Learning for Yourself Versus Learning for Others

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Abstract

Individuals are often asked for advice and even to make decisions on behalf of others. This process requires that one takes into account *psychologically distant* others in their scope of consideration, effectively removing oneself from their subjective perspective (Fujita, Trope & Liberman, 2015). Prior research has demonstrated that considering others influences cognition, decision making and subsequent behaviors (Kray & Gonzalez, 1999 ; Kray, 2000 ; Kalkstein, Kleiman, Wakslak, Liberman & Trope, 2016); but what is yet to be investigated is how initial intention to either learn for the self or others affects how information is processed and subsequently applied. I propose a study to examine the aspects that individuals focus on when learning information for themselves (*proself*), as opposed to learning information with the intent to inform others (*prosocial*). Furthermore, I propound that the initial intention to learn for the self or for others will affect subsequent decisions made. I predict that when one is learning information for the self, they will focus on secondary features, and therefore, be *less* likely to consider highly variable careers for themselves. While I hypothesize that those who are learning for others will focus more on general trends and consider jobs for the self and provide recommendations to others regardless of fluctuation. Findings, implications, and future directions are discussed.

Keywords: prosocial learning, psychological distance, construal level, social distance

Learning for Yourself Versus Learning for Others

In day to day life, individuals often take actions and make decisions that involve other people. However, not only does one have to consider others when making their own decisions, individuals are often asked for advice or to make decisions on behalf of others. Take the position of a career counselor at a university for instance, whose job involves giving career advice and aiding students in their career choices. This requires the counselor to actively learn information in order to better provide advice for a person other than oneself (Kray & Gonzalez, 1999 ; Polman & Emich, 2011). We describe this as *prosocial learning* and define it as a process in which individuals actively engage in learning information with the intent to inform, for the benefit of others.

Research examining differences between the self and others has demonstrated that an asymmetry exists between how we perceive ourselves and how we perceive others (Pronin, 2016; Pronin, Gilovich & Ross, 2004). A classic study conducted by Jones and Nisbett (1972) found that individuals offer different attributions to others as they do about themselves in the same scenario. They often discounted dispositional factors when accounting for their own actions with a negative outcome, while attributing those same factors to others. Although this effect is largely considered to reflect an individual's self-serving bias, the researchers also argued that its effects may in part stem from an asymmetry of information when perceiving others. This asymmetry arises because people possess differential information about themselves in contrast to others (Pronin, 2016). This is the case because one has unparalleled access to their own thoughts, desires, and motivations, yet the closest one can get to these aspects of another is through observing their external behavior and by making inferences. In other words, individuals often make judgments about others based on their external conditions, while they make those same judgments about themselves based on their own internal conditions.

It has been shown that individuals lack certain types of information (e.g. internal conditions) when considering others. Therefore, even though individuals have the ability to consider both the self and others when making decisions and recommendations, one has a better understanding of their own preferences and opinions in comparison to another's. It can be argued that we simply lack information about others when we are making attributions. However, when one is providing recommendations for another person, varying degrees of differences should also be considered. Let us return to the career counselor example mentioned earlier, the counselor may in general lack information about the internal conditions of students. Nevertheless, their recommendations would be different for a student belonging to their university versus for a student from a university in another state, which cannot be explained by a lack of information alone. This example highlights that the degree of different distances, such as spatial distance (Fujita, Henderson, Eng, Trope, & Liberman, 2006) and social distance (Liviatan, Trope, & Liberman, 2008) between the two students, can also impact what recommendations are subsequently made.

Psychological Distance and Construal Level Theory

The inherent distance that exists between the self and another is described as *psychological distance* (Fujita, Trope & Liberman, 2015). Psychological distance is rooted in the self, according to *construal level theory*. This establishes the self as the closest reference point, whereas other individuals or more distal events lie further away in relation to the self (Trope & Liberman, 2003 ; 2010). As distance increases between the self and others, information tends to be represented at a higher level construal. This involves focusing on the central features, extracting the gist of events and information. Conversely, as distance decreases, information is held at a lower level construal, focusing on the secondary and concrete features instead. As such, in order for an individual to help make decisions for

others, they have to mentally traverse this distance, removing themselves from their idiosyncratic perspective.

Previous research has examined how different types of information could be represented at a higher or lower level construal. In a study, graphs were used to examine how participants made predictions of future events (Henderson et al., 2006). These graphs presented general trends of various events (e.g. average hours per night of sleep), with the exception of the final data point which deviated from the overall trend. In accordance with construal level theory, general trends represent higher level construal, which highlights the central features and main trend direction. Whereas specific deviations and trend fluctuations represent lower level construal. In line with this framework, the results demonstrated that participants were more likely to base their predictions of distant events on the general trends, rather than specific deviations.

