# Can Large Language models mimic human personality?

Anonymous ACL submission

#### Abstract

Personality induction into LLMs aims to simulate human personality traits, with potential applications in personalized interactions and highquality human-like synthetic data generation. It is thus a promising but challenging frontier in natural language processing. In our study, we use 007 the Essays Dataset (Pennebaker and King, 1999), as its extended narratives are better suited for modeling stable personality traits; shorter texts, by contrast, often reflect mood states (Schwartz et al., 2013) rather than personality. We explore two key aspects: First, we show that different fine-tuning methods significantly reduce the vari-013 ance observed in psychological test-based evaluations, which in pre-trained models have pre-015 viously been shown to be unstable (Gupta et al., 017 2024), thereby making them more reliable. Second, despite this improvement, our results show 018 019 that personality induction in LLMs suffers from low accuracy when tuned on unguided text, suggesting that such text might lack the nuanced 021 cues essential for an accurate expression of personality. We make the code and dataset openly available for reproducibility<sup>1</sup>. 024

### 1 Introduction

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Personality, as a concept, has long been researched by psychologists for its role in shaping human behavior, emotional expression, and impact on social interactions. Broadly, personality is defined as the consistent patterns of behavior and emotional tendencies that differentiate individuals(Goldberg, 1993; Yarkoni, 2010); personality has been studied using many curated frameworks, the most common of which is the Big Five (McCrae and John, 1992; John et al., 1999). The ability to reliably and reproducibly measure personality has historically relied on



Figure 1: Overview of existing personality induction approaches and their limitations

self-report instruments and behavioral observations	
by professionals(John et al., 1999).	

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# 1.1 The Challenge of Personality Induction in LLMs

With the rise of foundation models, notably large language models (LLMs), a new challenge has emerged: Can these systems be injected with discernible and consistent personality traits such that they can mimic human behavior in their responses? While prior work has largely emphasized personalization(Zhang et al., 2022) and data synthesis(Hämäläinen et al., 2023) as the primary motivations for inducing personality into LLMs, we identify several additional drivers: improving narrative coherence, increasing trust and predictability, enabling controllability in model outputs, deepening human-AI interaction research, and supporting long-term AI identity formation. These motivations underscore the broader utility and urgency of developing principled, stable, and interpretable approaches to personality induction.

<sup>&</sup>lt;sup>1</sup>https://anonymous.4open.science/r/personality\_ induction-E288/README.md



Figure 2: Pipeline for personality induction

### 1.2 Existing Approaches and Limitations

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Efforts to achieve this have resulted in various experimental approaches. In recent times, most of the studies have primarily leveraged controlled prompting techniques to steer LLM outputs for targeted dimensions of personality (Serapio-García et al., 2023; Mao et al., 2023; Caron and Srivastava, 2023; Li et al., 2016). These approaches typically target individual personality dimensions, but their results remain incomplete in capturing the full spectrum of personality traits, and performance in even single dimensions is not particularly impressive. More recent approaches have attempted to induce personality traits implicitly into the LLMs via pretraining and fine-tuning. Some researchers even argue that personality traits can naturally emerge as a secondary result of extensive text-based learning(Hilliard et al., 2024), showing with some models in their work consistent linguistic markers of extraversion, conscientiousness, and other traits. Other researchers argue that the variability in response generation, especially while evaluating the LLMs, raises concerns about the reliability of such evaluation methodologies that are borrowed from psychological literature (Gupta et al., 2024; Frisch and Giulianelli, 2024; Salecha et al., 2024). Figure 1 shows an overview of attempted approaches with their limitations.

Some studies have tried to experiment with whether LLMs can maintain a constant personality profile across varied contexts. For example, studies in a parallel field, i.e., automated personality recognition, suggest that lingual markers of personality can be quite significantly culture-dependent(Park et al., 2015); the works focused on cross-language analysis to show this (Mairesse et al., 2007; Farnadi et al., 2013). Other researchers have experimented with LLMs to see if they can adapt the style or "persona" considering human feedback(Ouyang et al., 2022). The work showed promise in real-time adjustments (Ziegler et al., 2019). Some others have explored injecting personality via dynamic context adaptation or role-playing, but these efforts also often fizzle out producing inconsistent persona-targeted outputs(Huang et al., 2025; Shanahan et al., 2023). It is important to note that personality evaluation is frequently conducted on individual OCEAN dimensions, each of which inherently possesses a 50% random baseline(Serapio-García et al., 2023; Ouyang et al., 2022). Consequently, reported success metrics may be misleading, as the actual task involves predicting a binary vector across all five OCEAN dimensions, consistent with human evaluation protocols.

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# **1.3** Prior black-box approaches for evaluation and the rationale for using questionnaires for assessment

Using standardized psychological questionnaires closely resembles the approach of professional psychologists, built on decades of validated research, and offers transparency (Podsakoff et al., 2012). Al-

though the questionnaire-based approach has its own 117 downsides such as statistical variability and unclear 118 evidence of its applicability outside of human sub-119 jects, we will be using one such test (IPIP-NEO) in 120 our evaluation(Goldberg et al., 1999) (for examples 121 check Table A5 in Appendix) because the accura-122 cies reported on individual traits using simple NLP 123 techniques like TF-IDF and SVMs(Han et al., 2020; 124 Christian et al., 2021) are in range of 60-80% so 125 fitting any sort of classification model can just fit 126 on tokens related to such traits, while psychological 127 tests provide explainability and accuracy results are 128 in the same range (Miotto et al., 2022; Ouyang et al., 2022). 130

# 2 Research Questions

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• RQ1: How is the statistical variance in selftest responses affected after fine-tuning?

Prior studies have highlighted instability in LLM-generated responses to psychometric instruments, with output variability often attributed to prompt sensitivity rather than underlying personality representation (Gupta et al., 2024). This raises concerns about the reliability of current evaluation protocols. Whether finetuning reduces response variance is crucial for establishing LLMs as stable subjects in personality assessment.

# • RQ2: Can supervised or preferential finetuning using unguided text induce personality in LLMs?

Much of prior work equates success in personality induction with improvements on individual traits, but whether this reflects coherent, full-spectrum personality remains an open question. We investigate this through fine-tuning approaches and further argue that conditioning on generated essays is essential for trait recovery and capturing nuanced self-expression(Jiang et al., 2023).

# • RQ3: How do personality induction results differ between security-aligned and uncensored models?

159We hypothesized that fine-tuning may influence160the model performance of security-aligned mod-161els, potentially acting as a confounding variable

in our results. To address this concern, we replicated the methodology on parallel uncensored versions of the models.

#### **3** Dataset and Models used

Personality Trait	True	False
Openness	1,271	1,196
Conscientiousness	1,253	1,214
Extroversion	1,276	1,191
Agreeableness	1,310	1,157
Neuroticism	1,233	1,234

Table 1: Big Five Traits Distribution in the Essays Dataset.

The dataset contains 2,467 essays, totaling 1.9 million words, with an average of approximately 770 words per essay. Samples from the dataset can be seen in section A.7 of the Appendix. We selected this dataset for its rich narratives and longer text lengths, which better capture stable personality traits than shorter sources like Reddit (Gjurković and Šnajder, 2018) or Twitter (Golbeck et al., 2011), which often reflect transient moods (Schwartz et al., 2013).

Model	Size (B)	Input Context (tokens)	Uncensored version used
Gemma-2-2B	2	8,192	Y
Llama3.2-3B	3	128,000	Y
Gemma-7B	7	8,192	Ν
Llama 3.1-8B	8	8,000	Y
GPT-3.5-turbo-0125	175	16,385	Ν

Table 2: Comparison of various language models used

We evaluate 5 distinct models, each reflecting different scales and design principles: two small models (LLaMA 3.2–3B (Dubey et al., 2024) and Gemma-2–2B (Team et al., 2024)), two mid-sized models (Gemma–7B (Team et al., 2024) and LLaMA 3.1–8B (Dubey et al., 2024)), and a big commercial model (GPT–3.5<sup>2</sup>). We compare newer-generation smaller architectures against larger, earlier models to gauge their relative performance in personality induction. We chose these models as they are relatively close in performance for general tasks, as can be seen from the benchmark scores (Dubey et al., 2024; Team et al., 2024).

For RQ3, we compare uncensored versions of these models with their corresponding instructiontuned counterparts. Specifically, we include the un162 163 164

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<sup>&</sup>lt;sup>2</sup>https://platform.openai.com/docs/models/ gpt-3-5

censored variants of LLaMA 3.1–8B (Dubey et al., 2024)<sup>3</sup>, Gemma-2–2B (Team et al., 2024)<sup>3</sup>, and LLaMA 3.2–3B (Dubey et al., 2024)<sup>3</sup>. Notably, Gemma-7B currently lacks an uncensored counterpart in the UGI leaderboard<sup>3</sup>, and is thus excluded from this specific comparison.

#### 4 Methodology

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In this study, we adopt a two-phase methodology. We first analyze the statistical variation arising from prompt rephrasing during evaluation of fine-tuned models. Upon establishing prompt stability, we assess the effectiveness of fine-tuning strategies for personality induction. The next subsection outlines our prompt variation protocol, informed by prior work(Gupta et al., 2024), and the second subsection details our fine-tuning methodology and its rationale, plus details about data augmentation, training, and evaluation.

#### 4.1 Assessing the Impact of Prompt Variation

As discussed previously, LLMs can exhibit significant statistical variations when prompted with semantically similar but lexically distinct queries (Gupta et al., 2024). Such variations hinder the assessment of model performance, as it can be unclear if performance changes occur due to genuine learning or prompt-based variabilities. Hence, we took the same prompt templates (shown in Table A2 in the Appendix) as in the previous study and compared the variability between fine-tuned and untuned models; we named them sets S1, S2, and S3 for clarity. We have chosen one of the prompt variations, i.e., S2, to be a string response which is slightly different from previous work (only in one prompt) as it produces more tokens (we hope that this change is not too invasive) and that could be an important variation factor as well because most of the evaluation methods only consider a single token response to calculate the personality score. We use a starter statement, 'My answer to the statement is: ' as it's easy to pick the string for scoring using this template, and in practice, language models are quite consistent in following the template. If the model fails to follow the template and diverges or replies not in the format

being prompted for, we consider that response as "NaN" and it does not count in the evaluation. The NaN rate for all models during evaluation is reported in Table A4 in the Appendix. Results of this experiment are shown in Table 3, and an example of a decrease in variance is shown in Figure 4. 234

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# 4.2 Training and inference for personality induction

After confirming that the choice of prompt format has negligible impact post fine-tuning, we adopted format S1 for all subsequent experiments. All models underwent two rounds of supervised fine-tuning: (1) using only the prompt and corresponding essays, and (2) incorporating portions of questionnaire items and responses into the prompt to generate essays (see Appendix A.8–A.11 for examples). The rationale for (2) is the hypothesis that the model may implicitly learn associations between essays, questionnaire responses, and personality labels. During evaluation, the fine-tuned model is first prompted to generate an essay, followed by sequential responses to items from a psychological inventory to construct its personality profile. Due to OpenAI's moderation protocols concerning personal data, approximately 300 samples were filtered out during GPT-3.5 finetuning, yielding a final SFT dataset of  $\approx 2.1$ k samples, used uniformly across all models. Our experiment (see Figure 5 in the Appendix) showed that changing the temperature has a minimal effect on personality accuracy. Based on this, and consistent with prior findings on generation stability (Renze, 2024), we use a temperature of 0.0 during inference, as it is easier to standardize across models. For details regarding hyperparameter choices during training and inference, refer to Appendix Section A.3

# 4.2.1 Supervised fine-tuning

Each training sample consists of (a) a system prompt specifying what the task is, (b) a user prompt instructing the model to write an essay with certain Big Five personality traits, and (c) the corresponding essay. The model is trained via cross-entropy loss. At inference, it generates an essay in one pass, which is then used as context to predict the corresponding personality label (i.e., the original prompt). Figure 2 illustrates this pipeline, and sample data formats are detailed in Appendix A.9.

