

**Testing the comparative effectiveness of three procedures aimed at facilitating
newcomer orientation**

by

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Abstract

Realistic Job Previews (RJP's) have grown into a common practice for organizations who are focused on facilitating newcomer adjustment and reducing the risk of early-tenure turnover. Despite their shortcomings, over the past 40 years RJP's have repeatedly been linked to lower instances of turnover, higher job satisfaction, and stronger organizational commitment. In the past decade, new techniques aimed at either addressing RJP's shortcomings or expanding their content have been introduced. The Expectation Lowering Procedure (ELP) and Realistic Orientation Program for New Employee Stress (ROPES) are two such strategies. This fills a void in the research by examining the effectiveness of these three procedures in a quasi-experimental study using a sample of students entering an undergraduate statistics course. Additionally the impact of a moderator, trait optimism, and the presence of a mediator, organizational trust, were evaluated. Results indicate that none of the orientation procedures had a significant effect on any of the outcomes and that, when collapsed into a single condition, the presence of an orientation program did not outperform a control condition. Results suggest that a "honeymoon phase" may exist in newcomers. Implications for research and practice are discussed.

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Introduction

Research into newcomer orientation over the past 40 years has demonstrated that, if designed and delivered properly, early-tenure new employee orientation programs can have a positive impact on newcomer adjustment (Wanous, 1973; Fan & Wanous, 2008; Buckley, Fedor, Veres, Wiese, & Carraher, 1998). Such orientation programs are widely accepted as the best, most effective method for socializing organizational newcomers (Feldman, 1989). Traditionally, however, organizations have often failed to give attention to identifying the type of information that should be included in an effective newcomer orientation program. Human resources departments often reserve official orientation time for the delivery of employment paperwork, discussion of workplace policies not related to specific jobs or roles, and other general content aimed at clarifying legal and procedural issues in the workplace. As a result, such orientation programs have traditionally had little impact on newcomer socialization and served more as symbolic gestures of cordiality than effective vessels for facilitating newcomer adjustment (Louis, Posner, & Powell, 1983).

As newcomer socialization developed into a topic of importance, largely due to an increased interest in reducing early-tenure turnover, some began to turn their attention to newcomer orientation strategies as a possible remedy. Early researchers believed that addressing newcomer expectations could be a positive avenue for orientation programs. This notion arose from literature suggesting that recruitment practices tend to place an emphasis on selling job candidates on the value of a job while withholding factors that

may diminish the job's value (Weitz & Nuckols, 1955). The recruitment issue prompted Weitz to hypothesize that the problem of early turnover could be addressed by presenting realistic information about the target job prior to employees actually being exposed to the job. He argued that this might serve to buffer the lofty expectations developed during recruitment. This hypothesis was tested and received support in a study examining the comparative turnover rates between a group receiving realistic information about the job and a control group (Weitz, 1956). This result laid the groundwork for future examinations of orientation practices aimed at lowering newcomer expectations.

Although Weitz was the first to test the effectiveness of a targeted orientation program, John Wanous (1973) served to advance Weitz' ideas and further refine the theory underlying his approach. Wanous, in a 1973 study of orientation programs containing realistic information, coined the term realistic job preview (RJP). As Weitz had, Wanous presented job applicants who had not yet accepted a position with realistic information about the job for which they were applying. Wanous' rationale was that by providing applicants with a realistic preview, he might be able to vaccinate them against having their expectations go unmet. This vaccination effect was described in detail by Porter and Steers (1973) when they articulated the inverse relationship between newcomers' expectations and the likelihood that those expectations are fulfilled. The vaccination analogy for the RJP can be likened to traditional medicinal vaccination. In much the same way someone is exposed to trace amounts of the influenza virus to "prepare" their immune system, newcomers can be exposed to trace amounts of the job via the RJP.

By presenting job candidates with realistic information about their new job, the realistic job preview (RJP; Wanous, 1973) established a standard method for addressing inflated expectations in organizational newcomers and, by extension, improving levels of newcomer job satisfaction and commitment while lowering the likelihood for turnover.

It is important to note RJP was initially conceptualized as a post-offer but pre-hire tool. The rationale behind delivering the RJP prior to employment was that doing so would allow job candidates to remove themselves from job consideration prior to accepting the job. Since the early conceptualization of RJP, it has largely been adopted as a post-hire tool by both researchers and practitioners (Wanous & Colella, 1989). One can understand how it may feel somewhat odd to a potential newcomer to have been recruited and sold on the company's desirable characteristics, offered a job, and then subsequently presented with job information that may contain less-desirable aspects of employment. Although the organization is presenting realistic information about the job, the point in time at which they are delivering it may cause the candidate to perceive them as somewhat disingenuous. It seems likely that job candidates may consider it strange that an organization waited until *after* they had offered the job to be completely transparent about the job itself. So although a pre-hire RJP satisfies the theoretical elements of a successful intervention, it may be somewhat less practical than a post-hire RJP. For the purpose of evaluating its effectiveness as an orientation tool, and not a recruitment tool, RJP is designed and delivered as a post-entry orientation program in the current study.

The critical foundation of an effective RJP is a thorough job analysis to best capture the job itself. Armed with a current, accurate picture of the job, that picture is

then presented to newcomers with the intent of limiting the amount of “culture shock” they experience early in their job tenure (Wanous, 1973). As the practical value of the RJP became better understood, research examining the procedure increased greatly as evidenced by a series of RJP meta-analyses. (Premack & Wanous, 1985; Phillips, 1998; Earnest et al., 2011; for current review of RJP research, see Fan, Buckley, & Litchfield, 2012). The method for creating an RJP has become well established, and its effectiveness is well documented. As a result, it has become the standard against which any new newcomer orientation program must be compared. This dissertation aimed to examine the effectiveness of the traditional RJP in addition to two recently developed orientation procedures: ROPES and ELP.

Hypothesis Development

RJP Alternatives. Efforts to enhance RJP’s effectiveness while addressing its shortcomings have yielded extensions, alterations, and in some cases altogether different orientation strategies (e.g., Galatea (McNatt & Judge, 2004); ROPES (e.g. Wanous & Reichers, 2000); (Buckley et al., 1998); Authentic Self-presentation (Cable, Gino, & Staats, 2013). Two such strategies are the Realistic Orientation Program for New Employee Stress (ROPES; Wanous & Reichers, 2000; Fan & Wanous, 2008) and the Expectation Lowering Procedure (ELP; Buckley et al. 1998, Buckley, Mobbs, Mendoza, Novicevic, Carraher, & Beu, 2002). The primary way in which RJP and ROPES differ is that ROPES has an added section designed to equip newcomers with effective coping strategies and educate them about how and when to employ those coping strategies (Fan, Buckley, & Litchfield, 2012). ELP employs a different approach altogether and seeks to

affect newcomer expectations in a much more direct, overt way (Buckley et al., 1998; 2002). These two approaches are described in detail in the following sections.

ROPES. Whereas RJP is focused on the tasks and duties associated with a given job, ROPES extends that by including information about the stresses and emotional challenges associated with job performance. In this way, ROPES could be said to have an educational, coaching oriented facet that RJP lacks. The rationale behind ROPES is that all newcomers are going to encounter stressful events whether they are “vaccinated” against them or not. This can be likened to individuals who have received a flu shot still contracting a cold, a different strain of the flu virus, or having to deal with environmental allergies. While they are vaccinated against a serious threat, there are some threats that may be unavoidable. By providing newcomers with strategies to help them cope (e.g. collecting additional information) ROPES seeks to go beyond vaccination. If newcomers can expect to experience negative or stressful events beyond those they have been presented with, ROPES provides further protection against negative outcomes through upfront education about what to do in the event that job-related stressors are encountered. Limited research has demonstrated ROPES’ effectiveness in the contexts of organizational and cultural entry (Fan & Wanous, 2008).

Studies of the ROPES procedure have been conducted, primarily in military settings, and have had mixed results (Novaco, 1983; Meglino, 1988). In the earlier study, ROPES seemed to have benefits on par with or possibly beyond RJP. In the later study, ROPES appeared to have adverse effects, resulting in higher levels of turnover than RJP and a control condition. It was theorized that an invisible threshold may have been crossed whereby ROPES actually over-emphasized negative job components and

effectively pushed newcomers away. While the military context of this particular finding should be noted, this result may shed some light on the difference between RJP and ROPES from the newcomer's perspective and offer insight into why these two similar approaches may elicit quite different reactions. Whereas the RJP is somewhat extrinsic in the way it is presented and processed (i.e., "*Newcomers* typically face these types of challenges..."), ROPES forces newcomers to process and internalize the job information they are presented with (i.e., "When *you* face these types of challenges, consider these coping strategies."). The RJP simply asks newcomers to listen to information, while ROPES asks newcomers to actively engage the material by thinking about coping strategies. As a result, ROPES may serve to make the challenges associated with job entry more immediately tangible to newcomers, thereby eliciting a more negative immediate response with respect to turnover.

ELP. The expectation lowering procedure (ELP) designed by Buckley and colleagues (1998) takes an altogether different approach to addressing newcomers' expectations. Whereas both ROPES and RJP seek to lower newcomers' expectations indirectly by offering a picture of what newcomers can expect to encounter on the job, ELP takes the direct approach of asking newcomers to identify their own expectations for their new job, consider whether they are realistic or inflated, and finally lower them to a more appropriate level if necessary. This procedure is more conceptual in approach and is intended to be more interactive than both RJP and ROPES.

Whereas both RJP and ROPES rely on realistic information about the job as their primary means of addressing newcomer expectations, the ELP is designed to be an educational discussion of the negative impact of inflated expectations. The rationale

behind the ELP's approach is straightforward. RJP and ROPES attempt to influence (i.e. lower) newcomers' expectations *indirectly* by presenting job information. To illustrate this point, consider the following image. One may conceptualize the presence of the "expectation gap" as a three-part linear progression whereby (A) a newcomers' opinions concerning the job and job tasks influence (B) their expectations, and those expectations subsequently create (C) an expectation gap that impacts job related outcomes. In this conceptualization, RJP and ROPES focus on *A* in an attempt to influence *C*. ELP ignores *A* altogether and instead focuses its attention on *B*. ELP is more direct in that it treats step one as essentially inconsequential. Instead it targets the newcomers' expectations *independent of* their beliefs about the job. Theoretically, this distinction could be critical, as it makes no assumption that presenting a newcomer with job-related information will adjust their expectations. It has the added advantage of being more parsimonious.