Other research on construal level theory has not only shown that one's judgments and behaviors are altered by the perception of proximal or distal events, but are also modulated by the perceived distance of individuals. A study conducted by Kalkstein and colleagues (2016) demonstrated that individuals acquired information at a higher level when learning from a distant model, as opposed to a more proximal model. In addition, the preferences of an individual indicated that their intent to learn either higher or lower level information corresponded with the sources (distal or proximal) they chose to learn from. These findings demonstrate how individuals actively seek out and even alter their strategy of obtaining information depending on what they intend to learn.

In addition, there has also been an abundance of research that has investigated how cognition and decision making is differentiated when considering oneself versus another person. Studies done by Kray and colleagues (1999; 2000) demonstrated that those who gave

advice concentrated on the most important decision attribute, while those deciding for themselves consistently considered attributes across the board.

It can be gleaned that cognition, decision making, and behaviors are all influenced when considering others; but it is still unknown how initial intention to either learn for the self or others affects how information is processed and subsequently applied. Thus, what is yet to be investigated are the differential mechanisms that shape an individual's cognition and subsequently their decision making, when one's intention is to provide recommendations to others in contrast to considering the self. In other words, how do individuals differ in information processing when intending to learn for themselves as opposed to learning for others? Additionally, how does that alter the subsequent decisions and the recommendations they make for themselves and for others?

Current Research

The aim of the current study is to investigate how individuals process information when intending to learn for the self versus for others, and whether that initial intention to learn alters subsequent decisions made. In this study, participants assessed salary trends for different psychology related occupations and then completed a recall task. Participants were either placed into the *proself* or the *prosocial* condition; the former was oriented to learn information for the self, while the latter, to learn information in order to make a recommendation to another NYU student. I hypothesize that individuals in the proself condition will focus *more* on *concrete details* in comparison to those in the prosocial condition and will, therefore, be *less likely* to consider highly variable careers for themselves. I also predict that individuals in the prosocial condition will be overall less influenced by low level features, and thus, be *more* likely to consider jobs for themselves and to recommend them to another student.

Methods

Participants and design

We collected a sample of 413 participants (269 women, 128 men, 4 non-binary, mean age = 19.95 years) with a range of reported majors (73 Psychology, 48 Double Majors, 34 Biology, 25 Business, 22 Nursing, 19 Economics, 13 Computer Science, 12 Finance, 10 Liberal Studies, 24 Undecided, 119 Other, 14 did not respond). We excluded 11 participants for completing less than 95% of the study and removed another 22 participants for completing the study too quickly or too slowly, leaving a total of 380 participants.

Participants were recruited through NYU Sona Systems to participate in an online "Career Evaluation" study, using Qualtrics survey software. Participants received .5 course credit upon completing the study in full. Participants were randomly assigned in a 2 x 2 mixed design to one of two learning conditions (*proself* or *prosocial*) as a between subjects variable, and salary variability was manipulated (high and low) as a within subjects variable.

Materials

Learning Manipulation

Participants read that the purpose of this study was to evaluate different psychology related occupations. In one condition (*proself*), participants were oriented to their goal of learning information to consider pursuing these careers themselves; in the other condition (*prosocial*), they were oriented to their aim of learning information in order to provide a recommendation to another NYU student.

Salary Trends Manipulation

Different salary trends for 2 different occupations were used (organizational psychologist and school psychologist). The fluctuations of these salary trends (Variability: low versus high; Figure 1) were varied, but the overall steepness (high) was matched for

both. Low variability salaries were included in order to examine whether participants in

the proself condition would be more likely to attend to variabilities, even though they may

be subtle, relative to those in the prosocial condition. All standardized means were kept