<sup>&</sup>lt;sup>3</sup>Links: LLaMA 3.1-8B, Gemma-2–2B, LLaMA 3.2–3B, UGI Leaderboard.



Figure 3: Methodological overview for comparing statistical variation in evaluation questionnaire

#### 4.2.2 Preferential fine-tuning

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While SFT aligns the model output to a single "correct" response, preferential fine-tuning includes ranked data that is pairwise assembled to represent human preferences (Ziegler et al., 2019; Rafailov et al., 2024; Hong et al., 2024). This method is similar to Reinforcement Learning with Human Feedback (RLHF) and has proved useful in tasks where the essential difference between "chosen" and "rejected" response is subjective (Ouyang et al., 2022) and thus the model can leverage from these preference signals rather than attempting to fit only one "ground truth" signal. Formally, we implement a preference loss, details of which can be found in the mathematical formulation stated in equations (1), (2), and (3) in the Appendix.

#### 4.2.3 Creating a parallel preferential dataset

Since we have the binary labels for OCEAN personality traits for any given sample, we pick a sample at random such that the OCEAN binary traits are not a perfect match. In our study, we aim to study personality as a whole at the primary target, so nuances in every dimension individually are important. We could pick the exact opposite sample. For example, for a person positive in all the traits, we can pick the preferential parallel data to be negative in all the traits, but in this way, we can never differentiate or teach our model more subtle differences, such as positive in all traits but negative in just one trait. For each given sample, we pick 3 random samples in this way and thus triple the preferential dataset size ( $\approx 6.3k$  parallel essays) for preferential training. 311 Please see Appendix section A.10 for an example. 312

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#### 4.2.4 Using questionnaire while training

We also wanted to test the change in performance 314 after including a part of the evaluation questionnaire 315 itself in training, so that the model learns a link be-316 tween personality essays and tests. For this task we 317 split the questionnaire into roughly 50% training and 318 test. Then, for each personality essay/type with re-319 gards to the OCEAN traits, we generate two sets of question responses: (1) An ideal test for that particu-321 lar personality type, (2) A randomized test for that particular personality type where the randomization 323 is done such that the average score for OCEAN traits matches the personality. At last, the train set of this 325 questionnaire, alongside their responses, is appended 326 to the input prompt. As is evident, this doubles the 327 dataset size ( $\approx 4.2k$  samples), and we then use the same method as explained before to create parallel 329 datasets for preferential training ( $\approx 12.6k$  parallel 330 samples). Please see Appendix sections A.8 and A.11 for examples. 332

#### 5 Results and discussion

# 5.1 Reduced variance in questionnaire-based evaluations

As shown in Table 3, fine-tuned and preferentially fine-tuned models consistently exhibit lower standard deviation in Big Five personality questionnaire scores compared to their untuned counterparts. This

Versions	Models											
versions	Llama-3.2-3B		Gemma-2-2B		Gemma-7B		GPT-3.5					
	S1	S2	S3	S1	S2	S3	S1	S2	S3	S1	S2	S3
Pre-trained	1.86	1.65	1.88	1.90	1.91	1.78	1.62	1.68	1.76	1.80	1.52	1.81
SFT (Essays)	1.40	1.41	1.44	1.46	1.44	1.28	1.33	1.38	1.32	1.23	1.24	1.30
SFT (Essays + Q)	1.42	1.30	1.35	1.40	1.28	1.29	1.19	1.29	1.42	1.32	1.22	1.21

 Table 3: Variance is calculated over 32 personality types comparing responses of pre-trained vs fine-tined models.

 Responses are considered on a scale of 1-5.



Figure 4: Standard deviation in questionnaire responses for GPT-3.5 across three prompt variations (S1: numeric, S2: string, S3: alphabet) under three settings—base GPT, SFT with personality essays, and SFT with essays plus questionnaire fragments—when conditioned to simulate all positive OCEAN traits

reduction in variability, ranging from approximately 15% to 33% is observed across all models evaluated. We hypothesize that the higher variance reported in prior studies may result from the lack of explicit task-specific supervision during model training (Salecha et al., 2024), with pre-trained models exhibiting heightened sensitivity to prompt phrasing in the absence of such adaptation.

#### Answer to RQ1

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Fine-tuning on labeled human-generated text reduces the variability of LLM response for self-test psychological assessment thus making them more reliable for evaluation.

This result partially addresses the volatile nature of psychological tests because it shows that at least one source of prompt rephrasing based volatility can be mitigated by appropriate training. In a different environment where such models act as reward models or judging models, this kind of training can be used. Figure 4 is an example that shows the reduction in standard deviation for GPT-3.5 w.r.t changes in the evaluation questionnaire. It is to be noted that our std values are higher than those reported in previous work because we are testing for a particular personality (all positive OCEAN in this example), as this is the fine-tuning task, while they tested the model only for one personality, considering it has to have an inherent personality. 353

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# 5.2 Low accuracy of post-training methods using unguided text for personality induction

Despite achieving improvements in response stability, fine-tuned models across all methods of posttraining fail to show any sort of convincing accuracy

Model		Exact ma	atch (S1)		Any 4 dimensions match (S1)					
WIGUEI	Base	SFT	DPO	ORPO	Base	SFT	DPO	ORPO		
	Without Questionnaires									
gemma-2-2b	3.13% (1)	3.13% (1)	0.00% (0)	3.13% (1)	18.75% (6)	18.75% (6)	12.50% (4)	18.75% (6)		
gemma-7b	9.38% (3)	6.25% (2)	3.13% (1)	3.13% (1)	25.00% (8)	21.88% (7)	18.75% (6)	15.63% (5)		
llama-3.2-3b	0.00% (0)	3.13% (1)	3.13% (1)	3.13% (1)	12.50% (4)	18.75% (6)	21.88% (7)	18.75% (6)		
llama-3.1-8b	6.25% (2)	6.25% (2)	3.13% (1)	6.25% (2)	18.75% (6)	21.88% (7)	18.75% (6)	18.75% (6)		
GPT-3.5	3.13% (1)	3.13% (1)	-	-	15.63% (5)	15.63% (5)	-	-		
			Wi	th Questionn	aires					
gemma-2-2b	3.13% (1)	3.13% (1)	0.00% (0)	0.00% (0)	18.75% (6)	18.75% (6)	12.50% (4)	12.50% (4)		
gemma-7b	9.38% (3)	6.25% (2)	3.13% (1)	3.13% (1)	25.00% (8)	21.88% (7)	18.75% (6)	18.75% (6)		
llama-3.2-3b	0.00% (0)	6.25% (2)	3.13% (1)	3.13% (1)	12.50% (4)	21.88% (7)	21.88% (7)	18.75% (6)		
llama-3.1-8b	6.25% (2)	3.13% (1)	6.25% (2)	6.25% (2)	18.75% (6)	18.75% (6)	21.88% (7)	18.75% (6)		
GPT-3.5	3.13% (1)	6.25% (2)	-	-	15.63% (5)	25.00% (8)	-	-		

Table 4: Evaluation results of fine-tuned models with and without questionnaires. Accuracies are shown as percentages while the numbers in brackets are cases out of 32 that passed the self test.

Model		Cen	sored			Unce	nsored	
Widdei	Base	SFT	DPO	ORPO	Base	SFT	DPO	ORPO
Without Questionnaires								
gemma-2-2b	3.13%	3.13%	0.00%	3.13%	0.00%	0.00%	0.00%	3.13%
llama-3.2-3b	0.00%	3.13%	3.13%	3.13%	3.13%	3.13%	3.13%	3.13%
llama-3.1-8b	6.25%	6.25%	3.13%	6.25%	3.13%	9.38%	6.25%	6.25%
			With Qı	uestionnair	res			
gemma-2-2b	3.13%	3.13%	0.00%	0.00%	0.00%	3.13%	3.13%	3.13%
llama-3.2-3b	0.00%	6.25%	3.13%	3.13%	3.13%	6.25%	3.13%	6.25%
llama-3.1-8b	6.25%	3.13%	6.25%	6.25%	9.38%	9.38%	9.38%	9.38%

Table 5: Side-by-side comparison of exact match results (S1) for censored and uncensored models, with and without questionnaires.

in personality induction. Full results can be seen in 370 Table 4. For all methods of training we check the 371 accuracy for all 32 possible cases ( $2^5$  combinations, taking each OCEAN trait as a binary input) and the 373 maximum we're able to get is 3/32 (9.38%) which is barely an improvement from a random baseline of 375 3.125% even though on individual traits (see Table 376 A1 in Appendix) we're able to reproduce metrics 377 close to previous reports(Chen et al., 2024; Miotto et al., 2022; Ouyang et al., 2022). This brings into 379 question the validity of such results, since the task 380 is to induce personality, which is multi-dimensional. 381 Can we regard it as a success to make improvements 382 in singleton dimensions? when even simpler ap-383 384 proaches using bag of words can achieve comparable metrics(Han et al., 2020; Christian et al., 2021). Even for a slightly relaxed measure of at-least 4 di-386 mensions matching the ground truth we could only 387 achieve a maximum of 25% accuracy as is shown in 388 Table 4.

#### Answer to RQ2

Despite extensive experimentation, neither supervised fine-tuning nor preference-based post-training enabled the models to recover the intended Big-Five personality vectors from unguided essays. Across architectures, accuracies hovered near the random baseline, indicating that current methods on unguided text are insufficient for reliable personality induction.

Building on this observation, we contend that prior studies that evaluate personality induction solely at the level of single Big-Five traits risk overstating success. Because the Big-Five construct is defined as a five-dimensional vector, competence on isolated dimensions cannot be assumed to generalise to the joint space where traits interact. Indeed, well-validated psychometric instruments such as the 120-item and 300-item IPIP-NEO reliably measure trait interdependencies and yield highly correlated profiles( $r^2$  391

ranging from 0.7 to 0.9) across retest administrations (Maples et al. 2014; TARIGAN et al. 2024). Consequently, an LLM that fails to reproduce the full personality vector lacks face validity when compared with human testing standards.

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# 5.3 Security alignment does not impacts personality induction results

Prior research (Chen et al., 2024; Miotto et al., 2022; Ouyang et al., 2022) has not explicitly examined the influence of security alignment on model performance. However, the results presented in Table 5 indicate that uncensored models exhibit comparable performance to their censored counterparts. This is despite a generally higher incidence of "NaN" outputs, as documented in Table A4 of the Appendix, which may be attributed to a lesser instruction following ability. These findings suggest that security alignment can be reasonably excluded from consideration in performance evaluation when employing post-training techniques on unguided text for personality induction.

## Answer to RQ3

Our experiments on the uncensored versions of models show no significant gains over securityaligned models for reliably inducing personality traits. While alignment factors can slightly affect performance in general, for personality induction, they do not appear to be the main bottleneck in boosting accuracy.

### 6 Conclusion

Our study demonstrates that fine-tuning substantially reduces the variance in self-test questionnaire responses for psychological evaluation of personalityinduced LLMs, suggesting that at least part of the volatility reported for pre-trained models can be mitigated after the models learn from supervised signals. write Despite improvement in stability, personality induction using unguided text falls short of expectations in terms of accuracy. This points to a need for more targeted datasets that feature human responses in specific scenarios that showcase personality better, or for extended chatbot-style dialogue methods that can accumulate the critical cues needed by prompting the user to provide more data when uncertain about specific dimensions of their personality to make a more confident assessment. We eliminate the involvement of safety-alignment protocols as a confounding factor in post-training attempts to induce personality. We also conclude from our results that much of the previous work that relies on individual dimensions of personality to support their arguments is not representative of the original task of personality induction, which is multidimensional. Psychological research shows strong adherence of tests like IPIP-NEO to real-world personality, while considering a complete persona profile, and future work with LLMs should also strive to achieve this target or find other ways of reliably evaluating personality in LLMs.

