, while Chen and Kraklow (2015) investigated the degree of students' engagement in English classes with no specific target of

engagement. Thus, the object or target of engagement examined in a study might also influence which motivational regulation affects engagement more than the others.

Students' self-esteem plays a slightly greater role in the extent to which they are enthusiastic to expend their energy (physical and mental) to learn the pragmatic aspect of the English language relative to the inherent enjoyment of such a learning activity; they get involved in the pragmatics learning activity more because of their fear of sounding rude or incompetent when speaking in English than their interest in the activity per se. This might be related to their external regulation to a certain degree. When externally regulated, people will perform a behavior because they want to avoid punishment contingencies (Ryan & Deci, 2017). One of the main punishment contingencies the students in the present study try to circumvent is failing to land a desired job, and one of the proximal pathways to failing to get a desired job is to display poor interpersonal communication skills in the job interview, such as, by showing that they cannot speak English appropriately, or, in other words, sounding rude and hence being perceived incompetent by the interviewer.

CONCLUSIONS

When it comes to learning L2 pragmatics, operationalized as learning how to use the L2 appropriately according to contexts, the quality of students' motivation largely determines the extent to which they are eagerly engaged in the learning activity, the latter being a crucial pathway to L2 pragmatics learning achievement. However, not all motivational regulations are important for engagement; external regulation, that is, learning L2 pragmatics for its instrumental values, takes center stage, while identified regulation, that is, learning L2 pragmatics due to its being personally meaningful to students, is not powerful enough to effectuate students' engagement.

Pedagogically, it implies that in a context where the target language does not serve as the means of communication on a day-to-day basis, L2 pedagogy should put more emphasis on improving students' external regulation, for example, by constantly reminding students of the economic benefits associated with learning L2 pragmatics. It does not necessarily mean that the students do not need to be made interested in learning L2 pragmatics for the sake of the learning activity per se, that is, intrinsically motivated to learn L2 pragmatics. Quite the contrary, students need intrinsic motivation, which can bolster the quality of their engagement (Ryan & Deci, 2017, 2020). After all, the present

study found that students' intrinsic motivation also affected their engagement. However, since the effect of intrinsic motivation is much smaller than that of external regulation, teachers might not need to spend as much time to enhance the students' intrinsic motivation as they do to promote their external regulation. More importantly, teachers need to ensure that the classroom climate does not threaten the students' sense of competence, relatedness (with both the teacher and other fellow students), and creativity (see Reeve & Shin, 2020; Ryan & Deci, 2017).

It is to be borne in mind that the conclusion (and the concomitant pedagogical implications) derived from the present study should be taken with caution due to the study's limitations. First, the sample size in the present study is relatively small. According to Keith (2019), a small sample size tends to lead to an inflated effect size (R^2). Second, the present study exclusively relied on only one form of data gathered using an indirect measure of engagement: self-report. One of the major drawbacks of using such a method is that "students are susceptible to reporting their engagement in socially desirable ways – either by overreporting their engagement in general or by hesitating to report specific types of engagement or disengagement to avoid perceived or real social or academic consequences" (Hofkens & Ruzek, 2019, p. 315). Moreover, since engagement "is inherently situated" (Hiver et al., 2021, p. 3) and dynamic, ever changing in response to the learning environment (Sang & Hiver, 2021), students' assessment of their engagement in the present study might not be accurate. Last but not least, it is also possible that the predictor variables in the present study (Autonomous and Controlled Motivations) might in actuality be the outcome variable (e.g. Reeve & Lee, 2014; Oga-Baldwin & Nakata, 2017). In fact, at issue within educational psychology is whether engagement is the antecedent or outcome of motivation. Given the present study's design, it is not possible to confirm whether it is the case that engagement is indeed the outcome (but see Martin et al., 2017 for empirical evidence showing that engagement is the outcome). Taking these limitations into consideration, therefore, future studies should be conducted with a larger sample size adopting a longitudinal design and data triangulation method, as well as utilizing a more complex statistical modelling, e.g., structural equation modelling (SEM), to analyze the data, and as such, more credible and valid research findings could be produced (cf. Noels et al., 2019b). The findings yielded by such studies will give rise to more accountable and effective pedagogical interventions.

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