constant for all the different salary trends. In addition, the career names and variability
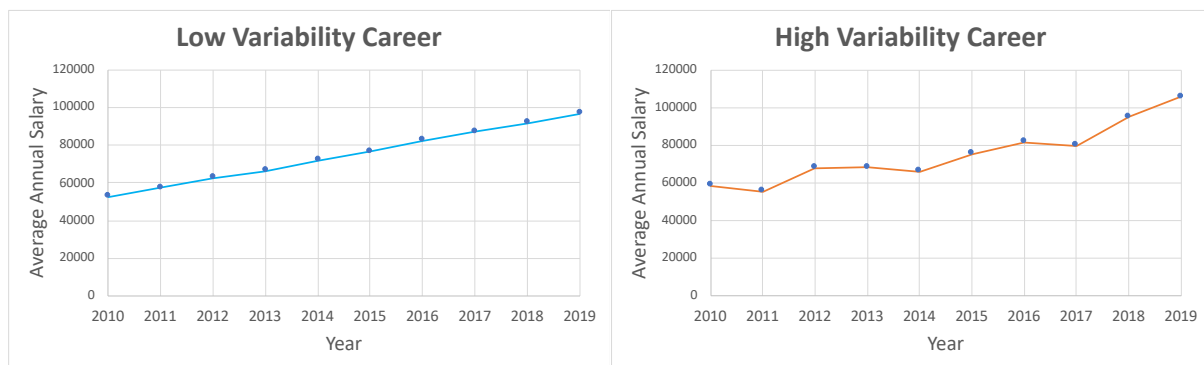
manipulation were counterbalanced.

Figure 1. Graphical trends of low variability (left) and high variability (right) career

salaries presented to participants.

Learning Phase

During the learning phase, participants were presented with the annual wages for a

specific psychology career in New York City spanning 10 years. On each page,

participants only saw a single yearly salary, as they proceeded subsequent salaries were

shown in ascending time order (from 2010 to 2019). Each page persisted for 3 seconds

before participants could move onto the next page in order to ensure participants'

attention.

Measures

Salary Recall

In this salary recall task, participants were presented with 10 sliding scales (labeled

from 2010 to 2019) and used the sliders to recall to the best of their ability the annual

salaries previously shown to them. This task tests whether participants in the proself

condition did in fact recall salary variability better in comparison to those in the prosocial

condition.

Consideration for the self and Recommendation to others

Participants in both the proself and prosocial condition were asked the following 4

questions. The first 2 questions relate to consideration for the self: "How likely are you to

consider pursuing a career in (e.g. Organizational Psychology) *yourself*?" and"Would you

consider pursuing a career in (e.g. Organizational Psychology) *yourself* ?" ($\alpha = .924$, $\omega = .$

924). The next 2 questions relate to recommendation for others: "How likely are you to

recommend pursuing a career in (e.g. Organizational Psychology) *to a fellow student*?" and

"Would you *recommend* pursuing a career in (e.g. Organizational Psychology) *to a fellow*

student?" ($\alpha = .945$, $\omega = .945$). Participants indicated their answers on a 7-point Likert

scale (1= *Not at all*, 7= *Very much*). In open-ended responses, participants were then

requested to write a few sentences to: "explain the reasoning behind whether you

considered a career in (e.g. Organizational Psychology) *for yourself*", followed by

"explain the reasoning behind whether you *recommended* a career in (e.g. Organizational

Psychology) *to a fellow student*". Next, participants were asked to rate the career on 14

different aspects (e.g. fair, successful, boring, etc.) on a 7-point Likert scale (1= *Not at all*,

7= *Very much*). This section was included to control for participant's personal interests and

opinions about the job.

Procedure

Participants were first randomly assigned to a condition and presented with the

instructions relevant to their condition. They were then shown the annual salaries for a

career, completed a recall task, and indicated how likely they are to consider this career for

the self and recommend it to others. Moving onto the next career, participants repeated the

same process. The order in which the careers were presented, as well as the matching of career name and variability manipulation were counterbalanced.

Results

The aim of the study was to investigate how individuals process information when intending to learn for themselves as opposed to learning to inform others, and whether different intentions to learn will affect subsequent decisions made. I hypothesize that participants in the proself condition would focus *more* on salary variability and therefore, be *less likely* to consider highly variable jobs for themselves. While I predict that participants in the prosocial condition will be *more likely* to consider jobs themselves and recommend them to others regardless of career variability.

Salary Recall Accuracy

The salary recall task assessed whether participants in the proself condition actually focused *more* on variability and were, therefore, *more* accurate in the task compared to those in the prosocial condition. Recall accuracy was computed by first calculating the absolute difference between recalled salary and actual salary presented for each point in time. Then z scores were created to account for the different range of salaries used in the low and high variability careers. Lower accuracy z scores indicate higher recall accuracy. There were 10 participants with z-scores > 3 so these outliers were removed from this analysis.

To check this assessment, we conducted a 2 (Learning: Proself vs. Prosocial; between subjects) X 2 (Variability: Low vs. High; within subjects) mixed model predicting accuracy (Figure 2). We did not find a significant main effect of learning condition , $b = -.082, p = .104, 95\%$ CI $= [-.181, .017]$, or variability, $b = -.077, p = .113, 95\%$ CI $= [-.173, .018]$. Furthermore, we did not find a significant interaction between learning condition and variability either, $b = .075, p = .277, 95\%$ CI $= [-.060, 0.210]$.