Additionally, ELP can be delivered as a "one-size-fits-all" orientation program suitable for all jobs regardless of complexity, organization, industry, or vocation (Buckley, et al., 1998). The effectiveness of ELP has been documented in at least two studies, both conducted by Buckley and his research team, and in those studies its effectiveness was shown to be on par with the job content-centered RJP. Although the effectiveness alone of ELP does not provide it with a clear advantage over RJP, the appeal of a "one size fits all" orientation program carries with it substantial practical appeal. Such a procedure could conceivably be delivered to all organizational newcomers, regardless of job, without requiring a costly in-depth job analysis.

Importantly, the ELP consists of several critical components designed to increase its effectiveness and bolster the likelihood that those in attendance will internalize it.

Through a discussion of the *psychological contract* (see Rousseau, 1989; 1993) attendees are encouraged to think about the things that they expect in their new job that may not have been discussed in the recruitment or entry phase of their role and whether those expectations align with the organization's plans for them. This section is intended to help individuals call-to-mind their expectations. Secondly, individuals are asked to discuss the implications of having expectations that go unmet. As part of this discussion, attendees are asked to consider previous instances in which they experienced unmet expectations. The final component is a facilitator-led discussion of the potential consequences of unmet expectations and a statement encouraging attendees to identify, clarify, and align their expectations to a more appropriate level.

Recently, researchers have called for studies that compare the effectiveness of newcomer orientation procedures and examine the contextual and individual factors that contribute to their success or failure (e.g. Fan, Buckley, & Litchfield, 2012; Earnest, Allen, Landis, 2011). The current study answered that call by examining the comparative effectiveness of RJP, ELP, and ROPES in a longitudinal, quasi-experimental study of students enrolled in an undergraduate statistics course. This study was aimed at understanding the progression that newcomer adjustment followed after an individual had been exposed to these programs. Further, this study makes an added contribution by examining a factor that may help explain *why* these procedures yield positive outcomes. That factor is the level of trust it builds between the newcomer and organization. This factor's potential value was originally noted by Wanous (1977) and has been examined previously in at least three RJP studies (Hom et al, 1998; Suzko & Breugh, 1986; Dugoni & Ilgen, 1981), but further research is needed to understand organizational trust's

relationship with RJP and whether that relationship manifests similarly when using ROPES and ELP.

Finally, this study offers an examination of a factor that may shed light on *when* one procedure may be preferred over the others. By examining the moderating effects of an individual personality trait (i.e. optimism), this study furthers the understanding of variables that may contribute to differential effectiveness of newcomer orientation procedures. These variables, along with specific hypotheses, are discussed in more detail below.

RJP, ELP, and ROPES compared. Two separate research studies conducted by Buckley and colleagues (1998; 2002) have demonstrated that RJP and ELP are comparable procedures concerning job satisfaction, organizational commitment, and turnover. In the more recent of the two studies (2002), a third RJP-ELP hybrid procedure was developed and tested, but results regarding its usefulness were inconclusive, and the limited attention that ELP has received in the research raises questions about whether it is established enough to function as a compliment to RJP. A small number of studies have examined the utility of ROPES in comparison to RJP-like orientation procedures, although many of those studies did not specify that ROPES was being used and followed looser guidelines regarding its content (see Fan, Buckley, & Litchfield, 2012 for review). The results of these studies are somewhat inconsistent, as some suggest that ROPES may have beneficial effects beyond those of RJP (e.g., Novaco et al., 1983), and others suggest that ROPES may have negative effects (e.g. increased turnover) when compared to the baseline, job-content driven RJP (e.g. Meglino et al., 1988). There are no studies that I am aware of that compare the effectiveness of ROPES and ELP or the comparative

effectiveness of RJP, ROPES, and ELP in similar contexts. To my knowledge, this is the first study to examine the main effects of these three orientation procedures in the same sample.

There is theoretical and practical rationale that could make the case for one procedure being preferred over others. The first and most critical is that RJP has established a standard for newcomer orientation programs. There is an abundance of academic and practical evidence that suggests RJP is an effective, low-risk approach to managing newcomer expectations. In light of that, any new approach must meet its standards for effectiveness while avoiding any undue risk.

Beyond research conducted strictly on RJP, there is minimal evidence to support a conclusion about which procedure, if any, is organizationally advantageous over the others. ELP holds a decided practical advantage in that it can be delivered with little or no job-related content and thus without a current job analysis. ROPES possesses a theoretical advantage in that it trains coping strategies and coaches newcomers on how to make the transition more manageable, thus broadening its scope and applicability.

Certainly, both ELP and ROPES also have shortcomings that RJP seems to lack. As evidenced by one research study, ROPES may run the risk of “over-personalizing” the negative job components. ELP, on the other hand, could lack the job-relevance that so clearly links its content to a newcomer’s upcoming tenure. In light of these factors and in response to calls for studies that examine the effectiveness of these three procedures in similar settings, the following hypotheses were made.

Hypothesis 1a: *RJP will lead to more positive outcomes than the control condition with regard to job satisfaction, intent to turnover, and course performance.*

***Hypothesis 1b:** ELP will lead to more positive outcomes than the control condition with regard to job satisfaction, intent to turnover, and course performance.*

***Hypothesis 1c:** ROPES will lead to more positive outcomes than the control condition with regard to job satisfaction, intent to turnover, and course performance.*

***Hypothesis 1d:** When collapsed, the presence of any orientation procedure (collapsed condition) will outperform the control condition with regard to job satisfaction, intent to turnover and course performance*

Trust. One potentially valuable mediator in the relationship between newcomer strategies and outcomes may be feelings of trust that newcomers develop towards the organization as a result of orientation programs. As an organization presents realistic job information, newcomers may develop feelings of trust due to the organization's forthrightness. Rousseau et al. (1998) offered the following, multi-level, definition of trust: "a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another (p. 395)." The value of trust has been confirmed in many areas related to organizational effectiveness and human resources practices, including communication (Giffin, 1967), leadership (Atwater, 1988), management by objectives (Scott, 1980), performance appraisal (Cummings, 1983), labor-management relations (Taylor, 1989), and implementation of self-managed work teams (Lawler, 1992) among others. Several researchers have articulated the importance of trust in determining individual employee outcomes previously. Generally speaking, the presence of trust in a relationship between employees and their organization allows employees to approach their goals and targets with confidence and self-assurance as opposed to fear (Meyer, Davis, & Schoorman, 1995). In the absence of trust, drivers of

employee behavior may become undesirable, as fear, skepticism, or at best indifference, may be primary motivators.

In the definition above, there are two key points that make trust extremely relevant to the newcomer-organization relationship. First is the element of vulnerability acceptance. Organizational newcomers are undoubtedly in a situation of vulnerability. However, as is evidenced by the definition above, a key element of developing a trusting relationship is one party's, in this case the newcomer's, intention to *accept* vulnerability. By choosing to continue with employment after having been exposed to an orientation program that generally contains negative information, newcomers are accepting the vulnerability of their position. Second, the driver of that acceptance is a positive expectation of the behavior of the organization. These two elements provide the basis for trust being a potentially valuable element in the connection between newcomer orientation programs and positive outcomes. The newcomer accepts vulnerability in exchange for positive treatment, and the first evidence of positive treatment is the organization's willingness to be transparent about less desirable aspects of the job.

Although it is generally not stated explicitly as part of the orientation program, the implied rationale for the organization's presentation of negative information to newcomers may be expressed as follows: "We recognize that you, the newcomer, are going to encounter less desirable events over the course of your job. We, the organization, are going to either present some of those potentially less desirable events (as with RJP and ROPES) or discuss the inevitability of such events (as with ELP) with the hope that you will view our effort favorably, accept the position of vulnerability, and understand that these events are common to the job and not aimed at you individually.

Our intent is to improve your overall job experience by discussing these things before they happen, so that you are not caught off guard when they occur.” By presenting negative information and being open about potential shortcomings, the organization is recognizing that the newcomer is vulnerable and essentially asking newcomers for their trust.

Trust is a variable that has been examined in at least three previous RJP studies (Hom et al, 1998; Suszko & Breugh, 1986; Dugoni & Ilgen, 1981). Two of the studies (Hom et al, 1998; Suszko & Breugh, 1986) supported the notion that trust is a viable explanation for the benefits of RJP, and one study (Dugoni & Ilgen, 1981) failed to confirm the relationship. To my knowledge, trust as a mediator has not been examined in relation to ELP and ROPES procedures, but theoretically its relevance is similar to its relevance concerning RJP. Further, although the content differs greatly, the overt discussion of the psychological contract in ELP brings trust to the forefront. As discussed, at the crux of the psychological contract is an informal agreement between the newcomer and the organization. Because the organization, or an agent of the organization in many cases, is making the effort to verbalize this informal agreement, feelings of trust and gratitude could be expected to develop.

By providing post-entry information aimed at lowering newcomers’ expectations, organizations are offering negative information (or realistic information that could be perceived as negative) in hopes of better preparing newcomers for their tenure. Newcomers may view such an act favorably, as it may be seen as going beyond what is necessary in the employees’ collective best interests. Further, an organization demonstrating a willingness to be transparent about potential weaknesses or negative

aspects of employment conveys a degree of honesty and humility. There is some evidence that the trait of honesty-humility (see Ashton, Lee, & Goldberg, 2004 for a discussion of the HEXACO model of personality) tends to correlate negatively with more deceptive behavior patterns, such as impression management, in an organization (Bourdage, Wiltshire, & Lee, 2014). In other words, individuals who tend to display honest-humble behavior patterns are less likely to demonstrate the more deceptive behavior patterns associated with impression management. As a result, one can see how being upfront and open about less desirable components of employment may cause the newcomer to harbor more positive feelings towards the organization while simultaneously decreasing doubts about the organization's genuineness. From a theoretical viewpoint, the link between perceptions of honesty-humility and feelings of trust is clear – those who outwardly demonstrate honesty should engender feelings of trust in others. Similarly, if an organization makes an effort to present itself as honest and humble by presenting negative information upfront, it stands to reason that feelings of trust in the newcomers should begin to develop.

Importantly, trust is not simply an idealistic, inconsequential value in the organizational realm. There is a great deal of research that demonstrates the positive effects organizational trust can have on important outcomes. In a 2002 meta-analysis, Dirks and Ferrin found strong, significant correlations between trust and the three outcomes that are historically of most interest to newcomer orientation researchers: Job satisfaction ($r = .51$), organizational commitment ($r = .49$), and intent to turnover ($r = -.41$). This finding suggests that if, in fact, newcomer orientation procedures do serve to promote feelings of trust in newcomers, gains experienced may be a direct result.