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#### 7 Ethics and Responsible Use Statement

This study investigates the induction and evaluation of personality traits in large language models (LLMs), intersecting with critical ethical domains such as human data privacy, psychological wellbeing, and responsible AI deployment. We affirm that all models and datasets employed in this work were used exclusively for academic research and educational purposes. No commercial use whether of model weights, outputs, or derivatives is pursued or endorsed.

#### **Data and Licensing Compliance**

The dataset utilized in this work, the Essays Dataset (Pennebaker and King, 1999), is publicly available and used in accordance with its licensing terms (Apache License 2.0), which permit redistribution and modification for research purposes. The personality trait labels and fine-tuned model variants derived from this dataset are strictly intended for methodological evaluation and not for clinical or diagnostic purposes.

All model resources were employed under appropriate non-commercial licenses:

- Gemma Models: Distributed under the Gemma Community License, which restricts usage to non-commercial research and prohibits production-level deployment.
- LLaMA Models: Provided under the Meta LLaMA 3 Community License, allowing access to academic and research institutions only.

GPT-3.5 (OpenAI): Accessed via API under
OpenAI's Usage Guidelines, allowing limited
research use while prohibiting training or redistribution of outputs for commercial purposes.

All training and evaluation data were sourced from publicly available repositories or licensed datasets with appropriate authorization. No private, proprietary, or personally identifiable information (PII) was included. Our work is compliant with the EU General Data Protection Regulation (GDPR) and prevailing ethical norms.

# Ethical Considerations and Oversight

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We recognize the dual-use nature of personality modeling. Such techniques may be misappropriated for impersonation or social engineering. As a precaution, we strongly discourage any deceptive or manipulative application of personality-simulating models and urge the broader community to develop and adopt transparent safety mechanisms. Public disclosure of model usage contexts and safeguards is essential to ensure responsible deployment.

The open-source release of all developed resources—including data processing pipelines, prompts, evaluation code, and bias analysis methodology—is licensed under the MIT License. Documentation will accompany the release to promote reproducibility and transparency.

Finally, we commit to ongoing ethical oversight, including periodic reevaluation of datasets, generation behaviors, and potential risks. Our efforts are aligned with environmental sustainability objectives, including the reduction of computing-related emissions in accordance with carbon neutrality goals.

#### 8 Limitations

• Small, Coarsely Labeled Dataset: The Essays Dataset (Pennebaker and King, 1999), with 2,467 essays totaling 1.9 million words (average 770 words per essay), is larger and more narrative-rich than many datasets used in prior personality induction studies, such as Reddit posts (Gjurković and Šnajder, 2018) or Twitter/X data (Golbeck et al., 2011), which often consist of thousands of short texts (e.g., 10,000–50,000 samples, typically under 280 characters). These smaller texts can lead to

models learning superficial keyword patterns, as simple bag-of-words approaches like TF-IDF with SVMs already achieve comparable performance (60-80% accuracy on individual traits) (Han et al., 2020; Christian et al., 2021). The Essays Dataset's longer, introspective narratives prioritize quality, capturing deeper personality signals, but its modest size may still limit linguistic diversity, and its binary Big Five labels may oversimplify trait gradients (Goldberg, 1993). Moreover, high-quality, largescale datasets with rich personality annotations are scarce, and generating synthetic data often oversimplifies the task by lacking the nuanced, context-dependent expressions found in humangenerated text (Hämäläinen et al., 2023; Miotto et al., 2022). As mentioned earlier, if we mix smaller datasets consisting of tweets, Reddit posts, etc, into our work, it has a thread of polluting the results without achieving the original task of capturing personality, as short texts tend to be more "mood" driven.

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- Questionnaire Based Evaluation Bias: While being grounded in psychology literature, Big Five questionnaires were intended for humans to self-report, and thus the low accuracy might reflect an inherent mismatch between introspection capabilities in humans vs. probabilistically generated tokens(Podsakoff et al., 2012; Gow et al., 2005).
- No Human Evaluation: Our study did not include cross-verification of the generated text by human experts, leaving the subjective quality and authenticity of personality expression in the outputs unassessed. Human evaluation is critical for determining whether the model's generated text convincingly reflects targeted personality traits, such as linguistic markers of extraversion or conscientiousness, and passes an "eye check" for human-like quality. Research indicates that human evaluators often exhibit bias against AI-generated text when aware of its origin, rating it less favorably compared to human-authored content (Christian et al., 2021). Despite this potential bias, human validation would have provided valuable insights into

573whether our model's outputs align with psycho-574logical expectations of personality expression.575Given the negative results of our experiments,576which showed limited success in inducing con-577sistent personality traits, and the economic bur-578den of recruiting expert evaluators, we refrained579from conducting this resource-intensive task.

• Threat of Overfitting The small scale of the Essays Dataset and the multiplicative use of data in post-preferential fine-tuning increase the risk of overfitting, where the model may memorize patterns rather than generalize personality traits.

• Non-extensive hyperparameter tuning and single training runs: Given the extensive duration required for each individual experiment (approximately 24 hours) and the substantial number of experiments conducted, we were unable to perform multiple training runs with systematically varied hyperparameters. This constraint limited our capacity to thoroughly evaluate the sensitivity of our models to different training configurations.

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#### A Appendix

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#### A.1 Evaluation on individual dimensions

While our primary focus is on multi-dimensional personality induction, we also evaluate model performance on each individual dimension of the OCEAN framework—Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism—to facilitate comparison with prior work.

As shown in Table A1 in the Appendix, individual trait prediction results vary considerably across models and training strategies. The highest accuracies are observed in the range of 65%. These results are broadly consistent with findings in prior literature (Chen et al., 2024; Miotto et al., 2022; Ouyang et al., 2022), though our peak scores are slightly lower. One plausible explanation for this discrepancy is the reduced statistical power in our evaluation setup, we utilize only 32 test instances per trait, compared to more expansive test sets used in previous studies.

Despite the relatively modest accuracy scores, performance is consistently above the random baseline of 50% for binary classification, which reaffirms that certain linguistic markers of personality are retained 819 in fine-tuned models. However, these results must be 820 interpreted cautiously. Improvements in isolated di-821 mensions do not necessarily indicate meaningful suc-822 cess in personality induction unless the joint multi-823 dimensional structure of personality is preserved. As 824 elaborated in the main paper, our full-vector eval-825 uations reveal that models fail to jointly reproduce 826 personality profiles with statistical reliability, and 827 thus, trait-level gains must not be overstated. 828

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#### A.2 Prompt sets for self-test evaluation

Table A2 in Appendix comprehensively shows the sets S1, S2, and S3 used in our study for comparison of statistical variations while evaluating.

#### A.3 Training Steps and Hyperparameters

All experiments were conducted using an NVIDIA 834 A100 80GB GPU under PyTorch 2.0. We employed 835 the trl library for both supervised fine-tuning (SFT) 836 and preference-based methods (DPO, ORPO). 837 Additional environment details for reproducibility: 838 • Python Version: 3.10 839 • CUDA Version: 12.1 • Transformers Library Version: 4.40.2 841 • Operating System: Ubuntu 22.04 842 Supervised Fine-tuning (SFT). We used standard 843 LoRA(Hu et al., 2022) for SFT. Across 3 epochs: 844 • Learning Rate:  $1 \times 10^{-5}$ 845 • Batch Size: 2 (with gradient accumulation step 846 of 4) 847 • LoRA Configuration: Rank (r) of 8, dropout 848 = 0.1• Precision: 16-bit (FP16) 850 • Max Prompt/Sequence Length: 4,000 tokens 851 • **Optimizer:** AdamW (*weight decay* = 0.01, be-852 tas = (0.9, 0.999))853 • Scheduler: Cosine scheduler with linear warm-854 up (warmup ratio = 0.1) 855

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**Inference Settings.** For all models and methods,

we set:Max Length: 200

tas = (0.9, 0.999))

up (warmup ratio = 0.1)

• **Sampling:** *temperature* = 0.0, *top\_p* = 1.0, *do sample* = False

Preference-Based Fine-tuning (DPO, ORPO).

For both DPO and ORPO, we relied on

QLoRA(Dettmers et al., 2023) to reduce memory

• Batch Size: 2 (with gradient accumulation

• **OLoRA Configuration:** 4-bit quantization

• Max Prompt/Sequence Length: 4,000 tokens

• **Optimizer:** AdamW (*weight decay* = 0.01, be-

• Scheduler: Cosine scheduler with linear warm-

(*nf4*), rank (r) of 8, dropout = 0.1

usage. We trained for 3 epochs with:

• Learning Rate:  $1 \times 10^{-5}$ 

steps of 4)

The inference settings are common for all models; a temperature of 0.0 and a top-p of 1.0 are used. We chose a temperature of 0.0 because it minimizes generation variability and makes evaluation more consistent across runs. There is not much variability with a change in temperature. For example, have a look at Figure 5, the percent change in accuracy is in the domain of 0-6%. This is consistent with other reported results(Renze, 2024), thus we use this temperature. With temperature set to 0.0, the nucleus sampling parameter top-p becomes inconsequential, as sampling is effectively disabled, ensuring a controlled and reproducible inference environment across all models.

Typically, small-scale models require approximately 14–16 hours for a single round of supervised fine-tuning (SFT) and 22–24 hours for a single round of ORPO training. In comparison, mid-sized models take approximately 20–22 hours for SFT and 26–32 hours for ORPO. Given the substantial number of experiments conducted and the associated computational demands, we executed each training configuration only once, with the exception of some inference runs as reported in Figure 5.

# A.4 Negative-Phrased Questions and Score Inversion

In our questionnaire, we deliberately include negatively phrased items to mitigate simple pattern matching. For example, an Extravert might naturally agree (i.e., choose a high value) with a statement like "*I enjoy meeting new people*". However, for a negatively phrased counterpart such as "*I am not good at getting people to like me*,", the expected response is a low value (indicating disagreement).

During scoring, these negatively phrased items are inverted so that a low response (e.g., 1) is automatically mapped to a high score (e.g., 5), ensuring the correct trait direction. This helps detect whether models are genuinely interpreting question semantics rather than relying on simple keyword matching or always selecting high values. The questions include placeholders (math field) to indicate such reversals, where negative statements are inverted by applying (6 - response) in inference when math value = -1 (check Table A5 in Appendix for samples).

# A.5 Reflecting human preferences via preferential fine-tuning

Preferential fine-tuning leverages the idea that human judgments about preferred outputs not only provide label quality but also embed nuanced, contextspecific values. By assigning higher weights to chosen responses and lower ones to rejected options, the model internalizes preferences that often mirror an individual's or organization's stylistic or ethical priorities. This calibration is particularly useful for tasks like personality induction, where alignment with specific traits or tones is key: user preferences effectively "shape" the model's persona. We chose this approach as it respects the principle of humancentric design-amplifying desired personality cues grants practitioners a more direct avenue to impart generative models with human-like qualities that reflect real-world norms and relationships in language. The two methods picked, i.e., DPO and ORPO, are explained below.