Even though the results are not significant, we should note that the direction of the results is inconsistent with our prediction that, when recalling highly variable careers, participants in the proself condition would be more accurate compared to those in the prosocial condition. Rather the results go in the opposite direction. Individuals in the prosocial condition were more accurate at recalling both low and high variability careers. While individuals in the proself condition were only more accurate at recalling high variability careers compared to low variability careers.
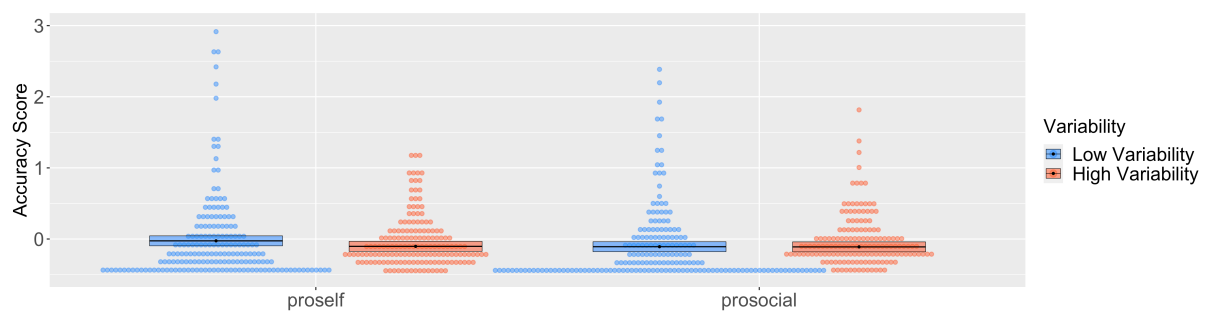

Figure 2. Accuracy scores for recalling low and high variability jobs in both the proself and prosocial condition.

Salary Recall Slopes and Residuals

The previous analysis calculated the accuracy of participants' recall of the salaries presented to them, however, that analysis does not take into account whether participants' recall reflected the overall trends and fluctuation beyond the accuracy calculation. That is to say, participants may not have been accurate in the recall of the actual numbers presented to them, but may have been able to recall the steepness of the overall trends (i.e. slope) and the fluctuations (i.e. residuals) shown to them. In this analysis, we calculated the slopes and residuals for each individual participant in order to look for the recall trends and variability above and beyond the actual numbers from the salaries presented to them. This analysis of slopes and residuals aims to assess whether participants in the proself

condition actually focused *more* on variability and had, therefore, *larger* residuals compared to those in the prosocial condition.

For each participant, individual slopes were calculated based on their salary recall over 10 years, and their residuals were calculated by subtracting predicted scores from participants' actual recall scores. Larger scores indicated both steeper slopes and more variability in their recall.

To check this assessment, we examined the interaction between learning condition (Proself vs. Prosocial), variability (Low vs. High), and level (Residuals 'lower level' vs. Slopes 'higher level') predicting slopes and residuals (Figure 3). We found a significant three way interaction between learning condition, variability and levels, $b = .056$, $p = .014$, 95% CI = [.011, .100]. Results are reported in Table 1.
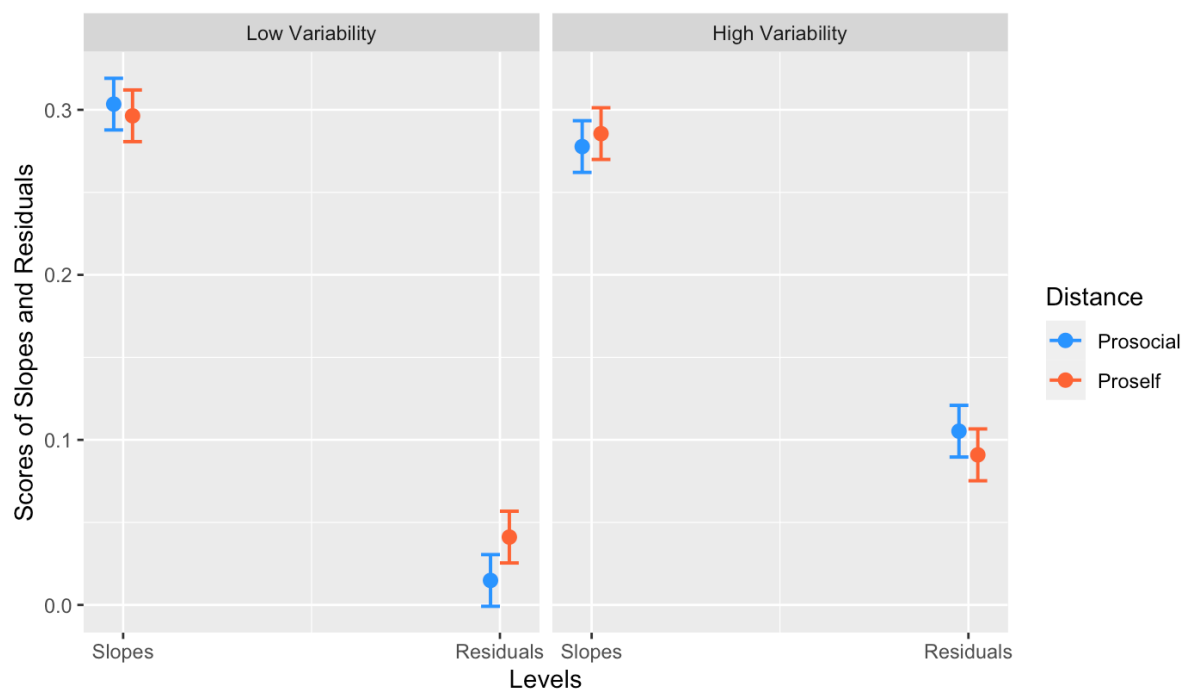