Trust was expected to mediate the relationship between the orientation procedures and the outcomes of interest. In other words, it was expected that trust would serve as the mechanism that *connects* the orientation procedures to increased job satisfaction and lowered intent to turnover. It may be argued that RJP and ROPES may have an advantage over ELP when it comes to building trust because those two procedures present negative information that is directly tied to the job. Although ELP lacks job-related, negative information that is common to RJP and ROPES, it undoubtedly presents information that could have a negative effect on newcomers' expectations. Because there are so few studies examining differences between RJP and ELP, and there has been no evidence that RJP and ELP build trust differentially, no differences with respect to the mediated relationship are anticipated, and therefore the effect will be examined on a condition that collapses all orientation procedures together.

***Hypothesis 2:** Trust will mediate the relationship between orientation procedure (in this case collapsed experimental conditions versus the control condition) and job satisfaction and intent to turnover.*

Individual Optimism. Optimism refers to the lens through which individuals perceive the outside world (Peterson & Seligman, 2004). Naturally, optimism and pessimism are considered to be on opposite ends of the same spectrum where optimism represents a positive outlook on life in general and pessimism represents a more negative outlook on life in general. With the rise in popularity of positive psychology, led by Seligman, the differences between optimistic and pessimistic individuals have become clearer. As Seligman notes, optimistic individuals typically maximize the positive events and minimize the negative events in their lives. They typically feel encouraged by life

events more often than their more pessimistic counterparts. In contrast, pessimistic individuals tend to maximize the negative events in their life and minimize the positive. They typically feel more discouraged by life events than more optimistic individuals (Gillham, Shatte, Reivich, Seligman, 2001).

As it relates to newcomer adjustment, individuals who focus on the positive (i.e. more optimistic) should be more likely to experience the fruits of a newcomer orientation procedure. Because their personal preference for focusing more on positive events lends them less likely to be intrinsically impacted by negative events on the job, they should experience a “match” between their personal view and the orientation procedure’s general goal (i.e. not being deterred by negative events). They should therefore experience more positive outcomes. Stated more simply, the content of the orientation message (i.e. not allowing negative events to push you away) should be internalized more positively by optimistic individuals because it is consistent with their general outlook. Conversely, individuals who are more pessimistic are less likely to be impacted positively by the orientation procedure because the orientation procedure is encouraging them to accept negative events without being discouraged. The primary message of the orientation procedure is inconsistent with their personal outlook and could therefore negate any value of such an orientation procedure.

To expand on this idea, consider the following contrast between an optimistic newcomer and a pessimistic newcomer who have experienced the same orientation procedure and have had identical job experiences. Seligman’s description of optimists and pessimists gives us some idea of how those opposing viewpoints may handle the orientation procedure and subsequent job experiences. Optimists are likely to attend

more closely to the positive information presented in the newcomer orientation procedure and positive experiences early in their job tenure. Although they would certainly be aware when negative events occurred, their preparation via the orientation program could be expected to buffer them against those negative events as their natural inclination is towards focusing more heavily on the positive. Pessimists, on the other hand, could be expected to not only “tune in” to the negative information offered during the orientation program but also to focus on the negative events they experience early in their tenure. In this way, the orientation program could actually serve to prime them for negative experiences.

Consider again the implied rationale for the organization presenting negative information in the first place. “We recognize that you, the newcomer, are going to encounter less desirable events over the course of your job. We, the organization, are going to either present some of those potentially less desirable events (as with RJP and ROPES) or discuss the inevitability of such events (as with ELP) with the hope that you will view our effort favorably, accept the position of vulnerability, and understand that these events are common to the job and not aimed at you individually. Our intent is to improve your overall job experience by discussing these things before they happen.” One can understand how this message may be internalized very differently depending on an individual’s natural tendency towards either optimism or pessimism. Whereas optimists may be much more likely to focus on the fact that the organization’s stated goal is to improve the job experience, pessimists would be much more likely to focus on the fact that the job has negative factors. Further, with the natural tendency towards

encouragement and away from discouragement, optimists are much more likely to experience a lasting, positive internal reaction to the message than are pessimists.

***Hypothesis 3:** Individual optimism will moderate the relationship between orientation procedure (in this case collapsed experimental conditions versus the control condition) and job satisfaction and intent to such that among individuals with a high level of optimism, the relationship between orientation procedure and outcomes will be stronger than among individuals with a low level of optimism.*

A model illustrating all proposed hypotheses and relationships is presented as Figure 1.

Method

Participants

Participants were 130 undergraduate students enrolled in a statistics course related to the completion of their degree's requirements.

Using two undergraduate statistics classes at Auburn University, I delivered one orientation procedure to each of four groups of students (i.e. the three procedures described above and one control procedure). Statistics classes at Auburn University are separated into 4 sections of approximately 20 students. Using two allowed me to deliver each orientation procedure to approximately 30 students (each section from each statistics class received one of the 4 orientation procedures) and achieve a total sample size of approximately 130. Both statistics classes were instructed by Dr. Jinyan Fan, which served to minimize potential confounds related to instruction style or course content. Both classes used identical syllabi, not including the course calendar, and both classes were comprised of the same course content.

Students versus organizational newcomers. A student sample was deemed appropriate for the examination of the proposed hypotheses for several reasons. Most critical is that there is a precedent for examining instructional settings in studies of newcomer orientation procedures (see Erffmeyer & Erffmeyer, 1983). Additionally, there are several qualities of this sample that closely parallel organizational newcomers. First, statistics students are entering into a role that is largely unknown to them. For students enrolled in the social sciences, the statistics course is dissimilar to other courses in content, format, and what it takes to be successful. The same is often true for organizational newcomers. Secondly, students have the option to withdraw from the course just as employees have the option to leave a job. The repercussions associated with choosing to withdraw strengthen the similarity between the sample and actual organizational newcomers. Statistics is a required course for achieving a degree in the social sciences. Whereas students may be able to withdraw from other courses without consequence, withdrawing from statistics is simply delaying the course until a later date. Therefore, choosing to withdraw is an option afforded students, but it is a decision that requires careful consideration just as quitting a job is not something typically done on a whim. The final similarity between the participants in this sample and actual organizational newcomers is their attitude at entry. Statistics, unlike most courses in the psychology curriculum, has a tendency to polarize newcomers' attitudes. In other words, whereas the perception upon entry into a normal course is likely to be neutral in many cases, students entering into a statistics are likely to harbor preconceived notions. Some students are likely to view it as just another course, while some are likely to have a more positive outlook (i.e., "I expect to receive an A in this course), and others are likely to

enter with more negative emotions (e.g., fear, doubt, disinterest, etc.). This type of variability mirrors the variability in organizational newcomers. Neutral emotions are not expected in all organizational newcomers, and neutral perceptions are unlikely to be present in all statistics students.

There are dissimilarities that warrant mention as well. First, unlike organizational newcomers in most settings, there is a definite termination date for students. This may impact the degree to which they actually withdraw from the course. However, as is common practice in newcomer orientation research, intention to turnover will be assessed. The intent to turnover is an attitude of interest and provides a means to lessen the blow of this critical difference. Second, it can be argued that students in this sample may be less likely than organizational newcomers to enter with overly optimistic expectations. As was discussed in the theoretical development of the hypotheses, although this difference may seem critical at face value, it is actually relatively inconsequential. The primary intent of these procedures is to lower expectations to a more realistic level. If certain newcomers already have accurate expectations, then their perceptions are not of primary concern. These procedures are aimed at those newcomers whose expectations are inflated. At worst, the presentation of the intervention programs should serve to confirm the attitudes of those newcomers who have realistic expectations. Therefore, with respect to this dissimilarity, no adverse effects are anticipated. Having variability in newcomers' perceptions at entry increases the scope of the current study, as such disparities are likely present in newcomers in most jobs.

It is also important to note that organizational commitment, a commonly assessed criterion in newcomer orientation research, is noticeably absent in the current study.

Although organizational commitment remains an important factor in the organizational realm, the sample and context in the current study make organizational commitment somewhat difficult to appropriately operationalize. The target of newcomers' commitment is the primary issue. Would the orientation programs be expected to engender feelings of commitment towards the presenter, instructor, course itself, higher education, or the institution, and would any of these be considered valuable as outcomes? The difficulties in defining commitment and justifying its inclusion led to the decision to omit it from this study.

Procedure

Early on in the semester, during one of the first few regularly scheduled lab meetings, I used the regularly scheduled lab meeting time to deliver an orientation procedure. Orientation procedures were randomly assigned to section to help minimize the influence of extraneous variables like time of day or graduate teaching assistant.

One lab meeting early in the semester is typically used to introduce the lab section and explain its value. The orientation procedure was delivered at that time and required approximately 30 minutes to deliver from start to finish. Prior to the delivery of the orientation procedure, but after the project had been introduced and participants had signed consent forms, I had students complete two questionnaires. The first questionnaire was aimed at assessing their personal optimism, and the second assessed the degree to which they perceive the stats course in a negative light. Over the course of the semester, I tracked the students' class satisfaction, intent to turnover, and trust of their instructor. These data were collected using questionnaires delivered at the halfway point

of the course and at the end of the course. These questionnaires were delivered via e-mail and combined took no longer than 20 minutes to complete.

Intervention Development. The process for developing the content of the RJP, ROPES, ELP, and control interventions is outlined in this section. It should be noted that because all four procedures are fundamentally different, the process for developing each is also different. Whereas RJP and ROPES both contain job-related information and therefore require a needs analysis, ELP is a content-free program and can therefore be developed with no job-related information. Lastly, the primary consideration when developing the control condition was to match the length and engagement of the three experimental interventions while omitting the “active ingredient” that could impact job-related outcomes.

RJP. For this study, the critical difference between traditional Realistic Job Previews and the RJP delivered here is the “job”, in this case, is a statistics class. This difference, while meaningful, has very little impact on the development of intervention content. As is typical with RJP, a needs analysis was performed to determine what information is particularly relevant and should be included (Wanous, 1973). Importantly, because the presenter only had 40 minutes to deliver the content, the amount of information that can be presented was somewhat limited. Whereas traditional RJP researchers would advocate for the presentation of any job-related information that could conceivably impact a newcomer’s expectations and subsequent experiences, that degree of breadth was impractical in the time available. Therefore the primary researcher made decisions concerning which information should be included.