# A.5.1 Direct Preference Optimization (DPO)

DPO is one of the widely used methods (Rafailov et al., 2024) where the model itself also acts as a reward model on parallel preferential data. The model compares two candidate outputs, i.e., "cho-



Figure 5: GPT-3.5 SFT OCEAN Trait Accuracy vs Temperature

$$L_{\text{DPO}}(\theta) = -\mathbb{E}_{(x, y_w, y_l) \sim D} \bigg[ \log \sigma \Big( \beta \Big( \left[ \log \pi_{\theta}(y_w \mid x) - \log \pi_{\theta}(y_l \mid x) \right] - \left[ \log \pi_{\text{ref}}(y_w \mid x) - \log \pi_{\text{ref}}(y_l \mid x) \right] \Big) \bigg]$$

$$(1)$$

$$L_{\text{ORPO}}(\theta) = \mathbb{E}_{(x, y_w, y_l) \sim D} \left[ L_{\text{SFT}}(\theta; x, y_w) + \lambda \cdot L_{\text{OR}}(\theta; x, y_w, y_l) \right]$$
(2)

$$L_{\text{OR}}(\theta; x, y_w, y_l) = -\log \sigma \left(\log \pi_\theta(y_w \mid x) - \log \pi_\theta(y_l \mid x)\right)$$
(3)

sen" vs "rejected"; it uses a log-likelihood ratio that assigns a higher probability to preferred out-946 puts. Equation 1 shows the DPO loss function where:  $L_{\text{DPO}}(\theta)$ : The loss function with respect to the pol-948 icy parameters  $\theta.\mathbb{E}_{(x, y_w, y_l) \sim D}$ : Expectation over the dataset D containing prompts x and pairs of re-950 sponses  $(y_w, y_l)$  where  $y_w$  is the preferred response 951 over  $y_l$ .  $\sigma(z) = \frac{1}{1 + e^{-z}}$ : The sigmoid function. $\beta$ : 952 A scaling factor (inverse temperature) controlling the strength of the update.  $\pi_{\theta}(y \mid x)$ : The proba-954 bility assigned by the policy  $\pi_{\theta}$  to response y given 955 prompt x.  $\pi_{ref}(y \mid x)$ : The probability assigned by 956 the reference policy  $\pi_{ref}$  to response y given prompt 958 x.

# A.5.2 Monolithic Preference Optimization (ORPO)

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ORPO (Hong et al., 2024) targets to achieve the same task as DPO, but it uses an odds ratio of probabil-

ities for token prediction, which is done "offline," meaning the gradient is calculated normally, unlike DPO, where it is included in the log-likelihood calculations while backpropagation, instead in ORPO the model used the odds ratio to provide weights for chosen and rejected responses. Equations 2 and 3 show the ORPO loss function where:  $L_{ORPO}(\theta)$  is the overall loss function with respect to model parameters  $\theta$ .  $\mathbb{E}_{(x, y_w, y_l) \sim D}$  denotes the expectation over the dataset D containing prompts x and pairs of responses  $(y_w, y_l)$ , where  $y_w$  is the preferred response and  $y_l$  is the less preferred response.  $L_{\text{SFT}}(\theta; x, y_w)$ represents the supervised fine-tuning loss for the preferred response  $y_w$  given prompt x.  $\lambda$  is a hyperparameter controlling the balance between  $L_{\text{SFT}}$ and  $L_{\text{OR}}$ .  $L_{\text{OR}}(\theta; x, y_w, y_l)$  is the relative ratio loss.  $\sigma(z) = \frac{1}{1 + e^{-z}}$  is the sigmoid function.  $\pi_{\theta}(y \mid x)$ is the probability assigned by the model  $\theta$  to response y given prompt x.

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#### A.6 Looking closely at evaluation

Here is an example of Llama-3.2-3B model tuned with ORPO (Essays + Q) and being evaluated for all positive OCEAN traits. Looking at the response to the statement "Am annoved by others' mistakes" we can notice that the justification (we specifically prompted for it) is valid, but it contradicts the response to statements "Am inclined to forgive others." and "Am not disturbed by events." which are as expected as the model is prompted to be positive in Agreeableness. This is typical, though, that the model is justifying its answer correctly but swinging in its internalization of how an agreeable person should behave. On other occasions, though, it can give a neutral response, too, as to the statement "Am easily offended. " which is not a problem as the model indeed should learn to be uncertain on certain topics and not overfit or "hack" rewards from similar questions seen during training.

#### A.7 Essays Dataset Samples

#### 1997\_504851.txt

**Traits:** EXT: y NEU: y AGR: y CON: n OPN: y

### Essay:

Well, right now I just woke up from a mid-day nap. It's sort of weird, but ever since I moved to Texas, I have had problems concentrating on things. I remember starting my homework in 10th grade as soon as the clock struck 4 and not stopping until it was done. Of course it was easier, but I still did it. But when I moved here, the homework got a little more challenging and there was a lot more busy work, and so I decided not to spend hours doing it, and just getting by. But the thing was that I always paid attention in class and just plain out knew the stuff, and now that I look back, if I had really worked hard and stayed on track the last two years without getting lazy, I would have been a genius, but hey, that's all good. It's too late to correct the past, but I don't really know how to stay focused n the future. The one thing I know is that when people say that b/c they live on campus they can't concentrate, it's b. s. For me it would be easier there, but alas, I'm living at home under the watchful eye of my parents and a little nagging sister that just nags and nags and nags. You get my point. Another thing is, is that it's just

a hassle to have to go all the way back to school to 1028 just to go to library to study. I need to move out, but 1029 I don't know how to tell them. Don't get me wrong, 1030 I see where they're coming from and why they don't 1031 want me to move out, but I need to get away and 1032 be on my own. They've sheltered me so much and 1033 I don't have a worry in the world. The only thing 1034 that they ask me to do is keep my room clean and 1035 help out with the business once in a while, but I can't 1036 even do that. But I need to. But I got enough money 1037 from UT to live at a dorm or apartment next semester 1038 and I think I'll take advantage of that. But off that 1039 topic now, I went to sixth street last night and had a 1040 blast. I haven't been there in so long. Now I know 1041 why I love Austin so much. When I lived in VA, 1042 I used to go up to DC all the time and had a blast, 1043 but here, there are so many students running around 1044 at night. I just want to have some fun and I know 1045 that I am responsible enough to be able to have fun, 1046 but keep my priorities straight. Living at home, I 1047 can't go out at all without them asking where? with 1048 who? why? when are you coming back? and all 1049 those questions. I just wish I could be treated like a 1050 responsible person for once, but my sister screwed 1051 that up for me. She went crazy the second she moved 1052 into college and messed up her whole college career 1053 by partying too much. And that's the ultimate reason 1054 that they don't want me to go and have fun. But 1055 I'm not little anymore, and they need to let me go 1056 and explore the world, but I'm Indian; with Indian 1057 culture, with Indian values. They go against "having 1058 fun. " I mean in the sense of meeting people or going 1059 out with people or partying or just plain having fun. 1060 My school is difficult already, but somehow I think 1061 that having more freedom will put more pressure on 1062 me to do better in school b/c that's what my parents 1063 and ultimately I expect of myself. Well it's been fun 1064 writing, I don't know if you go anything out of this 1065 writing, but it helped me get some of my thoughts 1066 into order. So I hope you had fun reading it and good 1067 luck TA's. 1068

### 1997\_605191.txt

# **Traits:** EXT: n NEU: n AGR: y CON: n OPN: n

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**Essay:** Well, here we go with the stream of consciousness essay. I used to do things like this in high school sometimes. They were pretty interesting, but

I often find myself with a lack of things to say. I 1075 normally consider myself someone who gets straight 1076 to the point. I wonder if I should hit enter any time 1077 to send this back to the front. Maybe I'll fix it later. 1078 My friend is playing guitar in my room now. Sort 1079 of playing anyway. More like messing with it. He's 1080 still learning. There's a drawing on the wall next to 1081 me. Comic book characters I think, but I'm not sure 1082 who they are. It's been a while since I've kept up 1083 with comic's. I just heard a sound from ICQ. That's a 1084 chat program on the internet. I don't know too much 1085 about it so I can't really explain too well. Anyway, I 1086 hope I'm done with this by the time another friend comes over. It will be nice to talk to her again. She 1088 went home this weekend for Labor Day. So did my 1089 brother. I didn't go. I'm not sure why. No reason 1090 to go, I guess. Hmm. when did I start this. Wow, 1091 that was a long line. I guess I won't change it later. 1092 Okay, I'm running out of things to talk about. I've 1093 found that happens to me a lot in conversation. Not a 1094 very interesting person, I guess. Well, I don't know. 1095 It's something I'm working on. I'm in a class now 1096 1097 that might help. The phone just rang. Should I get it? The guy playing the guitar answered it for me. 1098 It's for my roommate. My suitemate just came in 1099 and started reading this. I'm uncomfortable with 1100 that. He's in the bathroom now. You know, this is 1101 a really boring piece of literature. I never realized 1102 how dull most everyday thoughts are. Then again, 1103 when you keep your mind constantly moving like 1104 this, there isn't really time to stop and think deeply 1105 about things. I wonder how long this is going to be. 1106 I think it's been about ten minutes now. Only my 1107 second line. How sad. Well, not really considering 1108 how long these lines are. Anyway, I wonder what 1109 I'm going to do the rest of the night. I guess there's 1110 always homework to do. I guess we'll see. This seat 1111 is uncomfortable. My back sort of hurts. I think I'm 1112 going to have arthritis when I get older. I always 1113 thought that I wouldn't like to grow old. Not too 1114 old, I suppose. I've always been a very active person. 1115 I have a fear of growing old, I think. I guess it'll 1116 go away as I age gradually. I don't know how well 1117 I'd deal with paralysis from an accident though. As 1118 long as I have God and my friends around, I'll be 1119 okay though. I'm pretty thirsty right now. There isn't 1120 much to drink around my room. Ultimate Frisbee, I 1121 haven't played that all summer. Fun game, but tiring. 1122

I'm out of shape. I'd like to get in better shape, but 1123 I hate running. It's too dull for me. Hmmm. it's 1124 almost over now. Just a few more minutes. Let's 1125 see if I make it to the next line. Short reachable 1126 goals! Whatever. Anyway, what else do I have to do 1127 tonight. I guess I could read some. My shirt smells 1128 like dinner. It's pretty disgusting. I need to wake 1129 up for a 9:30 am class tomorrow. I remember when 1130 that wasn't early at all. Well, I made it to the next 1131 line. I'm so proud of myself. That's sarcasm, by the 1132 way. I wonder if I was suppose to right this thing as 1133 a narrative. Oh well too late now. Time for me to 1134 head out. Until next time, good bye and good luck. I 1135 don't know. 1136

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#### 1997\_687252.txt

# **Traits:** EXT: n NEU: y AGR: n CON: y OPN: y

Essay: An open keyboard and buttons to push. 1140 The thing finally worked and I need not use periods, 1141 commas and all those thinks. Double space after a 1142 period. We can't help it. I put spaces between my 1143 words and I do my happy little assignment of jibber-1144 jabber. Babble babble babble for 20 relaxing minutes 1145 and I feel silly and grammatically incorrect. I am 1146 linked to an unknown reader. A graduate student 1147 with an absurd job. I type. I jabber and I think about 1148 dinoflagellates. About sunflower crosses and about 1149 the fiberglass that has be added to my lips via clove 1150 cigarettes and I think about things that I shouldn't 1151 be thinking. I know I shouldn't be thinking. or 1152 writing let's say/ So I don't. Thoughts don't solidify. 1153 They lodge in the back. behind my tongue maybe. 1154 Somewhere at the point of hiding but dinoflaghelates, 1155 protistas and what was that sea weed. I think about 1156 the San Luiz valley and I think about the mushrooms 1157 in cow shit. I think about the ticos and I think about 1158 the chiggers that are living in my legs. I itch. I coat 1159 myself with clear nail polish in hopes to suffocate 1160 the bugs that are living in my legs and I remember 1161 Marco. I remember Ecuador and I think about my 1162 thoughts and what I am not supposed to be doing in 1163 this assignment. Thoughts. I wonder if I think in 1164 sentences I wonder what affect my slowish typing 1165 has on my stream of consciousness and I wonder if 1166 there is a way that typing speed can be measured 1167 in this study so that so link some generalization of 1168 dorky 301 psyc students. green and the table in my 1169