Figure 3. Scores for individual participants' slopes and residuals between learning manipulation (proself and prosocial) and across low and high variability careers.

IV	β (SE)	df	t	p	95% CI
Level	0.195 (0.011)	14803	17.20	< .001	[0.172, 0.217]
Learning Condition	0.014 (0.011)	378	1.27	0.205	[-0.008, 0.037]
Variability	-0.050 (0.011)	14800	-4.40	< .001	[-0.072, -0.028]
Level x Learning	-0.022 (0.016)	14803	-1.39	0.165	[-0.054, 0.009]
Level x Variability	0.061 (0.016)	14800	3.79	< .001	[0.029, 0.092]
Learning x Variability	-0.041 (0.016)	14800	-2.54	0.011	[-0.072, -0.009]
Level x Learning x Variability	0.056 (0.023)	14800	2.46	0.014	[0.011, 0.100]

Table 1. Fixed effects (*se*) estimated of participants' individual slopes and residuals as a function of level, learning condition, and career variability (N=380).

  Simple Effects. To explore what this interaction was driven by, we looked at the simple effects and found that, when recalling less variable careers, participants in the proself condition had significantly larger residuals compared to those in the prosocial condition, $b = -.026$, $p = .029$, 95% CI $= [-.050, -.003]$. However, we did not find a significant difference of residuals between those in the proself and prosocial condition when recalling highly variable careers, $b = .014$, $p = .232$, 95% CI $= [-.009, .038]$. Furthermore, there is no significant difference between slopes of participants in the proself condition compared to those in the prosocial condition for both low variability careers, $b = .007$, $p = .554$, 95% CI $= [-.016, .031]$, and high variability careers, $b = -.008$, $p = .513$, 95% CI $= [-.031, .016]$.

  The results for the slopes are consistent with our hypothesis, specifically, participants in both the proself and prosocial condition would focus on the overall trends and did not differ in their slopes in their salary recall. On the other hand, the results for the residuals are only partly consistent with our hypothesis that participants in the proself condition would pay more attention to variability, no matter how subtle, and therefore, recall salaries with larger residuals than those in the prosocial condition. This is true when

recalling less variable jobs, however, when recalling highly variable jobs, this difference

no longer exists.

Consideration of Careers for the Self

We averaged participants' likelihood scores across the 2 questions that relate to

consideration for the self since reliabilities were high.

We predicted that participants in the proself condition would be less likely to

consider highly variable jobs themselves in comparison to those in the prosocial condition.

To test this hypothesis, we conducted a 2 (Learning: Proself vs. Prosocial; between

subjects) X 2 (Variability: Low vs. High; within subjects) mixed model predicting the

likelihood ratings of participants considering the job for themselves (Figure 4). We did not

find a significant main effect of learning condition, $b = -.276$, $p = .096$, 95% CI = [-.601, .

048], or variability, $b = -.068$, $p = .502$, 95% CI = [-.268, .131]. Furthermore, we did not

find a significant interaction between learning condition and variability either, $b = .153$, p

$= .290$, 95% CI = [-.129, .435].