The process for developing the RJP content included interviews with students who have recently completed the course, interviews with teacher's assistants who had recently been assigned to the course, and ratings of several course-related criteria including course difficulty and course value and frequency ratings concerning different course-related behaviors (e.g., reading complex academic text, working on course-related material outside of the classroom, working on course-related material in groups, etc.). Example interview questions were, "What would you say are the top three challenges associated with the statistics course?" and "What are the primary tasks that are completed regularly in the course?" The primary purpose of this effort was to identify themes and commonalities that seem to best *define* the course and then provide newcomers with description of the course that they can use to develop a more accurate set of expectations.

The intervention content was laid out in several key phases. First, newcomers were presented with a confidentiality notice ensuring them that their participation or choice to not participate would not be shared with their instructor or TA and would in no way impact their standing in the course. Next, the presenter introduced the intervention by explaining to attendees that the purpose of the intervention was to simply provide students with a realistic picture of the class they were starting. They were told that this picture includes both favorable and unfavorable aspects. Critically, the intervention was introduced by telling attendees that it was being delivered at the request of their instructor. Under normal circumstances, an organizational representative would be presenting this information and such a statement would not be needed. However, because the researcher was not affiliated with the class, it was important that students believed this effort was initiated by the "organization" as trust was a variable of interest.

Were this statement not included, the likelihood that students would make that connection and develop feelings of trust would have been greatly diminished.

After the procedure as introduced, the presenter began the presentation of class-related information. Information was presented concerning ratings of course difficulty, required time commitment, and course value/benefit. Attendees were presented with average grade received in the course and the difficulty of exams. Attendees were then be presented with behaviors that were rated as critical, somewhat important, and not important by past students and TA's. The criteria for being deemed critical was having an average rating that greater than 2.5 on a 3-point scale during the needs analysis. Those deemed somewhat important had an average rating between 1.5 and 2.5, and those deemed unimportant had an average rating below 1.5. Students were then presented with descriptions of behaviors associated with successful performance and behaviors associated with unsuccessful performance. This information was gained via interviews during the needs analysis.

Lastly, attendees were presented with a wrap-up encouraging them to consider the information they have been presented with and to prepare appropriately. They were also be asked to not share any information they received with students from other lab sessions as that could have damaging effects on the study and their course experience. The course content as it was presented to students can be seen in Appendix A.

ROPES. As mentioned previously, the ROPES intervention is identical to the RJP intervention in its presentation of job-related information. As can be seen in Appendix A, the content of the two interventions is exactly the same up until the section aimed at addressing newcomer stress. To reduce redundancy, the process for developing the job-

related portion of the intervention is omitted from this section, as it is identical to RJP. The critical difference is a presentation of stress coping strategies and an interactive component in which attendees were encouraged to discuss stress relief techniques with other attendees. Those two sections are discussed in detail here.

The stress coping section of the intervention was introduced by letting students know that stress is a common experience for students in any course. Attendees were told that they would be presented with information regarding what previous students found stressful, how they coped with it effectively, and different strategies for stress coping that may also be helpful. It is important to note that general coping strategies were included in addition to strategies that had been successful for past students. This dual-coping strategy was employed by Fan and Wanous (2008), and was shown to be effective.

The stress-coping section was initiated by asking students, via a show of hands, to indicate whether or not they anticipated that they would experience stress related to the statistics course. The presenter acknowledged that stress was common for newcomers in most situations, particularly when they were entering into a relatively unknown set of circumstances. The presenter then offered encouragement by communicating that although stress is nearly unavoidable, it did not necessarily need to have a negative impact on performance. To illustrate this point, students were shown the classic stress-performance curve that presents optimal performance as co-occurring with mild to moderate levels of stress.

Next, attendees were presented with factors that created stress for previous students. Examples were the ambiguity surrounding successful performance in labs and the fear associated with having to learn new computer programs. Attendees were then

presented with information on what past students viewed as the best stress-reduction technique for statistics class – meeting frequently with the teacher’s assistant assigned to their lab section and being open about the things they are having trouble with. As a first step in helping students cope with stress in the statistics course, they were encouraged to engage their teacher’s assistant with questions throughout the duration of the course.

In the next section, students were presented with research showing that stress is often amplified by the fear of the unknown. The presenter informed them that one helpful stress-coping strategy is to address the unknown by gathering information. Additionally, students were encouraged to take advantage of extra credit opportunities to reduce the amount of stress they experience about their grade, as job analysis data suggested that grade-related concerns were a primary stressor. Lastly, students were asked to form small groups of two to three and discuss strategies they had employed to cope with stress in the past. The purpose of this discussion was two-fold. First, the session may serve to help them initiate relationships that could buffer the stress they may experience over the course of the semester. Second, a classmate may present a stress-reduction strategy that could potentially useful for those in their group.

ELP. As discussed in the introduction of this dissertation, the critical difference between the ELP and its counterparts is the lack of job-specific information. As such, the way the procedure was carried is quite different in that the presenter was intended be more interactive. Once the procedure had been introduced and attendees had been told that the purpose of the session was to have them consider lowering their expectations, they were asked to first consider what expectations they were harboring. This can often be challenging, as often these expectations are somewhat implicit. Many times,

newcomers do not recognize they had specific expectations until those expectations are violated. Students were then prompted to consider their expectations in a few critical areas including the grade they expected to receive, their expected course time commitment, the ease with which they would achieve their desired grade, the general experience they expect to have in the course, etc. At this point in the process the presenter reiterated that the purpose of the session was to help students lower their expectations. The presenter then engaged students in a discussion of why it could be beneficial to do so.

Following the discussion on the benefits of lowering expectations the presenter moved into a more educational section where the psychological contract was discussed. Students were informed that whether they recognized it or not, an unwritten contract existed between themselves and their instructor and teacher's assistants. To illustrate this point, students were presented with a fictional scenario in which a student received a very important phone call in the middle of a class meeting and felt compelled to step out and take the call. Students were asked to consider whether they would feel it was acceptable to answer the call. After a show of hands, the presenter discussed how this situation was an example of the presence of a psychological contract. The key point in this illustration is that although there may have been no formal agreements about whether stepping out is permissible, most students harbor expectations about their experiences in the class. A second example was then presented. The students were asked to consider how they would feel if the professor asked them stay a few minutes after class on a Friday afternoon to finish covering a topic. The primary purpose of this example was to illustrate a key point concerning the psychological contract. That point was that the

student and the instructor could have a wide gap in their expectations about the same issue. Whereas the professor may feel is perfectly within his rights to take a few minutes to finish up a topic, the students may feel as though it is unfair that they are being asked to stay beyond the scheduled time. Students were asked to think about how this event unfolding could impact their attitude about the course.

The presenter then discussed “reality shock” as an unfortunate result of unmet expectations. The presenter defined reality shock as that moment or moments when a newcomer thinks, “I did not know that it was going to be like this.” The presenter then presented research showing that reality shock can have negative impact on one’s satisfaction and performance. The presenter then presented the students with two strategies to help them ensure that they did not encounter reality shock over during the statistics. The first strategy was an active, purposeful decision to lower expectations, and the second was to internalize the fact that negative events are typically unavoidable and common. The presenter then presented a personal example of a time when they entered into a new situation with preconceived expectations and how those expectations going unmet had a negative impact. The purpose of this illustration was to help students understand how expectations can have negative consequences.

The final component of this presentation was an exercise in which attendees were asked to think back to a time when they had expectations go unmet. They were asked to consider the consequences and how it made them feel. Lastly, they were asked to write down any expectations for the class that they may have had and then write a lower version of that same expectation beside it. This exercise was included to help students call their expectations to mind and recognize that they do have the ability to create and

buy into a lower expectation without having no expectations at all. Once the final exercise was completed, students were thanked for their attendance and attention and were dismissed.

Control. The control intervention was a presentation designed to be interesting and engaging and of similar length to the experimental interventions while lacking any “active ingredient”. This intervention was adopted from a newcomer orientation study that was planned, designed, and submitted for grant funding by Fan, Buckley, & Sutton (2012) but was not approved and carried out. The intervention contained information related to how changes in technology and workforce composition could greatly impact job prospects for students entering the workforce. The information in its entirety is included in Appendix A. The most important consideration for the design of the control condition was ensuring that the content was interesting without discussing any content that could be expected to impact students’ perceptions of the course or the course’s instructors. The control intervention was designed to be of similar length to the other interventions (i.e. between 30 and 40 minutes long).

Additional Controls. Of paramount importance in quasi-experimental studies such as the one proposed here is the control of factors that could potentially impact the quasi-experiment’s internal validity. Several measures with the study’s design were taken in an effort to maximize the internal validity of this study in the absence of true random assignment. First, the primary researcher was the only person who knew which interventions were delivered to which statistics lab sections, and therefore, which individuals were presented with what orientation content. All of the instructor’s assistants served only to introduce the presenter on the day of intervention delivery and

were absent for the remainder of the presentation. Additionally, they were not given any notes, transcripts, or any indication as to the content of any intervention. As a result, the potential for either the instructor or his assistants to influence the results of the study in any way was greatly diminished. Next, as stated previously, the same statistics instructor taught both statistics courses. Both courses used identical syllabi, other than the course calendars, which must necessarily be different as the class meets on different days of the week. This was of particular importance as two factors that could greatly impact students' ratings of their satisfaction, trust, and intent to turnover could have been qualities of the instructor or the amount or volume of coursework, both of which were controlled for in the current study.

It should be noted that the instructor of the course was quite familiar with the orientation procedures being tested here. This fact could be viewed as a potential confound. However, although the instructor was aware of the content of the interventions, he had no knowledge of which students were exposed to which intervention and was therefore unable to provide differential treatment to students based on the procedure to which they were exposed. Thus, instructor-related confounds were highly improbable in the current study.

All interventions were randomly assigned to lab section and teacher's assistant. Because there were four teacher's assistants and four interventions, the possibility existed for intervention to be nested within teacher's assistant. Because this was highly undesirable, special attention was paid to ensure that no single intervention was assigned to only one teacher's assistant. Although the random assignment of interventions to groups could not accomplish the degree of control as true random assignment of

interventions to participants, it could guard against some potential confounds such as energy/mood of the presenter, time of day effects, and the aforementioned third variable of teacher's assistant. Importantly, the same presenter presented all interventions, so potential effects of delivery style or quality should not have been a threat.

Measures

Trait Optimism. Trait optimism is a stable, dispositional construct designed to assess how an individual interprets and responds to negative events (e.g. disappointment, letdown, unmet expectations ,etc.; Peterson & Seligman, 2004). It was measured by using the Hope/Optimism scale from Peterson and Seligman's Values in Action questionnaire (2004). This questionnaire is an 8-item scale with response options ranging from 1 (strongly disagree) to 5 (strongly agree). An example item is, "I can find the positive in what seems negative to others."