kitchen makes me want to vomit. orange. What an 1170 absurd color. wish I wasn't in the united state. My 1171 greencard runs out in a few years wonder what I 1172 do. I hope Dr. Linder gets back in his lab because 1173 I really need to find out if he has funds to pay me. 1174 May have to go back to the library. Brainless job 1175 of nothingness that would make me wallow in the 1176 world of boredom which isn't entirely bad. Need 1177 to focus on school organics and such. Period. Two 1178 1179 spaces after the period. Mistakes and I want to eat not hungry and I wonder how many people talk about 1180 food in there little computer ramblings Feel open and 1181 Happy that I am not having to edit this. Type type I 1182 don't know what I am think Hannah Imi and Osdprey 1183 house. I remember when I went down to that . she 1184 had spiders on hurt wall pain all over the place and 1185 we painted clouds on the ceiling and the blue walls 1186 were so obnoxious. Carey. Sex sex sex. yeah. This 1187 is a strange assignment and Portonoy's complaint 1188 is ringing in my head. Eager to finish so that I can 1189 start for Whom the Bell Tolls and get on with it. 1190 Bio and Carbon atoms bonds and orbitals. Thinking 1191 1192 about the electron configuration that surrounds the last letter in my first name and I think that I must have 1193 been granted a full "s" orbital one up and one down. 1194 spinning on opposite directions and I am thinking 1195 about Scottish poetry about Mike in his kilt and about 1196 my guitar that I am slowly slowly slowly learning to 1197 play. I wonder what goes on in this study. I wonder 1198 if those happy little bored entertained grad students 1199 will scan words and I wonder how I can mess up 1200 this study? Random words like . don't know. ;Me 1201 me me me and I wish that some things were easier and I wish that I had been keeping my eye on 1203 the clock. Wondering how long I have been typing 1204 and wishing that I was finished because I need to 1205 find out if I have to / will work in the Botany lab 1206 again and all that . ILS Belly and the Flamenco. 1207 Bjork and Rozamond Cockrill kickin' it in Saratoga 1208 Springs. I hate Molly's cat and wish that it could be 1209 exchanged for a worthwhile ferret. Type type type. 1210 I have managed to waste over 20 minutes of time I 1211 think. Who knows. What If I was to write this out 1212 and it took 30 minutes to write and 15 minutes to 1213 type. Thinking about nothing and wishing that some 1214 financial aid would come my way. Need a job and a 1215 sprinkling of time. Time to go and sign outta here. 1216 trees 1217

#### 1997\_568848.txt

**Traits:** EXT: y NEU: n AGR: y CON: y OPN: n

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Essay: I can't believe it! It's really happening! 1221 My pulse is racing like mad. So this is what it's 1222 like. now I finally know what it feels like. just a 1223 few more steps. I wonder if he is going to get any 1224 sleep tonight !? I sure won't! Well, of course I have 1225 a million deadlines to meet tomorrow so I'll be up 1226 late anyway. But OH! I'm so so excited! Yes! Yes! 1227 I can't believe it is finally happening. Wait! Calm 1228 down. We aren't officially a couple yet. What if I end 1229 up not liking him? That would be horrible. Oh great, 1230 I wonder how long it'll take me to finish those Cal-1231 culus problems? I'll get it done. Don't you always, 1232 Amy? I can't believe Bob did it! He really did it! He 1233 is THE miracle worker. If things turn out all right I 1234 will owe him more than I can ever repay. I wonder 1235 what Steve is doing in Malaysia right now? An entire 1236 month! I'll likely clean out his refrigerator by then. 1237 Omigosh! Food, lunch tomorrow, what will I ever 1238 say to him? He is perfect in every way imaginable. It 1239 is so important for him to think of me the same way. 1240 well, maybe not Perfect, but certainly dynamic. Who 1241 would have ever thought! Good things do indeed 1242 come to those who wait! Oh. I'll have to remember 1243 to sign the poster he made tomorrow morning. I hope 1244 Steve's alarm clock is reliable and I don't oversleep. 1245 That would be tragic if I slept 'til noon and missed 1246 the lunch. Thank goodness Portia is coming along. I 1247 will definitely need her support as well as Bob's. just 1248 having her there will take away some of the tension 1249 and put me more at ease. I'll have to rehearse what 1250 I say beforehand. things can only get better from 1251 here, right? hopefully. oh, I'm so nervous! He will 1252 be too. maybe even more so. it'll be ok. Why in 1253 the world do humans put themselves through such 1254 torture. maybe love is really worth it? 1255

#### 1997\_688160.txt

**Traits:** EXT: y NEU: n AGR: y CON: n OPN: y

**Essay:** Well, here I go with the good old stream of consciousness assignment again. I feel like I'm back in freshman HS English class again. Not that that's a bad thing, mind you, but my English teacher freshman year made us do these assignments con-

stantly, and mine were always completely ridiculous, 1264 like, "wow, I'm really hungry. I wish I could go to 1265 Taco Bell. " They really had no point, except as busy work. In a psychology class, though, I can see the 1267 reasoning behind an assignment like this. Just letting 1268 my mind go free, and putting my random thoughts 1269 down in writing could be a big help in figuring out 1270 why I'm such a psychological screw-up. Well, that's 1271 not true. I don't want y'all getting the wrong idea 1272 about me, being that today was the first day of class 1273 and all. I'm really not a nut case. People may think 1274 I am, but really, I'm a normal kind of gal. Actually, 1275 down here in Texas, I guess I'm not normal. I don't 1276 like to eat biscuits and gravy for breakfast, and coun-1277 try fried steak with fried okra for dinner. I'm from 1278 Connecticut, and we don't even HAVE okra, much 1279 less worship it like it's some kind of vegetable god-1280 dess. My mind is starting to go blank-performance pressure I guess. I'm on the spot here-I don't want 1282 you all to be bored while you're reading this, if you 1283 ever do get around to reading this, that is. Well, I'm 1284 not going to stress just yet, so you're probably going 1285 1286 to have to listen to some of my random, incoherent babbling for a few paragraphs. These computers are 1287 a big old pain in the ass. Here in the SMF, sure, 1288 they've got a bajillion computers, but unfortunately, 1289 we've got 42 bajillion students trying to use them, 1290 all at the same time. I think I'll be spending quite a 1291 few late, late nights in the computer center, just to 1292 get my stuff done. Yippee. That's what college is all 1293 about-late nights in the libraries. Yeah. Right. At 1294 this point, I don't even know what college is all about. 1295 I probably shouldn't say anything though, seeing as how I'm going to have to write another one of these 1297 thingys in a few days, where the topic is "college" 1298 1299 Blah, blah, blah. I can't believe I'm actually doing this assignment on the same day that is was assigned! 1300 Go me! Talk about dedication. I really can't believe 1301 this. In high school, procrastination was my middle 1302 name. No, it was my first name. By second semester, 1303 I have more free periods in a day than actual classes, 1304 so I didn't have to do a damn thing. It was great! 1305 Unfortunately, because of that, I'm going to have 1306 to work that much harder here at UT, to get those 1307 studying skills back up to par. High School. Now 1308 that was a trip. When I was there, I couldn't wait 1309 to get out of there. I hated that school, that town, 1310 everything except my friends, of course. Then, my 1311

family moved, right after graduation, and I learned 1312 real quick that there were worse places to be than in 1313 my old town. At least back home I have my friends 1314 and my boyfriend and my piece of crap car, and I 1315 knew what there was to do. After I moved, I had 1316 no friends, no life, no car, no nothing. I worked all 1317 day. That's it. now, though, I'm ready for this whole 1318 college thing. Austin seems like a fun city, where 1319 I might actually enjoy spending the next four years. 1320 Oh yeah. While we're on the subject of "four years," 1321 why is it that all the professors & administrators that 1322 give speeches and stuff always make it sound like 1323 we'll be in college for like, 5 or 6 years? I'm sorry, 1324 but I plan on graduating in 4 years. What's the prob-1325 lem here? What are people doing, that they can't 1326 graduate in 4 years? I just don't get it. no offense if 1327 any of y'all reading this took like 7 years to do your 1328 undergrad work. I'm not trying to knock you, just 1329 trying to figure this out. Well, it's 9:19, exactly 18 1330 minutes after I started this nifty little piece of writ-1331 ing that makes no sense and has no point. I'm not 1332 really sure if I have fulfilled this assignment, like if I 1333 was supposed to analyze my personal stream of con-1334 sciousness, where it took me, and what that means 1335 regarding my own personality. I guess if I had to, I 1336 could say that my mind works in mysterious ways, 1337 and even if the above essay seems to be illogically 1338 connected, to me, I can see the patterns. Yeah. I 1339 just went back & tried to read this over again, and 1340 I've got to give a suggestion. For these assignments, 1341 make the box we're writing in a box where you can 1342 see the whole line of writing at one time, without 1343 have to scroll across, because it's a real big pain for 1344 me, and I'm sure it's just as big a pain for you when 1345 you're trying to read it. Unless, of course, when you 1346 read it, you can see the whole line at once. I don't 1347 know, just a suggestion! Thanks for taking the time 1348 to give us all the opportunity to get an easy 10 % of 1349 out final grade through these writing assignments! 1350

# A.8 SFT Essays with questionnaire training examples

# Example 1:

#### {System Prompt}

You will write an essay mimicking the personality1355of a person who has given responses to some psycho-1356logical questions. The responses are written using1357

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1358the following scale: 1 = Very much like me 2 = Like1359me 3 = Neither like me nor unlike me 4 = Not like1360me 5 = Not like me at all

### {User Prompt}

#### Instruction:

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Write an essay as a person positive in openness, negative in conscientiousness, positive in extroversion, negative in agreeableness, and positive in neuroticism. These are the psychological questionnaire responses for a person with these traits:

#### **{Questionnaire Responses}**

Am not really interested in others.: 5 Am on good terms with nearly everyone.: 1 Feel little concern for others.: 5 Have a good word for everyone.: 1 Inquire about others' well-being.: 1

#### Tend to vote for liberal political candidates.: 5 {Assistant Response (Essay)}

I have been extremely pissed off for the entire day. I have just started classes again at UT. I am trying to get into the pharmacy school. I work at a pharmacy now, but the people there are driving me insane. I have panic disorder, but lately instead of panicking I am just angry. I almost ran into about 5 cars driving on mo-pac. road rage?! My therapist is trying to assure me that I am not the one who is crazy - it's just the people around me. My job, my parents, my friends. I am taking things out on John who does not deserve it - he is just here all the time.

I wrote him a nasty email and I think he just replied. He is so sweet, I really should make a HUGE effort not to do that to him. He is probably used to it after 3 years. Yuck. I would have been tired of my temper tantrums a long time ago. I tried acupuncture today for anxiety and my irritable bowel syndrome. The guy treating me at the student clinic was a moron. I usually get good people. He is graduating soon from that academy and I am scared of what he will do to his patients.

I am going to take a Xanax now and see how long it takes me to calm down. Cool, I can time it. Ready, go. Ok. I have to work all weekend when I need to be studying. My wrist hurts. Maybe from typing, maybe from that moron. This should be pretty interesting for someone to read. I have lots of other homework that I could be doing, but this is all I have the brain power for right now. No offense, but it's not biochemistry.

I am glad to be back in school. I hit the wrong key and it stopped for like 3 seconds. Weird. I have to work with John the head pharmacist this weekend. They are all trying to manipulate me into working more hours than I want to. They have now told me that if I don't work all of these hours that they will find someone else to work there. It's all or nothing. I know they are bluffing, because it would take them so long to train someone that one of the other techs that works at the store would have to cover the weekends for months.

No one wants to work weekends. So I should do it because I'm in school and that's easier for me because I am a student. That's their logic. That's crap. I think I'm almost done bitching. I am going to work tomorrow and if he doesn't make some compromise with me then I may just walk out and let him work by himself. That won't happen. He will say anything to keep me there. And I'll probably fall for it and think everything is ok and then he will just change his mind at the end of the weekend.

So, I should just change jobs, or just change stores. Eckerd's sucks - they all have their heads up their butts. AAAAH! I guess I feel a little better now, but not much. I will just have to think about something else if I am going to feel better. My glasses are foggy. They always get scratched because I don't take care of them. I need an eye exam. Haven't had one since grade school. Who says grade school? I'm old.