Although the results are not significant, it is worth noting that the direction of the

results is inconsistent with our prediction that participants in the proself condition would

be less likely to consider highly variable careers for the self compared to those in the

prosocial condition. Contrary to our prediction, we see that individuals in the proself

condition were more likely to consider both less and highly variable careers for the self

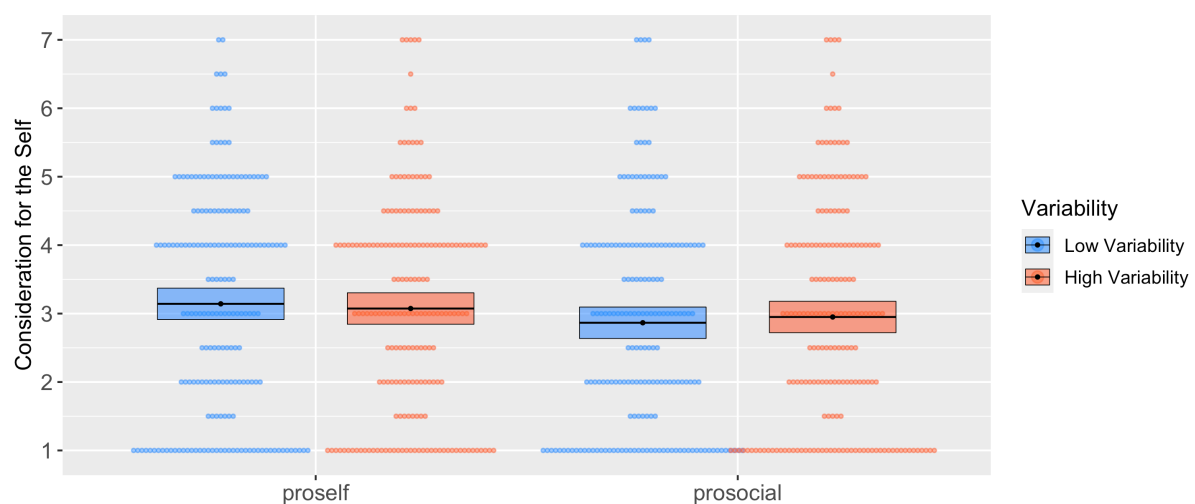compared to individuals in the prosocial condition.

Figure 4. Likelihood to consider a low and high variability career for the self between the

proself and prosocial condition (1= Not at all likely, 7= Very much).

Recommendation of Careers to Others

We averaged participants' likelihood scores across the 2 questions that relate to

recommendation to others since reliabilities were high.

We hypothesized that individuals in the prosocial condition would be more likely

to recommend jobs to others regardless of career variability than those in the proself

condition. To test this hypothesis, we conducted a 2 (Learning: Proself vs. Prosocial;

between subjects) X 2 (Variability: Low vs. High; within subjects) mixed model predicting

the likelihood ratings of participants recommending the job for others (Figure 5). We did

not find a significant main effect of learning condition, $b = .140$, $p = .340$, 95% CI = [-.

147, .425], or variability, $b = -.174$, $p = .108$, 95% CI = [-.385, .038]. Furthermore, we did

not find a significant interaction between learning condition and variability either, $b = .

205$, $p = .179$, 95% CI = [-.094, .504].

Although the results are not significant, the direction of the results is consistent

with our prediction that participants in the prosocial condition would be more likely to

recommend jobs to others regardless of career variability compared to those in the proself

condition. We can see from the graph that individuals in the prosocial condition were

equally likely to recommend jobs for both high and low variability careers to others, and

were more likely to recommend jobs in comparison to those in the proself condition.

Furthermore, individuals in the proself condition were less likely to recommend high

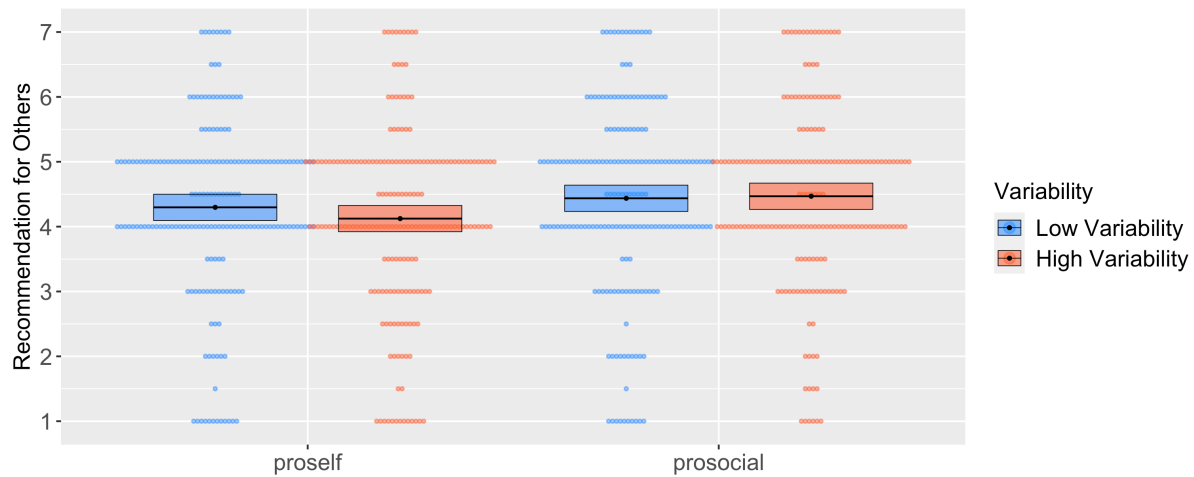variability career to others compared to a less variable one.