Job Satisfaction. The job satisfaction questionnaire is based on the 3-item measure offered by Cammann, Fichman, Jenkins, and Klesh (1983). It has been adapted to suit educational contexts. Response options range from 1 (Strongly Disagree) to 7 (Strongly Agree). An example item is, "All in all, I am satisfied with being in this statistics course."

Intent to Turnover. Intent to turnover was assessed using a 4-item measure based on Aryee, Budhwar, and Chen (2002). It has been adapted to suit the current study. Response options range from 1 (Strongly Disagree) to 5 (Strongly Agree). An example item is, "If I could do it without penalty, I would strongly consider dropping this statistics course."

Organization (Instructor) Trust. Instructor trust was assessed using a 7-item measure based on the one developed by Gabarro (1978). It has been adapted for use in educational contexts. Response options range from 1 (Strongly Disagree) to 5 (Strongly Agree). An example item is, “I can expect my instructor to treat me in a consistent, predictable fashion.”

Course Success. Course success will be measured using students’ self-reported final grades in the course.

Using these data, I examined which orientation procedures were more effective at increasing (or maintaining) satisfaction and reducing turnover. In addition, I also assessed what role, if any, optimism had in determining the relative effectiveness of a given procedure. Further, I examined the mediating effect of instructor trust (which is intended to serve as a proxy for organizational trust).

Analytic Strategies

Hypotheses 1a, 1b, 1c, and 1d were tested using two-way, repeated measures ANOVAs to examine the relationship between condition and job satisfaction and intent to turnover. Repeated measures ANOVAs allowed for the examination of within-group differences from time 1 to time 2 with regard to satisfaction and intent to turnover. Additionally, a one-way ANOVA was run to evaluate the experimental conditions’ impact on course success. In the case of the collapsed condition, an independent samples t-test was run, as there were only two groups in the analysis (i.e., any experimental condition v. control condition).

The mediating effect of trust (hypothesis 2) was tested using a regression-based SPSS macro designed to provide significance tests for indirect effects using bootstrapped

95% confidence intervals. Testing mediation requires one to test the indirect path from the predictor variable to the outcome variable through a predetermined mediator. This is accomplished by employing the above-mentioned tests to determine whether the product of the predictor-mediator effect and the mediator-outcome effect is significantly different from zero (judged by examining 95% confidence intervals around the product coefficient).

The moderating effect of optimism (hypothesis 3) was tested using two steps of linear regression. In the first step, the dependent variable was regressed onto the predictor variable and the moderator with no interaction term. In step two, the interaction term was added and significance tests were examined. In the case of a significant interaction term, a regression-based SPSS macro (Hayes & Matthes, 2009) designed specifically to examine trends and direction of the moderation effect was employed. Stated differently, this procedure allows the researcher to examine the impact, if any, the moderator variable is having on the predictor-outcome relationship and in which direction.

Results

Means and standard deviations for all measurements presented by treatment group are included as Table 1. The total sample size in the current study was 136. Of those 136, 109 respondents completed the questionnaires at Time 1. Of those 109, 26 belonged to the control condition, 31 to the ELP condition, 25 to the RJP condition, and 27 to the ROPES condition. Of the 109 that completed the questionnaires at Time 1, 92 completed the questionnaires at Time 2; 25 in the control condition, 25 in the ELP condition, 25 in the RJP condition, and 17 in the ROPES condition. The dropout rate was 32% from

initial respondents to Time 2 respondents. Nineteen percent of the total sample ($n = 26$) were male, and 81 percent ($n = 110$) were female. Although this sample seems heavy on female respondents, the distribution is consistent with the department from which the sample was taken. One hundred twenty of the respondents were Caucasian. Eight respondents were African American, and one respondent was Hispanic. Seven respondents did not indicate their race.

Two-way ANOVAs for hypotheses 1a, 1b, 1c, and 1d are presented as Table 2. Hypotheses 1a, 1b, and 1c predicted that RJP, ELP, and ROPES, respectively, would each be superior to the control condition with regard to job satisfaction, intent to turnover, and course performance. These hypotheses were not supported. The interaction between condition and time for job satisfaction was non-significant, $F_{(3,80)} = .95$, $p=.42$. No differences were observed between any of the three experimental procedures and the control condition for job satisfaction as indicated by the lack of a significant between-groups effect for condition; $F_{(3,80)} = 1.35$, $p=.27$. Examination of the within-groups test for job satisfaction revealed that there was a significant effect of time, $F_{(1,30)}=9.17$, $p<.01$, indicating that job satisfaction decreased from time 1 to time 2.

The interaction between condition and time for turnover intentions was also non-significant; $F_{(3,80)} = 2.03$, $p=.12$. As was the case with job satisfaction, the between-groups effect was non-significant for turnover, $F_{(3,80)} = 1.65$, $p=.18$, indicating that none of the experimental conditions were superior to the control condition. Examination of the within-groups test for intent to turnover revealed that there was a significant effect of time, $F_{(1,30)}=9.64$, $p<.01$, indicating that intent to turnover increased from time 1 to time 2.

One-way ANOVA results for the impact of condition on course success are presented as Table 3. For course performance, $F_{(3,88)} = .23$, $p = .87$, indicating that no differences existed between the experimental procedures and the control group with regard to course performance.

Hypothesis 1d stated that when the experimental orientation programs were collapsed into a single condition, the collapsed condition would outperform the control condition with regard to job satisfaction, intent to turnover, and course performance. Although no significant effects were found regarding hypotheses 1a, 1b, and 1c, the analysis was still run. A two-way ANOVA revealed that the interaction term for intent to turnover (condition*time) was non-significant, $F_{(1,82)} = 2.02$, $p = .16$. The main effect for condition was non-significant with regards to intent to turnover; $F_{(1,82)} = 2.43$, $p = .12$. The within-groups effect was also non-significant for intent to turnover $F_{(1,82)} = 3.21$, $p = .08$.

A second two-way ANOVA revealed that the interaction term for job satisfaction (condition*time) was non-significant, $F_{(1,82)} = .79$, $p = .20$. The main effect for condition was non-significant for job satisfaction $F_{(1,82)} = .636$, $p = .43$. The within-groups effect was also non-significant for job satisfaction $F_{(1,82)} = 3.70$, $p = .06$.

Results of an independent samples t-test are presented as Table 4. An independent samples t-test revealed that there were also no differences between the collapsed condition and the control condition regarding course performance $t_{(90)} = .28$, $p = .78$.

Results for the mediation analysis are presented as Table 5. Hypothesis 2 aimed to build upon hypothesis 1d and concerned the mediating effect of trust on the relationship between orientation procedure (collapsed) and intent to turnover and satisfaction.

Specifically, it was predicted that trust would mediate the relationship between orientation program and job satisfaction and intent to turnover. Although hypothesis 1d revealed that no such relationship existed between orientation program and job satisfaction and intent to turnover, the analysis was still run, as partial mediation was a possibility. Using Preacher and Hayes' (2008) INDIRECT macro for SPSS, the mediation effect was tested using bootstrapping methods with 1000 resamples. Results suggested that the effect of orientation procedure on turnover intentions was *not* mediated by trust; the 95% confidence interval (-.17 to .28) included zero. Trust also failed to mediate the relationship between orientation procedure and satisfaction, as the 95% confidence interval ranged from -.42 to .28. Instructor trust did not mediate the relationship between orientation procedure and turnover intentions or job satisfaction at time 2.

Results of moderation tests are presented as Table 6. Hypothesis 3 aimed to build upon hypothesis 1d and was concerned with the moderating effect of optimism on the relationship between orientation procedure (collapsed) and the outcomes of interest. Results of the job satisfaction moderation analysis revealed that adding the interaction term (condition*optimism) did not contribute significantly to a model containing only main effects for condition and optimism, $b=-.24$, $t=-.31$, $p=.75$, and therefore moderation was not present. Results of the intent to turnover moderation analysis revealed that adding the interaction term (condition*optimism) did not contribute significantly to a model containing only main effects for condition and optimism, $b=.27$, $t=.57$, $p=.57$, and therefore moderation was not present. The insignificant moderation did not warrant

further review of the direction and magnitude of the relationship, and therefore more in-depth trend analyses were not performed.

Discussion

Results in the current study suggest that realistic job preview (RJP), realistic orientation program for new employee stress (ROPES), and expectation lowering procedure (ELP) do not produce more positive outcomes than a control condition with regard to turnover intentions, satisfaction, or course performance. Further, results also indicated that when conditions were collapsed into a single condition (i.e., presence of any orientation procedure) and compared against a control condition, the orientation procedure condition was not found to be significantly better than the control condition with regard to intent to turnover, job satisfaction, or course performance.

The absence of any effect due to condition is perplexing. The most likely reasons are the lack of sufficient sample size and the potential absence of inflated expectations at entry. These limitations and their effects will be discussed in more detail, but it is worth noting that analyses revealed a within-groups effect such that newcomers did experience higher levels of intent to turnover and lower levels of job satisfaction at time 2 when compared to time 1. Examination of means suggested that in all conditions other than the control, a decrease in job satisfaction and increase in intent to turnover occurred from time 1 to time 2. These results would seem to suggest that all orientation procedures, not just ROPES as previous research suggests (Meglino et al., 1988), might have a sensitizing effect on newcomers.

This effect may have theoretical similarities to confirmation bias. Confirmation bias is a phenomenon whereby individuals who perceive something to be true use

evidence in support of their perception as confirming evidence and largely ignore evidence disputing their position. As a result, their initial position becomes truth in their mind, in spite of any evidence to the contrary. In the context of newcomer orientation procedures, it is possible that the procedures are giving rise to confirmation bias as the job unfolds whereby employees', or in this case students', exposure to negative job events serves to confirm a belief that "the job is negative" that either existed prior to entry or was planted by the orientation procedure. As this effect was not of primary interest in the current, and considering results here were non-significant, this effect needs much more research attention to be sharpened and better understood. Were this effect to be supported in further research, it would suggest that a more in-depth discussion of the positive job aspects may be warranted as a means to buffer the negative aspects.

If the rise in intent to turnover and lowering of job satisfaction were found to be consistent across samples and studies, then it may also suggest that a "honeymoon phase" exists early in newcomers' job tenure but may begin to dissipate with time. In the current study, an apparent downward trend in means suggests that as the role became more and more familiar to students, their positive feelings toward the role began to lower. This is similar to the "honeymoon phase" most often associated with marriages whereby the newness and optimism surrounding a relationship masks negative feelings about the relationship. As the newness begins to wear off, those negative feelings remain and become more salient, as they are no longer softened by optimism. For the sake of comparison, the immediate post-entry delivery of orientation programs may be similar to delivering marriage counseling immediately after the wedding. Because any issues discussed in the counseling could be dismissed as speculative, attendees may be less

likely to internalize the message, since optimism about the possibilities may negate any honest consideration of negative factors.