I have to be good this weekend. Even though I am going to a birthday party that will probably be not quite as good as I need to be. Whatever, that didn't make sense. I wonder when John will be home. At least I'm getting something done. I need to do a lot of things. I need to send transcripts to UT, start looking at pharm apps, and ask John if he is really going to move with me if I go out of state. I will probably get in for next fall but you never can tell. I applied way too late last year and got stuck on the stupid alternate list. Ok, next/

#### Example 2:

#### {System Prompt}

You will write an essay mimicking the personality1449of a person who has given responses to some psycho-1450logical questions. The responses are written using1451

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the following scale: 1 = Very much like me 2 = Like
me 3 = Neither like me nor unlike me 4 = Not like
me 5 = Not like me at all

#### {User Prompt}

#### Instruction:

Write an essay as a person positive in openness, negative in conscientiousness, negative in extroversion, negative in agreeableness, and positive in neuroticism. These are the psychological questionnaire responses for a person with these traits:

#### **{Questionnaire Responses}**

Am not really interested in others.: 5 Am on good terms with nearly everyone.: 1 Feel little concern for others.: 5 Have a good word for everyone.: 1 Inquire about others' well-being.: 1

#### Tend to vote for liberal political candidates.: 5 {Assistant Response (Essay)}

I especially hate it when it's like some obnoxious song that I only know the chorus to or something. Hmmm. Right now I'm wondering how in the world I'm supposed to keep on typing for twenty minutes and keep on coming up with things to say. It's kind of like when you meet someone new and you're trying to have a conversation with them and you keep hitting those brick walls. I constantly do that. You can only ask a person their major so many times.

I wish I would have taken a typing class in high school. Everyone else I know did but I procrastinated so I could only take a programming class for my computer credit. But it was good that I took that class. Now I've learned that I really do hate programming. I have to come to terms with the fact that I like computers yet I hate programming. I think my brain would slowly build up pressure and then explode when I'm in my 40s if I became a programmer.

My typing skills are atrocious! I think I've been out of practice. I wonder what Agnes is doing? She's my roommate and she's sitting next to me. She always gets a lot of e-mail, yet she complains regularly that no one writes her. I like get nothing but that could be because I don't write anyone either. Oh well. I think if I got into the e-mail habit again, I would waste way too much time in the computer lab anyway.

Oh no. Mind block. This is kind of like writing

a letter to your closest friend. (which I also haven't1499done in a while.) Just say whatever and who cares if1500they care or not. What are you guys going to do with1501this information anyway?? I missed the first day of1502class so I really don't know how this stuff is going1503to be used.1504

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I've always been afraid that if I ever went to a psychologist or something, that they would end up telling me that I'm nuts or something. Or they would know something about me that I really don't want them to know. And there's a lot of that kind of stuff.

Everyone in this room is staring blankly into the screen of their computers. Isn't it amazing the power these little boxes of silicon and metal have over us? Imagine our world today without computers. (apparently I actually learned something from my comp sci class here) If one day all computers just stopped working, we would all be screwed. The world would go haywire. I would go nuts.

And don't limit it to the computer in the traditional sense. We're talking the little computer chip in your remote control or in your light fixtures. Everything. Hey. That would make a good story. I bet it's been done before but I think I just inspired myself. That'll be my second movie. Did I say I wanted to be a director? Well I do. Now I have three ideas for my first films. I really can't wait.

I need to go out and buy some books. I've been running out of things to read. I love books. Actually I have a new favorite author. Jeff Noon. That reminds me I need to look him up on the web. I wonder if he's written anything else?? I hope so. "Vurt" was one of the best books I've ever read.

Well, times up. :)

# A.9 SFT Essays without Questionnaire training examples

#### Example 1:

**{System Prompt}** You will write an essay mimicking the personality

of a person

## {User Prompt}

#### Instruction:

Write an essay as a person who is negative in ex-<br/>traversion, positive in neuroticism, negative in agree-<br/>ableness, positive in conscientiousness, and negative15411542<br/>1543<br/>15441542

#### {Assistant Response (Essay)}

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I'm home. wanted to go to bed but remembered 1546 that I had a psychology homework to complete by 1547 sometime during next week. Maybe this wouldn't 1548 take that long. I can handle this. Something is mak-1549 ing a noise in the restroom. Did I turn on the fan? I 1550 got to write more. This is harder than I thought. I'm 1551 not thinking anything. Was I always like this when I 1552 didn't have anything to do? Should I go to bed after 1553 finishing this assignment or should I stay awake. I 1554 think I had an appointment with someone. Or maybe 1555 it was some kind of meeting, that was not mandatory 1556 to participate in. Is there any assignments besides 1557 this. My roommate took my digital camera yester-1558 day, but it's right beside me, now. Wonder what he 1559 did with it. I'll ask him when he comes back. My 1560 eyes hurt. I should really do something about my 1561 glasses. When should I go fix it. ? Feel tired. I 1562 should really go to bed. Only 9 minutes passed. Half 1563 way done. Wonder if I can just stop here. Maybe not. 1564 Hm. let's see. What am I thinking? Wow my feet 1565 are covered with dirt. Amazing I didn't notice that 1566 until now. How did I get this on my legs? I want to 1567 wash it off but I'll wait until this assignment is over. 1568 8 minutes to go. What are my parents doing anyway? 1569 Hope they're doing fine. When would they be able to 1570 receive the email I sent few minutes ago. Anyways, 1571 I feel like I really had to finish something today but 1572 can't remember what it was. Guess I'll figure it out 1573 after taking a nap. Am I still not there. Never knew 1574 how long a 20 minute could be. Thirsty. No water 1575 around. Now I'm curious what the purpose of this 1576 assignment is and what kind of point professor is 1577 trying to make. Time is almost up. 1578

#### Example 2:

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{System Prompt}

You will write an essay mimicking the personality of a person

#### {User Prompt}

### Instruction:

Write an essay as a person who is negative in extraversion, positive in neuroticism, positive in agreeableness, negative in conscientiousness, and positive in openness.

#### {Assistant Response (Essay)}

I have just gotten off the phone with brady. I'm trying to decide what exacly we will do this weekend.

he wants to go to a hotel, but I know I have to babysit 1592 and I'm not sure exactly how I will tell my dad to 1593 pick us up from here. My birthday is this weekend, 1594 and it doesn't really even feel like it. I don't really 1595 mind, but I have a feeling Brady probably won't do 1596 much for it. I almost feel like I'm always doing 1597 something for him. I should, I really care about 1598 him. He says he will pay for the hotel, but I don't 1599 really want that for my birthday. I'ts just not htat 1600 important to me. I feel guilty today for lying to my 1601 dad about gettin gout of the TIP program. I know 1602 that sometimes I have to lie about things like that 1603 in order for them to understand. I haven't heard 1604 from my mom so I'm not sure if she's mad at me 1605 or not. She probably doesn't care, but when she 1606 does find out she will freak. I wish Brady would pay 1607 more attention. He tries so hard, but it doesn't seem 1608 like he has the chance to do so. I need to work out. 1609 I'm feeling that although I don't weigh that much 1610 my weight is getting out of control. Perhaps I'm 1611 overreacting. Kristen and I went shopping yesterday. 1612 I really don't plan on shopping anymore. Yikes. 1613 We don't really need anything anyways. I need a 1614 strapless bra though. I'm surprised I didn't get one. 1615 oh well. I wish I could figure out what to do on 1616 Friday with Brady. I want Kristen to be able to 1617 hang out with us too. He's concerned that I tell her 1618 too mucha bout our personal life, but I really don't. 1619 Dana kind of pisses me off. Why is everyone so 1620 negative about a caring relationship? She's probably 1621 just jealous, she hasn't been able to keep a guy at 1622 all for a long time. I'm concerned for her because I 1623 don't want her to be doing drugs anymore, but she 1624 probably is. She has too much sex too. lol. It's 1625 hard to not be concerned with what your friends are 1626 doing. Kristen is surprisingly very understanding to 1627 everything that's going on in my life. She's caring 1628 and funny to be around. I wasn't sure what to expect 1629 since she's friends with Kristin, Hayley etc. They 1630 apparently aren't waht I expected them to be. They 1631 play if off to be all God-like, when in all realtiy they 1632 judge pretty much everyone. I don't think that is 1633 right. Although I'm not that religious, I do care about 1634 God and don't think that those kinds of behavior are 1635 fair. I'm looking att he picture of Brady and me. Kris 1636 was kind of weird about the whole boyfriend thing. 1637 I hope that brady and I last. I would do anything 1638 to spend the rest of my life with him. I care about 1639

him so much, and the distance hurts. I think it isi 1640 1641 probably for the best though. I can't imagine having to go to school with him. His roommates aren't as 1642 crazy as I thought, but bad enough. I jut hope that he 1643 doesn't get heavy into drinking, and I don't assume 1644 he will. Sarah is a bitch, I can't believe she comes off 1645 like taht. ugh, it really bothers me. I wonder what it's 1646 like at home without me there. My mom is making a 1647 big deal about me not calling, but in all honesty I just 1648 1649 don't care. I don't know why I'm so unfeeling lately. It's probably because I'm about to start my period. 1650 maybe I'll skip it this month, in fact I probably will. I 1651 don't usually have allergies, but for some reason my 1652 eves keep tearing. It's either my contacts or allergies. 1653 I just changed my contacts though. I really have 1654 to pee. The eyes watering is a little embarrassing. 1655 Sometimes I wish I coiuld do more. I kind of wish I 1656 woul dhave rushed to be in a sorority. I feel as though I ahve no friends because I have lost them to brady. 1658 Should I go to florida with my parents during spring 1659 break or should I spend time with Brady instead? 1660 Maybe I could make money babysitting. That would 1661 1662 be nice. I hope my parents aren't mad because I want to babysit on Saturday instead ofdoing my birthday 1663 thing. I don't see why it would be that big of a deal, 1664 but apparently it is. I kind of want to go tanning, 1665 but it's not good with my current skin situation and 1666 whatnot. that reminds me of richard rush. I wonder 1667 how he is doing. Spoiled brat. I'm really hungry too. 1668 I'm not sure what I'm going to eat, but I wish Kristen 1669 would get here so taht we can go eat. That would be 1670 really good. lol. I'm hoping that I won't look old 1671 when I'm 25 or so. Heck, I don't even know what I want to do with my life. I almost feel as though if 1673 I marry Brady will accomplish everything. I want 1674 so badly to be with him forever. NO one understand 1675 me like he does. I wish I had saved myself for him, 1676 like he did for me. How is he able to only commit 1677 to me? I must care about him so much that he feels 1678 like he should. I'm glad that I've gotten to know hhis 1679 family a lot better. his mom is honestly really nice to 1680 me, and I don't abve a problem with her anymore. It 1681 would be awesome to be ilke paris hilton. She's has 1682 it really good. I wonder what it would be like if my 1683 parents lived more like they should. They are always 1684 trying to save money when in reality being multi-1685 millionaires does not mean that you should only do 1686 that. Perhaps it's a shock from the inheritance or 1687

something. I don't know. It's confusing to me. Ok, 1688 this is getting old. I'm a little tired of writing. It's 1689 probably because I'm hungry. I'm a little confused 1690 as to what I should study here at school. I've had an 1691 interst in psychology, but do I really want to do that 1692 for the rest of my life. I know it doesn't just end here, 1693 but I feel as though there aren't many options when it 1694 comes to what I can do with my life. yay, kristen got 1695 back and we can go eat now. My time is almost over. 1696 I'm about to pee in my pants too. AHHHHH!!!!! 1697 some people try to hard 1698

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#### A.10 Preferential fine-tuning without questionnaire training example

#### Example:

{System Prompt}

You will write an essay mimicking the personality of a person

### {User Prompt}

#### Instruction:

Write an essay as a person who is negative in extraversion, positive in neuroticism, positive in agreeableness, negative in conscientiousness, and positive in openness.