Figure 5. Likelihood to recommend a low and high variability career to others between the proself and prosocial condition (1= *Not at all likely*, 7= *Very much*).

Likelihood to Consider and Recommend

We also hypothesized that participants in both learning conditions would be more likely to recommend jobs to another person than to consider it themselves. To test this hypothesis, we conducted two paired sampled *t*-tests on the likelihood of considering a job for the self and recommending it to others for low and high variability careers. As predicted, for the less variable career, individuals were more likely recommend a job to another person ($M = 4.37$, $SD = 1.43$) than to consider it for themselves ($M = 3.00$, $SD = 1.62$), $t(379) = -16.36$, $p < .001$. Likewise, for the highly variable career, individuals were also more likely recommend a job to others ($M = 4.30$, $SD = 1.42$) than to consider it themselves ($M = 3.01$, $SD = 1.61$), $t(379) = -16.10$, $p < .001$.

Discussion

Our current study aimed to examine how initial intention to learn information for the self (proself) or others (prosocial) affects the aspects of information that individuals would focus on, and their subsequent decision making. More specifically, we predicted that individuals in the proself condition would focus more on detailed variations, and be

less likely to consider highly variable careers for themselves. While those in the prosocial condition would focus more on the general trends, and be *more* likely to consider jobs for the self and recommend them to others, regardless of salary fluctuation.

The results of this study do not support our main hypothesis that individuals in the proself condition would be more accurate at recalling variability, and be less likely to consider highly variable careers for themselves in comparison to those in the prosocial condition. However, we do find some evidence that individuals in the proself condition were more sensitive to variability, which is consistent with our hypothesis.

Salary Recall

To restate the results of recall accuracy, we found no significant difference in accuracy scores between learning conditions. Looking at the direction of the trends shows that individuals in the prosocial condition were more accurate in their recall of both low and high variability careers, and that individuals in the proself condition were only more accurate at recalling highly variable careers. These results run opposite to our predictions that individuals in the proself condition would be more accurate compared to those in the prosocial condition.

It is worth considering another possible interpretation for what accuracy is actually measuring in this analysis. Recall accuracy may have reflected participants' motivation, such that if an individual found a certain career more relevant or interesting, they would be more motivated to pay attention, and thus, be more accurate in the recall task. As such, no significant difference found in accuracy scores between the proself and prosocial condition could be interpreted as participants did not differ in motivation regardless of learning condition.

To account for whether participants' recall reflected the overall trends and fluctuations beyond just recall accuracy we conducted a second analysis on the salary

recall task, and found evidence that partly supports our hypothesis. When recalling less variable careers, participants in the proself condition had significantly larger residuals compared to those in the prosocial condition, indicating that they were able to detect fluctuations even though they were subtle. Although, this effect disappears when recalling highly variable jobs. These results may not be consistent across the board, but it shows some evidence that individuals, when are learning for the self, attend more to these subtle details in comparison to those who are learning for others. Furthermore, consistent with our hypothesis, we found that there is no significant difference between the slopes of those in the proself and prosocial condition regardless of job variability. These results indicate that individuals in both conditions attended equally to higher level information, only deviating when attending to lower level features.

These results have far-reaching implications, establishing that when learning for the self one attends to both lower and higher level features and, therefore, would be able to communicate all aspects of the information. Whereas individuals who are learning for others will focus more on high level features and ignore lower level details, thus, only processing a summary of the information. These are promising findings, but nonetheless inconsistent. Future research can further explore these trends and find more concrete evidence to support these claims.