If the honeymoon phase is a real effect and not simply an artifact of the current sample and conditions, then it may warrant consideration of adjustments in the timing of the delivery of such programs. If orientation programs are delivered too soon, this finding might suggest that their message is rendered less meaningful as positive feelings regarding the opportunities the job poses may have a mitigating effect. Although it would be difficult to determine just how long the honeymoon phase would be expected to last in a job, theoretically there would be value in delaying the delivery of an orientation program until after it has subsided and newcomers are able to consider its message with a more sober mind. This could have bearing on future research as examinations have been performed examining differences in pre- and post-entry delivery of orientation programs, but no studies I am aware of have examined potential differences between immediate post-entry delivery and delayed delivery.

There are theoretical pros and cons to such a tactic. On the positive side, attendees would likely be better-equipped to genuinely understand the content as they will have had some time to experience the job and its related tasks and responsibilities, therefore leaving them more likely to accurately process orientation content. On the negative side, allowing them to experience the job to some degree prior to delivering an orientation program runs the risk that they will experience some negative event that they have not been adequately prepared for and turnover as a result. It also calls into question whether such a program should be referred as an “orientation” program. If research can demonstrate that a honeymoon phase is real and that newcomers are predisposed to be

content early in their tenure, then delaying the delivery of the orientation program may have few negative consequences. The best answer may be to develop orientation programs as two-step programs whereby individuals are exposed to a traditional orientation program at the outset, and then a second “refresher” program is delivered later in their tenure. Certainly, the organizational commitment is higher, but with the content having already been developed and attendees able to bring real experiences into a discussion, it had a great deal of theoretical and practical value.

One reason that results may not have been consistent with previous research concerns the state-of-mind of newcomers in the student sample. Whereas it was anticipated that a large enough portion of the newcomers would enter harboring unrealistically high expectations for the course, it is possible that the orientation procedures were rendered ineffective due to a lack of necessity. To remain consistent with a previous illustration, if comparing a flu vaccination to a placebo, differences in symptoms would only be expected to manifest if the groups had in fact been exposed to the flu virus. The active ingredient is only meaningful if it has something to act on. In this case, it is possible that student expectations were not inflated enough at the outset to meaningfully differentiate the message of the control condition from the messages of the experimental conditions. If that was indeed the case, then it is possible that the orientation procedure actually had the reverse effect of either lowering expectations further or simply confirming, and potentially cementing, negative beliefs about the course prior it actually beginning. In order to effectively lower expectations and thereby reap the benefits of an orientation program, inflated expectations must exist at the outset. In the case of the

statistics class, it is possible that expectations were not greatly inflated, thereby rendering the “active ingredient” ineffective.

Whether the reason was sample size, a honeymoon effect, or the “active ingredient” problem described above, the influence of such limitations on hypotheses 1a, 1b, 1c, and 1d would also be expected to carry over to hypotheses 2 and 3. It appears that was the case as neither hypothesis 2 or 3 was supported. In the absence of a main effect to lay the foundation, interactive effects are unlikely to occur in a meaningful way. Such was the case in the current study as mediation and moderations examinations yielded insignificant results. That does not necessarily dismiss optimism and trust as potentially important factors in determining the value of newcomer orientation procedures, but it does suggest that the setting and execution of the current study were not ideal to gain a clear picture of their impact.

Consistent with past results is the finding that the delivery of an orientation procedure is not likely to have a direct impact on the performance domain. Although delivery of an orientation procedure would not be expected to have *negative* impact on performance, thus rendering it largely harmless, expecting gains in performance based on delivery of an orientation is likely a fruitless endeavor. More proximal factors such as individual characteristics, job training, and leadership effectiveness are more likely to carry the predictive weight with respect to performance.

Although not included in the current study’s results section, there was marginal evidence ($p = .057$) that students who received an orientation program were more trusting of their instructors at time 1 than those who did not. This effect had faded by time 2, but it does seem to suggest that orientation procedures may serve to “break the ice” in

developing a trusting relationship early in newcomers' tenures. Although it is difficult to provide a great deal of theoretical commentary on this, especially considering the effect was marginal, this effect may warrant future examination, as the positive gains of trust have been well-documented in previous organizational research.

Limitations

There were two primary limitations in the current study. The first is the fact that students in a statistics class were used instead of organizational newcomers. Although explanations were offered as to why this limitation is less problematic than it may seem at first glance, it is certainly true that there are differences between students and employees that are difficult to ignore. As was described in detail in the previous section, the most critical factor concerning the sample was that inflated expectations exist, as the active ingredient of all orientation programs depended on it. It is possible that such expectations were absent thereby yielding the orientation programs no more impactful than the control condition. Additionally, it remains somewhat unclear how students view turnover compared to employees, as the implications and consequences are quite different.

Second, modest sample sizes plagued the analyses in the current study. Even in cases where seemingly meaningful mean differences were observed, the sample sizes were too small to produce significant results. Measures were taken to conduct meaningful analyses in spite of this limitation (i.e. collapsing across orientation procedures). However, the fact remains that a total sample size of approximately 120 that is segregated into four groups and also suffers from attrition seriously limits statistical power. Future researchers should work to balance the desire for a homogenous sample

that provides control and the value of increasing sample size at the expense of such control.

Implications for Practice and Future Research

Results of the current study do not provide support for the well-documented finding that delivery of orientation programs aimed at lowering newcomers' expectations has a positive impact on the employee experience. Theoretically, the differences in content between the three procedures examined here have meaningful implications, as they all use different mechanisms to confront newcomer expectations. However, in practice, these theoretical differences may not produce noticeable differences in newcomers – as results here indicated that there were no substantial differences between the three programs, potentially for the reasons discussed previously.

Future researchers should take care to ensure that their orientation program is appropriate for the sample to which they are delivering it. This issue may have been the downfall of the current study, as expectations may not have been inflated enough to yield meaningful results. Researchers should consider measuring expectations and making an effort to quantify the degree of expectation inflation, as that may provide insight into the potential value of orientation programs. These orientation programs are theoretically at their best when expectations are inflated. In the absence of such inflation, they may be largely unnecessary.

Theoretically, these orientation procedures *should* be most effective in job contexts where there is a large gap between what newcomers would expect of a job and what actually occurs during employment. It may be useful to develop a framework to identify such jobs based on job qualities and functions. Nurses, for example, are

generally viewed positively by the general public due to the reasonable pay and element of public service. However, traditionally, nurses tend to have relatively low job satisfaction. Similar jobs may prove to be fertile ground for future examinations.

The current study provides some support for the notion that the differences in content among the orientation procedures are not substantial enough to warrant segregating them as fundamentally different programs, as no orientation program impacted outcomes. The current study suggests that there is likely little downside to including components of each procedure in a single orientation program. Although drawing such conclusions was not the original intent of this study, results suggest that no single orientation procedure is noticeably superior to another when compared to a control group, and the nature of ELP is such that there are components that could be included in a ROPES program quite seamlessly. It is relatively easy to imagine a ROPES program that includes components of an ELP program, notably a discussion of the psychological contract and the stresses associated with unmet expectations. Given that both programs seek to achieve the same outcome through the same mechanism (i.e. newcomer expectations), there is likely little downside to such an approach. Such a comprehensive approach to newcomer expectations may actually serve to appeal to a broader audience, as the more conceptual flavor of ELP may be an asset for positions that are not as easily defined by traditional job analysis methods. Additionally, ELP and ROPES are similar in that they both have an educational component.

Future researchers should consider examining the impact of such hybrid procedures. Whereas Buckley and colleagues (2002) developed such a procedure that melded RJP with ELP, no such examinations have been performed for a ROPES-ELP

hybrid. Finally, although the results here do not provide support for the value of an orientation program aimed at newcomer expectations, there is ample research evidence in the organizational realm that suggests otherwise. The results here are likely due to sample-related issues and should not be viewed as evidence that such programs do not provide value. Instead, these results suggest that the conditions under which these programs provide value are of critical importance. It is likely that there are certain instances in which these programs would be expected to flourish. Future researchers should begin to move towards examining the *job-related factors* that allow for positive gains due to orientation programs rather than simply evaluating their worth beyond control groups. Their value is apparent, although not confirmed by the current study. Instead, future researchers should begin to tease apart the contexts in which organizations can be expected to gain the most return by implementing such practices.

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Table 1

Means, standard deviations, and participants broken down by group membership

Condition		Turnover (T1)	Turnover (T2)	Satisfaction (T1)	Satisfaction (T2)	Trust (T1)	Trust (T2)	Grade	Optimism
Control	Mean	1.48	1.42	4.83	4.82	4.31	4.46	4.48	3.91
	n	26	25	26	25	26	25	25	32
	SD	.57	.74	1.47	1.48	.68	.80	.65	.53
ELP	Mean	1.70	1.73	4.91	4.70	4.56	4.47	4.52	3.98
	n	31	25	31	25	31	25	25	38
	SD	.79	.65	1.11	1.04	.44	.67	.71	.509
RJP	Mean	1.56	1.80	4.96	4.53	4.47	4.22	4.40	4.11
	n	25	25	25	25	25	25	25	35
	SD	.71	.95	1.46	1.54	.64	.78	.76	.36
Ropes	Mean	1.75	2.25	4.50	3.82	4.63	4.48	4.35	4.08
	n	27	17	27	17	27	17	17	30
	SD	.90	1.45	1.44	1.83	.49	.49	.78	.41
Collapsed	Mean	1.67	1.89	4.83	4.41	4.56	4.38	4.43	4.05
	n	83	67	83	67	83	67	67	103
	SD	.80	1.02	1.33	1.48	.52	.68	.743	.43
Total	Mean	1.63	1.76	4.83	4.52	4.50	4.40	4.45	4.02
	n	109	92	109	92	109	92	92	135
	SD	.75	.97	1.36	1.49	.57	.71	.71	.46

Note. All scales are 5-point scales

Note. Grade is a 5-point scale where 'A' = 5 and 'F' = 1.