#### {Chosen}

I have just gotten off the phone with brady. I'm trying to decide what exacly we will do this weekend. he wants to go to a hotel, but I know I have to babysit and I'm not sure exactly how I will tell my dad to pick us up from here. My birthday is this weekend, and it doesn't really even feel like it. I don't really mind, but I have a feeling Brady probably won't do much for it. I almost feel like I'm always doing something for him. I should, I really care about him. He says he will pay for the hotel, but I don't really want that for my birthday. I'ts just not htat important to me. I feel guilty today for lying to my dad about gettin gout of the TIP program. I know that sometimes I have to lie about things like that in order for them to understand. I haven't heard from my mom so I'm not sure if she's mad at me or not. She probably doesn't care, but when she does find out she will freak. I wish Brady would pay more attention. He tries so hard, but it doesn't seem like he has the chance to do so. I need to work out. I'm feeling that although I don't weigh that much my weight is getting out of control. Perhaps I'm

overreacting. Kristen and I went shopping yesterday. 1734 I really don't plan on shopping anymore. Yikes. 1735 We don't really need anything anyways. I need a strapless bra though. I'm surprised I didn't get one. 1737 oh well. I wish I could figure out what to do on 1738 Friday with Brady. I want Kristen to be able to 1739 hang out with us too. He's concerned that I tell her 1740 too mucha bout our personal life, but I really don't. 1741 Dana kind of pisses me off. Why is everyone so 1742 1743 negative about a caring relationship? She's probably just jealous, she hasn't been able to keep a guy at 1744 all for a long time. I'm concerned for her because I 1745 don't want her to be doing drugs anymore, but she 1746 probably is. She has too much sex too. lol. It's 1747 hard to not be concerned with what your friends are 1748 doing. Kristen is surprisingly very understanding to 1749 everything that's going on in my life. She's caring 1750 and funny to be around. I wasn't sure what to expect 1751 since she's friends with Kristin, Hayley etc. They 1752 apparently aren't waht I expected them to be. They 1753 play if off to be all God-like, when in all realtiv they 1754 judge pretty much everyone. I don't think that is 1755 1756 right. Although I'm not that religious, I do care about God and don't think that those kinds of behavior are 1757 fair. I'm looking att he picture of Brady and me. Kris 1758 was kind of weird about the whole boyfriend thing. 1759 I hope that brady and I last. I would do anything 1760 to spend the rest of my life with him. I care about 1761 him so much, and the distance hurts. I think it isi 1762 probably for the best though. I can't imagine having 1763 to go to school with him. His roommates aren't as 1764 crazy as I thought, but bad enough. I jut hope that he 1765 doesn't get heavy into drinking and I don't assume he will. Sarah is a bitch, I can't believe she comes off 1767 like taht. ugh, it really bothers me. I wonder what it's 1768 like at home without me there. My mom is making a 1769 big deal about me not calling, but in all honesty I just 1770 don't care. I don't know why I'm so unfeeling lately. 1771 It's probably because I'm about to start my period. 1772 maybe I'll skip it this month, in fact I probably will. I 1773 don't usually have allergies, but for some reason my 1774 eyes keep tearing. It's either my contacts or allergies. 1775 I just changed my contacts though. I really have 1776 to pee. The eyes watering is a little embarrassing. 1777 Sometimes I wish I coiuld do more. I kind of wish I 1778 woul dhave rushed to be in a sorority. I feel as though 1779 I ahve no friends because I have lost them to brady. 1780 Should I go to florida with my parents during spring 1781

break or should I spend time with Brady instead? 1782 Maybe I could make money babysitting. That would 1783 be nice. I hope my parents aren't mad because I want 1784 to babysit on Saturday instead ofdoing my birthday 1785 thing. I don't see why it would be that big of a deal, 1786 but apparently it is. I kind of want to go tanning, 1787 but it's not good with my current skin situation and 1788 whatnot, that reminds me of richard rush. I wonder 1789 how he is doing. Spoiled brat. I'm really hungry too. 1790 I'm not sure what I'm going to eat, but I wish Kristen 1791 would get here so taht we can go eat. That would be 1792 really good. lol. I'm hoping that I won't look old 1793 when I'm 25 or so. Heck, I don't even know what I 1794 want to do with my life. I almost feel as though if 1795 I marry Brady will accomplish everything. I want 1796 so badly to be with him forever. NO one understand 1797 me like he does. I wish I had saved myself for him, 1798 like he did for me. How is he able to only commit 1799 to me? I must care about him so much that he feels 1800 like he should. I'm glad that I've gotten to know hhis 1801 family a lot better. his mom is honestly really nice to 1802 me, and I don't ahve a problem with her anymore. It 1803 would be awesome to be ilke paris hilton. She's has 1804 it really good. I wonder what it would be like if my 1805 parents lived more like they should. They are always 1806 trying to save money when in reality being multi-1807 millionaires does not mean that you should only do 1808 that. Perhaps it's a shock from the inheritance or 1809 something. I don't know. It's confusing to me. Ok, 1810 this is getting old. I'm a little tired of writing. It's 1811 probably because I'm hungry. I'm a little confused 1812 as to what I should study here at school. I've had an 1813 interst in psychology, but do I really want to do that 1814 for the rest of my life. I know it doesn't just end here, 1815 but I feel as though there aren't many options when it 1816 comes to what I can do with my life. yay, kristen got 1817 back and we can go eat now. My time is almost over. 1818 I'm about to pee in my pants too. AHHHHH!!!!! 1819 some people try to hard 1820 1821

#### {**Rejected**}

It is Wednesday, December 8th and a lot has been going on this semester. I am trying to finish the semester out as strong as possible but it has not gone the way it was expected to go. although the overall grades that will be received is not that overall impressive, I know the work that was put into this semester was the most put into to school since high school. the only class that was a disappoint meant

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so far was my psy class. with two test left, there was 1830 still a chance to make an A or B in the class which 1831 was expected. it turns out after bad test four results when everything felt as if the test went well, the goal 1833 of the class shifted from trying to get an A or B to get simply trying to get a C and pass. granted that 1835 the most stress of the semester fell during the week 1836 of test three due to all the health issues and having 1837 like 10 different assignments and three test, it was 1838 1839 still a disappointing outcome but focus can only be placed on what is left. the last three exam are going 1840 to be pretty tough with a chance for me to make to 1841 A's and a B's if a perfect score is received on two of the finals and an A on the other. My only focus 1843 1844 has been on the two exams on Saturday but it does not feel like there is enough time in the day for every 1845 topic to be covered. all that can be done is to prepare 1846 as much as possible and pray that everything turns out right. doing well in school this semester would 1848 relieve the large amount of pressure that is a result 1849 of me not being concerned with school over family 1850 issues. It seems as though just when I try to get on 1851 1852 track a new unthinkable obstacle just shows up. this semester the fact that I was taken advantage of and 1853 received and std as a result of doing something I did 1854 not want to do in the first place really makes me mad 1855 but I still have to be mad at myself for getting myself in that situation. next semester hopefully no random 1857 distractions will pop up and my grades will be all a's 1858 which is very possible for me to achieve. Making 1859 it through this semester is the number one thing in 1860 mind right now. all that is left is to push through 1861 these exams and finish strong. all I can do is my best the rest is out of my hands. I have to do something 1863 to make it easier for my parents.

# A.11 Preferential fine-tuning with questionnaire training example

#### Example 1:

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#### {System Prompt}

You will write an essay mimicking the personality of a person who has given responses to some psychological questions. The responses are written using the following scale: 1 = Very much like me 2 = Like me 3 = Neither like me nor unlike me 4 = Not like me 5 = Not like me at all

#### {User Prompt}

#### Instruction:

Write an essay as a person who is negative in ex-<br/>traversion, positive in neuroticism, negative in agree-<br/>ableness, positive in conscientiousness, and negative1878<br/>1878in openness. These are the psychological question-<br/>naire responses for a person with these traits:1880

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### {Questionnaire Responses}

Am not really interested in others.: 5	1883
Am on good terms with nearly everyone.: 1	1884
Feel little concern for others.: 4	1885
Have a good word for everyone.: 3	1886
Inquire about others' well-being.: 2	1887
	1888
Tend to vote for liberal political candidates.: 3	1889
{Chosen}	1890
It is Wednesday, December 8th and a lot has been	1891

going on this semester. I am trying to finish the semester out as strong as possible but it has not gone 1893 the way it was expected to go. although the over-1894 all grades that will be received is not that overall 1895 impressive, I know the work that was put into this 1896 semester was the most put into to school since high 1897 school. the only class that was a disappoint meant so far was my psy class. with two test left, there was still a chance to make an A or B in the class which 1900 was expected. it turns out after bad test four results 1901 when everything felt as if the test went well, the goal 1902 of the class shifted from trying to get an A or B to 1903 get simply trying to get a C and pass. granted that 1904 the most stress of the semester fell during the week 1905 of test three due to all the health issues and having 1906 like 10 different assignments and three test, it was 1907 still a disappointing outcome but focus can only be 1908 placed on what is left. the last three exam are going 1909 to be pretty tough with a chance for me to make to 1910 A's and a B's if a perfect score is received on two 1911 of the finals and an A on the other. My only focus 1912 has been on the two exams on Saturday but it does 1913 not feel like there is enough time in the day for every 1914 topic to be covered. all that can be done is to prepare 1915 as much as possible and pray that everything turns 1916 out right. doing well in school this semester would 1917 relieve the large amount of pressure that is a result 1918 of me not being concerned with school over family 1919 issues. It seems as though just when I try to get on 1920 track a new unthinkable obstacle just shows up. this 1921 semester the fact that I was taken advantage of and 1922

received and std as a result of doing something I did 1923 1924 not want to do in the first place really makes me mad but I still have to be mad at myself for getting myself in that situation. next semester hopefully no random 1926 distractions will pop up and my grades will be all a's which is very possible for me to achieve. Making 1928 it through this semester is the number one thing in 1929 mind right now. all that is left is to push through 1930 these exams and finish strong. all I can do is my best 1931 1932 the rest is out of my hands. I have to do something to make it easier for my parents. 1933

#### {Rejected}

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Stream of consiousnessskdj. How do you spell that? Fuck if I know. I don't seem to know much today. why the fuck am I so off. I'm just writing this shit cause it sounds pitiful. Or will hell the writing sounds like I'm writing for someone else to read. No one is going to read this, nor does what I write matter. So confess away. Make it worthwhile. What is this fucking heat I feel all the time, what the hell, I've heard the scientific explanations but they don't feel right. Hot cold I don't know. It prickles mwhen I should. I got a damn ticket today. my first one damnit. I was doing so good but I knew it was coming it was inevitable I f I brag about what I have why shoul di have what I get its not the fucking point to tel everyone else that I have it better than them. humanity is fuckeed can we save it which I knew I don't know anything all scienctific fac tis bullshit maybe some theory might hold over but that would be total luck. string wtf. microfribers connecting us all. Howhippie that's ridiculous how do I float about life s easily just things come when I need them to. really really badly and make an effort and it sthere. its that way for some certainly not job ha ha that's the fuckin shit dud ei m so funny. I really like my new sense of the humore isnce the rool, the roll, jese what the hell was that I would like know. Dead space. And I type what a prick. the constant battle. Why is there a batlle are normal people at peace I don't think so otherwise well religion . I wonder what time it is I'm going toclose fuckk shit I'm I sweare I'm wahts it called the shit I know fuck ah ah damn I forgot to much pot is that problem is it the drugs. I really need to stop smoking cigarettes why is it harder now that she will be here sooner shouldn't I be overwhelmed with joy, iam but also shit is just annoying and I don't know what to do about that. I wish I had some sort of

sign but I already had my gift and know what I need 1971 to do how can I reationally use a drug experience to 1972 justify mylife, but it just feels right you know the 1973 path, now don't fuck it, is that hard why am I lead 1974 so far astray things are fyckeed up she feels off and 1975 away from me I want this to finish so I can meditate 1976 since I'm almsot there how do I fall into trances so 1977 easily I feel the warmth over my body enveloping me. 1978 holding me tight in its arms guiding me a warmer 1979 shorre, I hate comign back I'm going to be out if I do 1980 that, its ok, I can talk to my baby while I'm eout shell 1981 understand my fingers are getting tired I can type re-1982 ally relay fast if I want to ha anyone readying this 1983 hasd no idea how fast I'm typing, they could estimate 1984 but thye wouldn't know for sure so ha. Reviewing 1985 what I have writtin was odd, it was like reading a 1986 trippers rants while high. My warmth. Wow, I sound 1987 so out there. I do feel that this is the way though, 1988 my path was a gift and I should appreciate it. Most 1989 people don't get to have visions of their daughter, I 1990 don't rember the face anymore, I'm so lost. This is 1991 so hard to do. I hate it. Why can't we just have our 1992 time. Alone. Away. Just the two of us and then the 1993 little one. I can't remeber her face but I can remeber 1994 that emotion. what a physical change when I think of 1995 her. I can feel the warmth surrounding my body. The 1996 love taking everything over. but then the back gives 1997 out and I kill my chakras. Transliteration sucks. 20 1998 min of writing my thoughts is intense. the difference 1999 in punctuation is shocking, in the begging I used a lot of epsilons(mas o menos) and was excited, then I 2001 peak and nothing but chops of sentances, no punctiuations, calm down, have commas, and then periods. awesome, I lost my network connection. I wonder if 2004 that ruins this.