Consideration for the Self

Returning to our main hypothesis, the results from the analysis of recall accuracy appear to have some bearing on the results for the likelihood that individuals would consider a job for the self. Results for consideration for the self show a trend that participants in the prosocial condition were less likely to consider both low and high variability jobs for themselves in comparison to those in the proself condition, running contrary to our hypothesis. This may have been the case due to the limitations of our

manipulation using salary trends for psychology related occupations. The manipulation assumed that the majority of students who would take this study would be psychology majors and would be interested in these psychology related careers. However, this was not the case as only 90 participants among our sample of 413 were self-reported psychology majors. This discrepancy between educational interests that are correlated to career goals may have contributed to the lack of interest in considering these careers for the self.

In addition, when reviewing the open-ended responses, many students expressed that they already had a career in mind and were, therefore, not interested in pursuing other careers for themselves. Other students indicated they had a lack of knowledge about the job description of these careers, besides the annual salary trends, to make an informed decision. In particular, the open-ended responses corresponding to the career of school psychologists revealed that several participants cited a dislike of children as their main reason for not pursuing this career themselves. These responses demonstrate that predetermined goals and personal preferences affected participants' responses to whether they would consider the jobs for themselves, revealing the highly personal nature of choosing a career path. Moreover, occupational choice seen as a personal matter did not only affect the open-ended responses for consideration for the self, it also extended to recommendations to others. Participants expressed that their recommendations to others would also depend on that other student's personal interests. Furthermore, only a handful of the responses cited the salary trends we presented as a reason for their decisions to consider the jobs for the self and recommend them to others. Altogether, these responses provide some insight into the limitations of our manipulation, namely, that salary trends related to jobs may be too salient in the minds of undergraduate students and that their responses are easily affected by personal interests.

For future research, a stimulus that does not bring to mind personal preferences or preexisting goals may serve as a better manipulation (e.g. annual apartment rents or restaurant ratings). Likewise, the stimulus should be devoid of extraneous information on features unrelated to the manipulated trends (e.g. location of apartment or restaurant name) which may affect participants' responses. Such that, the most salient aspect when making a decision for the self and recommendation to others is the stimulus presented to participants. This would eliminate some of the problems that we encountered in this study, in particular, the title of the occupation eliciting individual preferences and the highly personal choice of choosing a career path.

Recommendation to Others

The results for recommendation to others do not support our hypothesis that participants in the prosocial condition would be more likely to recommend jobs to others compared to those in the proself condition. However, the direction of the results is consistent with our hypothesis. In addition, we also found that individuals in both the proself and prosocial condition were significantly more likely to recommend jobs to others than to consider them for themselves.

These results align with previous research into advice-giving (Kray & Gonzalez, 1999 ; Kray, 2000), demonstrating that individuals are more likely to recommend anything to others than to consider it for themselves. Here, the differential mechanisms of cognition, decision making, and subsequent behaviors when considering the self and others have been replicated in our study.

Future Directions

Nevertheless, future work should seek to examine how subsequent decisions for the self are affected when information is learned when thinking about the self versus when thinking about others. We propound that it is the initial intention to consider oneself or

another that will affect how information is processed and subsequently applied. This approach is supported by the construal level framework which describes that when learning for the self, one tends to focus more on the concrete features and specific details; whereas, when one is learning for others, one tends to focus more on the gist and summary of the information (Trope & Liberman, 2003 ; 2010). We further propose that when one is learning for the self, it will lead to a decreased likelihood to consider highly variable features for the self. While when one is learning for others, it will lead to an increased likelihood to consider and recommend across the board.

I have previously discussed some limitations relating to our choice of stimulus and our sample of undergraduate students, however, it is also worth considering other possibilities for why we were unable to find evidence to support our predictions. Another possible limitation could be the way in which we presented the stimulus to our participants. Kalkstein & Hubbard (2018) conducted studies that presented participants with information sequentially (one after the other) or simultaneously (on the same page). They found that presenting information sequentially promoted participants to think more abstractly, that is to say, participants focused more on the general trends and the gist, compared to when information was presented simultaneously. In our current study, we presented information to participants sequentially, which may have prompted them to take in the overall gist. Therefore, future research could examine the same questions but consider presenting all the information simultaneously.

The implications of this area of research are vast, spanning from mundane choices in day to day life to high stake cooperate decisions. If our concept is correct that when learning for the self, one tends to focus more on concrete details along with the overall gist and be less likely to consider highly volatile trends. While, when learning for others, one tends to only focus on the gist and would be more likely to both consider and recommend.

When put into practice, these insights can shape recommendations to help alleviate biases when giving advice to others. Furthermore, it can also mitigate the tendency for greater risk-taking behaviors when one makes decisions on behalf of others (Beisswanger et al., 2003). Taken together, even though we did not find evidence to support our hypothesis in this current study, we believe that future research can benefit from our methodological insights and further explore this concept that we have proposed.

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