Table 2

Univariate Repeated Measures ANOVA Results

Source	<i>df</i>	<i>MS</i>	<i>F</i>	<i>Partial</i> η^2	<i>Observed Power</i>
Intent to Turnover (Non-collapsed)					
Between					
Treatment	3	1.98	1.65	.06	.42
Error	80	1.20			
Within					
Time	1	2.05	9.64**	.11	.87
Treatment × Time	3	.43	2.03	.07	.50
Error	80	.21			
Intent to Turnover (Collapsed)					
Between					
Treatment	1	2.92	2.43	.03	.34
Error	82	1.20			
Within					
Time	1	.70	3.20	.04	.43
Treatment × Time	1	.44	2.02	.02	.29
Error	82	.21			
Job Satisfaction (Non-collapsed)					
Between					
Treatment	1	4.86	1.35	.05	.35
Error	80	3.61			
Within					
Time	1	4.37	9.17**	.10	.85
Treatment × Time	3	.45	.95	.03	.25
Error	80	.48			
Job Satisfaction (Collapsed)					
Between					
Treatment	1	2.33	.64	.01	.12
Error	82	3.67			
Within					
Time	1	1.74	3.70	.04	.48
Treatment × Time	1	.79	1.67	.02	.25
Error	82	.47			

Note. * $p < .05$

Table 3

One-way ANOVA Results for condition on course performance

Source	<i>df</i>	<i>MS</i>	<i>F</i>
Between Groups	3	.12	.23
Within Groups	88	.53	

Note. Results non-significant.

Table 4

T- tests of course performance for condition collapsed compared to control group

	<u>t-tests for equality of means</u>	
	t	df
Course Performance (Collapsed)	.90	.30

Note. Results were non-significant

Table 5

Indirect Mediation Effect of Orientation Procedure on Job Satisfaction and Turnover Intentions through Instructor Trust

Mediation Test DV	95% Confidence Interval	
	Lower	Upper
Turnover Intention	-.164	.277
Job Satisfaction	-.415	.276

Note. All 95% confidence intervals are calculated from 1000 bootstrapped samples. All confidence intervals include zero. Results are non-significant.

Table 6

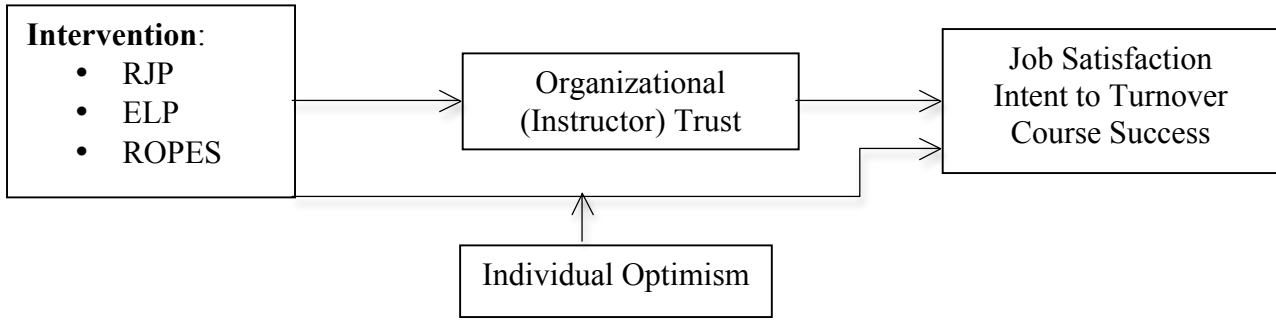
Moderated Regression Analysis With Intent to Turnover (Time 2) and Job Satisfaction (Time 2) Regressed onto Condition (binary-coded) and Trait Optimism

Model (Intent to Turnover)	<i>b</i> at Entry	R^2	<i>F</i>	$R^2\Delta$
Step 1		.05	1.61	
Condition	-.66			
Trait Optimism	-.08			
Step 2		.05	.484	.003
Condition × Trait Optimism	.28			
Model (Job Satisfaction)	<i>b</i> at Entry	R^2	<i>F</i>	$R^2\Delta$
Step 1		.011	.484	
Condition	.53			
Trait Optimism	.19			
Step 2		.01	.10	.001
Condition × Trait Optimism	-.24			

Note. Condition is a dichotomous variable. Trait Optimism is a continuous variable. All results are non-significant.

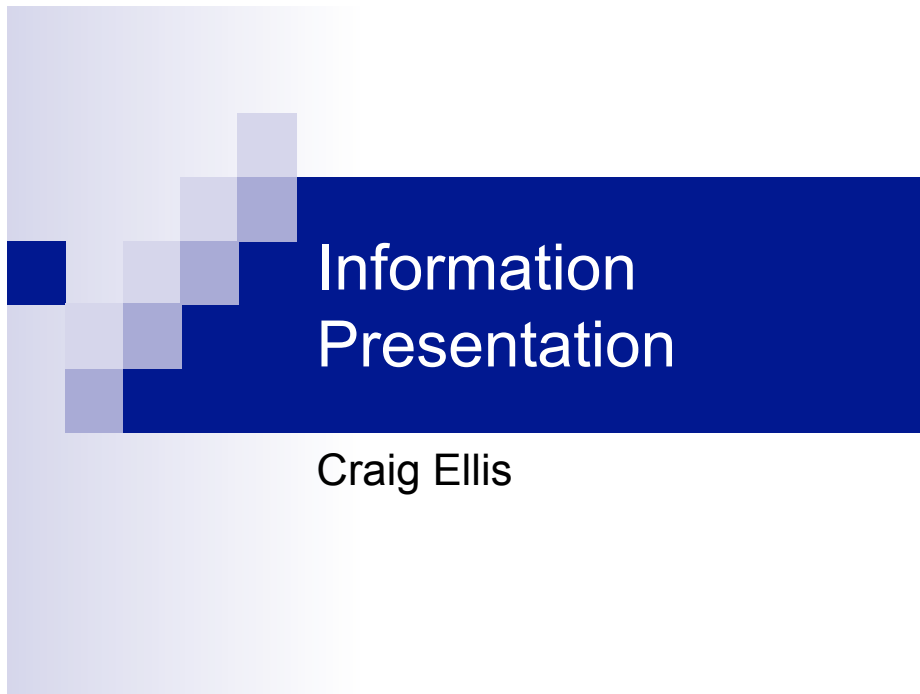
Figures

Figure 1



a. Model depicting proposed relationships

RJP Content



Project Introduction

- Consent Document
 - Please read it carefully and sign it if you wish to participate

- Complete the Questionnaires and return them to me



Project Introduction

- Your Instructor and TA do not know what I'm going to be talking to you about today.
 - So if you ask them they will have no answers for you.

- All questions should be directed to me
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Project Introduction

- Your participation is CONFIDENTIAL. Your instructor and TA will not who participated in this research project until the end of the semester.



Before we get started...

- Please don't hesitate to e-mail with questions if you ever have them.
- If you are under 19 years old, please see me after class.
- Please raise your hand and ask questions if you have them during this presentation.



Introduction

- The following message is intended to provide you with a realistic picture of what you can expect to encounter over the course of the semester in this statistics class. Your professor believed that providing you a realistic preview may help prepare you mentally for this course, and so he asked that I come and talk to you.



Introduction

- This class has favorable and unfavorable aspects. I will step through a list of these aspects. The information contained in this session was gathered by in-depth discussions with previous stats TA's, as well as having them complete several questionnaires about the statistics course. I will proceed through this session slowly so that you are able to process and jot down any information that you consider valuable.



In plain terms

- Purpose and Preparation
 - Research
 - Discussion with Dr. Fan
 - He wanted it included



Difficulty

- Teaching assistants and former students were asked how the statistics course compares to other courses in the psychology curriculum in terms of difficulty, time commitment, and benefit. Their responses were:



Difficulty

- The statistics course can be expected to be somewhat more difficult than other than courses in the psychology curriculum



Time Commitment

- In order to perform well, the statistics course can be expected to require somewhat more of a time commitment than other courses in the psychology curriculum



Benefit

- Concerning the benefits associated with learning the content of the course, the statistics course can be expected to have somewhat more benefit than other courses in the psychology curriculum



Difficulty and Grading

- Teaching assistants were asked to offer their opinion on the difficulty of course material as well as what they believe is the average grade that students earn in the course. The TA's responses indicate that....



Difficulty and Grading

- The examinations in the statistics course are considered somewhat difficult.
- As a whole, assignments in the course (Examinations included) are considered to be somewhat difficult.
- On the bright side, the average grade on examinations is a B, and the average grade for the course as a whole is a B.



Critical Behaviors

- This is a list of behaviors that are considered “very important” for performing well in this statistics course. You can expect to be engaged in these behaviors and activities *frequently* over the course of the semester. When asked, teaching assistants and students pointed these things out as being critical:



Critical Behaviors

- Working with computers and computer programs
- Note-taking
- Attending class regularly
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- Working on class material outside of the classroom
- Completing assignments on time
- Understanding basic mathematics (e.g., addition, subtraction)



Continued

- Understanding intermediate mathematics (e.g. algebra)
- Following instructions that are given
- Being self-motivated and avoiding procrastination
- Making logical connections between statistical concepts
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Continued

- Performing well on examinations
- Recalling information from memory
- Taking advantage of extra credit opportunities



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Successful Students

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Unsuccessful Students

- Turning work in late
- Not asking questions
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- Missing class/lab
- Procrastinating on assignments



Unsuccessful Students

- Regularly missing lab and/or lectures
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- Focusing less on understanding concepts and more on “right” or “wrong” answers
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- Typically working in groups where one person did the assignment and others copied it
- Neither asking nor being able to answer questions during lab sessions



Wrap-Up

- You should now have an idea of what to expect, and what it will take to be successful.



Important!

- It is requested that you do not discuss the content of this presentation with other students in the statistics class.
 - It's very important to my research project, and could keep me from graduating, so please.



Information Presentation

Craig Ellis



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- Focusing less on understanding concepts and more on “right” or “wrong” answers
- Typically paying little to no attention in lab (i.e., talked to peers, played on cell phones).
- Not completing assignments on time or in full
- Typically working in groups where one person did the assignment and others copied it
- Neither asking nor being able to answer questions during lab sessions



A step further

- In addition to having knowledge of the types of tasks and challenges you are likely to experience, it may also be beneficial for you to have a knowledge of the ways in which you can respond to and cope with the challenges you are faced with. Now, I will offer some information about the things that students in this class often find stressful and the things that students in class may do to help them manage that stress effectively.