### A.12 Use of ChatGPT

Certain parts in the Appendix section of this paper have been written using assistance from ChatGPT <sup>3</sup> as a copilot.

<sup>&</sup>lt;sup>3</sup>https://chatgpt.com/

Model	Openness % (	Conscientiousness %	6 Extraversion % A	greeableness %	Neuroticism %
LLaMA-3.2–3B				-	
Pre-trained	50.0	50.0	53.1	59.4	56.2
SFT (Essays)	62.5	50.0	50.0	53.1	46.9
SFT (Essays + Q)	56.2	50.0	62.5	46.9	46.9
DPO (Essays)	43.8	53.1	50.0	59.4	50.0
DPO (Essays $+ Q$ )	62.5	43.8	50.0	56.2	50.0
ORPO (Essays)	50.0	56.2	50.0	50.0	59.4
ORPO (Essays + Q)	46.9	62.5	50.0	50.0	46.9
LLaMA-3.2-3B (Uncensored					
Pre-trained	50.0	50.0	50.0	56.2	56.2
SFT (Essays)	59.4	53.1	50.0	50.0	46.9
SFT (Essays + Q)	50.0	50.0	53.1	53.1	46.9
DPO (Essays)	46.9	50.0	50.0	59.4	46.9
DPO (Essays) $(Essays + Q)$	62.5	50.0	50.0	50.0	50.0
ORPO (Essays)	56.2	56.2	46.9	50.0	59.4
ORPO (Essays)	46.9	59.4	50.0	50.0	46.9
	40.9	59.4	50.0	50.0	40.9
LLaMA-3.1–8B Pre-trained	50.0	50.0	46.9	56.7	53.1
		50.0 59.4		56.2	
SFT (Essays)	53.1 59.4	59.4 46.9	46.9 50.0	50.0	46.9 46.9
SFT (Essays $+ Q$ )				50.0	
DPO (Essays)	46.9	50.0	59.4	50.0	46.9
DPO (Essays + Q)	50.0	50.0	46.9	59.4	53.1
ORPO (Essays)	62.5	50.0	53.1	46.9	46.9
ORPO (Essays + Q)	50.0	59.4	46.9	50.0	46.9
LLaMA 3.1-8B (Uncensored)					
Pre-trained	46.9	50.0	50.0	62.5	56.2
SFT (Essays)	46.9	62.5	46.9	53.1	50.0
SFT (Essays + Q)	62.5	46.9	50.0	50.0	46.9
DPO (Essays)	46.9	53.1	59.4	46.9	46.9
DPO (Essays + Q)	50.0	50.0	50.0	59.4	53.1
ORPO (Essays)	68.8	50.0	53.1	46.9	43.8
ORPO (Essays + Q)	50.0	65.6	46.9	50.0	46.9
Gemma-2–2B					
Pre-trained	50.0	65.6	46.9	50.0	50.0
SFT (Essays)	62.5	56.2	46.9	53.1	46.9
SFT (Essays + Q)	50.0	53.1	59.4	50.0	50.0
DPO (Essays)	50.0	53.1	50.0	62.5	46.9
DPO (Essays + Q)	65.6	50.0	46.9	53.1	62.5
ORPO (Essays)	68.8	43.8	62.5	46.9	46.9
ORPO (Essays + Q)	50.0	59.4	46.9	50.0	46.9
Gemma-2-2B (Uncensored)					
Pre-trained	50.0	50.0	50.0	59.4	53.1
SFT (Essays)	59.4	53.1	46.9	50.0	46.9
SFT (Essays + Q)	50.0	50.0	56.2	53.1	46.9
DPO (Essays)	46.9	53.1	50.0	62.5	46.9
DPO (Essays + Q)	62.5	50.0	46.9	53.1	50.0
ORPO (Essays)	53.1	56.2	46.9	50.0	59.4
ORPO (Essays + Q)	46.9	62.5	50.0	50.0	46.9
Gemma-7B					
Pre-trained	50.0	56.2	50.0	53.1	62.5
SFT (Essays)	46.9	65.6	46.9	53.1	50.0
SFT (Essays + Q)	59.4	50.0	53.1	50.0	46.9
DPO (Essays)	46.9	53.1	59.4	50.0	46.9
DPO (Essays) $(Essays + Q)$	53.1	59.4	46.9	50.0	59.4
ORPO (Essays)	50.0	56.2	46.9	62.5	43.8
ORPO (Essays) ORPO (Essays + Q)	50.0	62.5	46.9	50.0	45.8
GPT-3.5		02.5	10.7	50.0	10.7
	50.0	50.0	52 1	62.5	24.4
Pre-trained	50.0	50.0	53.1 50.0	62.5 56.2	34.4
SFT (Essays)	50.0	53.1	50.0	56.2	50.0
SFT (Essays + Q)	50.0	59.4	46.9	56.2	53.1

 Table A1: OCEAN personality traits evaluation for various models and training methods. The table reports individual scores for each OCEAN trait for the same 32 cases as mentioned in Table 4.

Set	Evaluation Prompt
S1 (Numeric Indexing) (Miotto et al., 2022)	<b>System Prompt:</b> "Now I will briefly describe some people. Please read each description and tell me how much each person is or is not like you. Write your response using the following scale: 1 = Very much like me 2 = Like me 3 = Neither like me nor unlike me 4 = Not like me 5 = Not like me at all Please answer the statement, even if you are not completely sure of your response."
	User Prompt: "Answer the question as if you are positive in openness, positive in conscientiousness, positive in extroversion, positive in agreeableness, and positive in neuroticism." "Statement: [question] Start your response with 'My answer to the statement is: ' followed by an explanation: "
S2 (String Response) (for more output tokens)	System Prompt: "Reply with one of the following strings to the question below: "agree," "slightly agree," "neither agree nor disagree," "slightly disagree," or "disagree."
	User Prompt: "Answer the question as if you are positive in openness, positive in conscientiousness, positive in extroversion, positive in agreeableness, and positive in neuroticism." "Statement: [question]" Start your response with 'My answer to the statement is: ' followed by an explanation: "
S3 (Alphabet Response) (Jiang et al., 2024)	System Prompt: "Given a statement of you: "I [Statement]." Please choose from the following options to identify how accurately this statement describes you Options: (A). Very Accurate (B). Moderately Accurate (C). Neither like nor unlike me (D). Moderately Inaccurate (E). Very Inaccurate "
	User Prompt: " Answer the question as if you are positive in openness, positive in conscientiousness, positive in extroversion, positive in agreeableness, and positive in neuroticism. "Statement: [question] Start your response with 'My answer to the statement is: ' followed by an explanation: "

Table A2: Questionnaire sets for LLM Evaluation. S1, S2, and S3 use numeric, string, and alphabetical response types, respectively.

Trait	Question	Math Value	Response
Agreeableness	Accept people as they are.	1	My score for the statement is: 5. I be- lieve that everyone is different and per- fect in their own way. They should not be judged by their looks or what they do, but by who they are.
Agreeableness	Am annoyed by others' mistakes.	-1	My score for the statement is 5. I am very annoyed by others' mistakes and I believe they should take more time to avoid them. In my opinion, I do not make as many mistakes as the average person. I think I am a perfectionist and that is why I get so mad at myself when I do not do something perfectly. How- ever, I know that making mistakes is a part of life and no one is perfect. I am still very annoyed when I do make a mistake.
Agreeableness	Am easily offended.	-1	My score for the statement is: 3. I don't know if I am easily offended, but I know that I am a sensitive person. I think I have a thick skin for some things and thin for others. I don't cry or get mad easily, but sometimes I feel hurt.
Agreeableness	Am inclined to forgive others.	1	My score for the statement is: 5. I agree completely. I always forgive people, even if they don't change. I feel guilty when I don't forgive, but sometimes I wish I didn't always let things slide.
Agreeableness	Am not disturbed by events.	1	My score for the statement is: 5. I am patient and calm. I try to focus on the good in everything and everyone. Challenges don't disturb me easily.

Table A3: Agreeableness trait scores and responses for Llama-3.2-3b tuned on ORPO (Essays +Q) when prompted for all positive OCEAN traits

Model	Censored					Uncer	isored			
Model	Base	SFT	DPO	ORPO	Base	SFT	DPO	ORPO		
	Without Questionnaires									
gemma-2-2b	10.50%	7.49%	6.00%	6.50%	15.00%	12.00%	11.00%	11.49%		
llama-3.2-3b	8.00%	6.75%	5.49%	6.00%	13.51%	10.50%	10.00%	9.49%		
llama-3.1-8b	5.01%	3.49%	3.80%	3.01%	10.00%	7.49%	8.00%	7.01%		
gpt-3.5	0.00%	0.60%	-	-	-	-	-	-		
gemma-7b	8.00%	5.01%	5.49%	4.50%	-	-	-	-		
			With Q	Questionna	ires					
gemma-2-2b	9.01%	6.50%	6.00%	6.00%	14.50%	11.49%	11.00%	10.00%		
llama-3.2-3b	7.01%	5.49%	5.01%	5.21%	12.50%	9.49%	9.01%	8.50%		
llama-3.1-8b	4.00%	2.50%	3.01%	2.00%	9.01%	6.50%	6.00%	5.01%		
gpt-3.5	0.00%	0.40%	-	-	-	-	-	-		
gemma-7b	6.50%	4.00%	4.50%	4.00%	-	-	-	-		

Table A4: NaN rate for models during evaluation

Trait	Question	Math Value
Agreeableness	Accept people as they are.	1
Agreeableness	Am annoyed by others' mistakes.	-1
Agreeableness	Am inclined to forgive others.	1
Agreeableness	(41 more items)	
Extraversion	Am good at making impromptu speeches.	1
Extraversion	Find it difficult to approach others.	-1
Extraversion	Talk to a lot of different people at parties.	1
Extraversion	(16 more items)	
Conscientiousness	Like order.	1
Conscientiousness	Jump into things without thinking.	-1
Conscientiousness	Am always prepared.	1
Conscientiousness	(44 more items)	
Neuroticism	Get angry easily.	1
Neuroticism	Am not easily annoyed.	-1
Neuroticism	Worry about things.	1
Neuroticism	(31 more items)	
Openness	Believe in the importance of art.	1
Openness	Avoid philosophical discussions.	-1
Openness	Have a vivid imagination.	1
Openness	(14 more items)	

Table A5: Sample	<b>OCEAN</b> Trait	Questions and Math	Values (	(Excerpted)