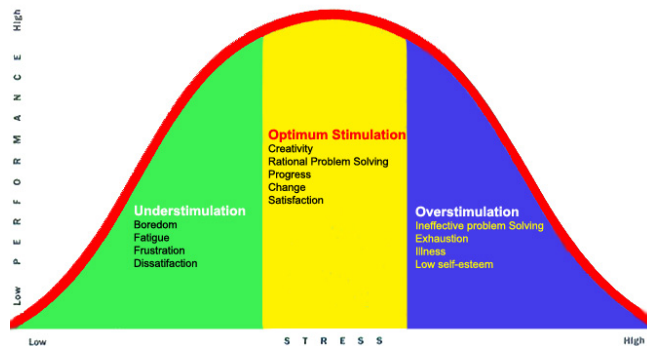


Show of Hands

- How many of you expect to experience stress at some point over the course of this statistics class?

Truth is...

- The truth is that most students experience stress related to their performance in statistics. It is important that you are informed about the things that may lead to stress in statistics class and also how you can go about coping with stress without it affecting your performance negatively. In the next several minutes I will inform you about the things that may cause you to experience stress in this class. I will also ask you separate into small groups and discuss effective approaches to dealing with stress.





According to TA's and Students

- The frequent need to complete and turn-in assignments
- The fear of performing poorly on examinations
- The ambiguity surrounding successful performance in labs
- The challenging nature of the material
- Performing mathematical operations
- Understanding concepts that they've never been exposed to before
- Fear of missing out on important information
- Learning to use new computer programs
- The difficulty in understanding the instructor during course meetings



A bit more

- All of these things appear to be sources of stress. The best way to cope with these things is to have frequent contact with your TA. TA's are available during office hours and are also willing to spend time in lab sessions reviewing concepts that you may not understand or answering questions about course material



Research shows...

- Psychological research on stress indicates that often stress is amplified or worsened whenever little is known about the stressful event.
 - you don't know the date an assignment is occurring on
 - you don't know the chapters being tested
 - you don't know how to perform the operations being tested, etc.



Collect Information

- The fear of the unknown is FAR more stressful than the fear of the known, so collect information!
 - How to stay informed



How to stay informed

- Attend ALL class meetings and lectures.
- Attend TA office hours and ask questions in lab sessions.
- Talk to others in the class about what is stressful



Grade Stress

- In addition to lacking information, students also stress out about their grade
 - There are things that you can do to help limit the amount of stress you experience with your final grade



Grade Stress

- Get all the extra credit that you can get
- Refer to your syllabus and ask your TA about opportunities to drop or replace low grades



Don't Procrastinate

- Past TA's note that procrastination is a key identifier of unsuccessful students
 - When you're procrastinating, you're experiencing stress
 - When you decide to stop procrastinating, you experience even more stress



Group Session

- Take a few minutes and discuss what you've done in the past to help alleviate stress related to classes with those around you



Important!

- It is requested that you do not discuss the content of this presentation with other students in the statistics class.
 - It's very important to my research project, and could keep me from graduating, so please.



Information Presentation

Craig Ellis



Project Introduction

- Consent Document
 - Please read it carefully and sign it if you wish to participate

- Complete the Questionnaires and return them to me



Project Introduction

- Your Instructor and TA do not know what I'm going to be talking to you about today.
 - So if you ask them they will have no answers for you.

- All questions should be directed to me
 - rce0002@tigermail.auburn.edu



Project Introduction

- Your participation is CONFIDENTIAL.
Your instructor and TA will not who participated in this research project until the end of the semester.



Before we get started...

- Please don't hesitate to e-mail with questions if you ever have them.
- If you are under 19 years old, please see me after class.
- Please raise your hand and ask questions if you have them during this presentation.



Introduction

- I am currently in the process of researching a fairly new technique that is aimed at improving the class experience for students entering statistics. Because many of you are experiencing statistics for the first time, your professor felt that this procedure has the potential to be extremely beneficial to you. This procedure was originally designed to be delivered to employees entering into a new job, but I've adapted it for students entering a new class. Dr. Fan requested that I come and speak with you all.



ELP

- The procedure that I am researching is called an Expectation Lowering Procedure or ELP. This procedure is aimed at lowering the expectations of students entering a new class.
 - Expectations can be almost anything
 - What are some things students may have expectations for when starting a new class?



Expectations

- Grade they'll receive
- Time commitment required
- How easy the course will be
- How likeable the professor will be
- Etc.



The goal

- The goal of this presentation is to *lower* your expectations
 - This may seem a bit backwards. Why would you want to have lower expectations?
 - What do you think?



My hope

- I'll give you information related to 3 things:
 - How expectations become inflated
 - How to lower your expectations
 - Why it's good to do so



Your Expectations

- Think about some of the expectations you have for this class
 - Actually think about them



Your Thoughts

- How many of you thought about grades?
- How “easy” the course will be (including homework)?
- How often you’ll be able to miss the class and still pass?



Goals are good

- Goals are good and they can be motivating
 - But setting goals also has the tendency to inflate expectations
 - Salary Example



Psychological Contract

- Understand that a “psychological contract” exists
 - An agreement between two parties, like a formal contract, that deals with unspoken expectations
- A psychological contract exists between you and your instructors.



Example

- For instance, while it may not be written in the syllabus, there may be an unwritten agreement between a student and the professor that it's okay to step out of the classroom without permission to take an important phone call
 - It's all good if both parties agree



Another Example

- It could be that the student expects to get out of class a few minutes early, while the professor thinks it is okay to keep students a little late to ensure full coverage of a topic.
 - This presents a problem. What's the problem?



“Reality Shock”

- In a situation like that, “reality shock” happens.
 - “I didn’t think it was going to be like this.”
 - Psychological research shows that reality shock is bad for your satisfaction and your performance.
 - How to prevent it...



Preventing Reality Shock

- There are two key things you can do to help prevent reality shock.
 - 1) Make it a point, right now, to lower your expectations
 - 2) Understand that negative events *will* happen, and mentally prepare for it



Personal Example

- Relationships are the *easiest* way to understand how the psychological contract works.
 - I'm married now, but when my wife and I started dating....



Breakfast Food

- Wait, wait, wait, YOU DON'T LIKE BREAKFAST FOOD!?



Exercises

- Think back to a time when you had expectations go unmet
 - Class, Job, Relationship, Church, Social Group



Last Exercise

- Take out a sheet of paper
- Write down your expectations for this class
 - It may be difficult at first, but they'll come to you
 - They may things that you liked about previous classes.
- Think about how you would feel if those expectations weren't met.
- Beside that, write a lower version of that expectation
- Keep your list with you



Thank you

- Thanks for listening
- It's VERY important that you don't talk to other students in this class about the information that I presented today
 - It could keep me from finishing up my Ph.D. and that would be sad.



Information Presentation

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Introduction

- The purpose of today's session is to provide you with valuable information about a shift that is occurring in the way information is created, presented, and received worldwide. As you will see, these changes are very relevant to you and your future, and if you understand what these changes are and the ways in which they are occurring, your knowledge can be a valuable resource for your future. During this session, you will be presented with information concerning a population and information shift in the world, the ways in which you will be influenced by this shift, trends that are expected to occur in the future, and evidence that those trends and shifts in information transmission and access are currently in progress



IQ

- If you were to take 25% of the population in China with the highest IQ's, that 25% would equal more than the population of North America. In India, that number would be 28%. Basically, those nations have more honors students than we have students.



Jobs

- If you were to take every single job in the United States and send it to China, China would still have a labor surplus. In other words, if we did ship the jobs to China, they would still have more people than they would jobs.



Population

- In the next 5 minutes, 60 children will be born in the United States, 244 children will be born in China, and 351 babies will be born in India. Our population is growing, but China and India's populations are growing at much more rapid pace.



Employment

- The U.S. department of labor estimates that the average student in today's society will hold between 10 and 14 jobs by the time they are 38 years old.
 - 25% of workers in the United States are working for a company that they've been employed with for less than a year.
 - Over 50% of workers are working for a company that they've been employed with for less than 5 years.



Job Shift

- Former Secretary of Education Richard Reilly has claimed that the top 10 in-demand jobs in 2010 did not even exist in 2004.
 - What does that mean? It means that students are currently forced to prepare for jobs that don't even exist yet. In other words, students need to be trained to use technologies that don't even exist yet to solve problems



Case Study

- Take this example for instance. Try to name the following country.
 - Richest country in the world
 - Largest military in the world
 - Center of the world in terms of business and finance
 - World's strongest education system
 - Center of innovation and invention
 - Has a currency that is the standard of worldly value
 - Highest standard of living



Answer?

- That country was England in 1900.
- The age of an “American Advantage”



Internet Usage

- The United States currently ranks about 20th in internet penetration. Internet penetration is determined by identifying the total percentage of the population that uses the internet. In the United States, that number is about 75%.




Nintendo!

- In 2002, Nintendo Corporation invested 140 Million Dollars into research and development. The U.S. board of education spent less than half of that on research and innovation in education.



Marriage

- Last year, 1 out of every 8 couples married in the United States met online.
 - Match.com
 - E Harmony
 - Christian Mingle
 - Farmer's Only



MySpace (throwback)

- In 2006, there were over 106 Million registered users of Myspace. If Myspace were a country, it would have been the 11th largest country in the world.



Facebook

- There are currently about 1.3 BILLION unique users that log onto Facebook monthly.
 - Only China is comparable to Facebook.



Google'ing

- There are over 2.7 billion searches conducted on Google each month, which begs the question, “Who answered those questions before Google existed?”
 - Your thoughts?



Texting

- The number of text messages sent and received in one day exceeds the world's population.
 - The number of Text Messages sent and received in the United States alone exceeds the world's population



Language

- There are currently 5x as many words in the English language as there were when William Shakespeare was alive.
 - “Muggle” is one of those words



Books

- More than 3,000 new books are published each day.



Information Overload

- It's estimated that if you were to read the New York Times cover to cover for one week, you would be exposed to more information than an individual living in the 18th century would have been exposed to in their entire lifetime.



Information Generation

- It is estimated that in the next year, more unique information will be created than has been in the past 5,000 years combined.

Technical Development

- The amount of technical information developed is doubling every two years. For students earning technical degrees, this means that half of the things they learn in their first year will be obsolete by their third year.

Paper Costs

- In the future, E-paper will be cheaper than actual paper.





Laptops

- Last year, 47 million laptops were shipped worldwide. The \$100 laptop plans to ship between 50 and 100 million laptops worldwide to children in underdeveloped countries.



Brain Power

- It's been predicted that by 2015, a super-computer will be developed that exceeds the computational power possessed by the human brain. It's also been predicted that by 2049, a super-computer will be developed that exceeds the computational power of the entire human species.
 - Google the movie "Transcendence"



Wrap-up!

- So what does this mean for you? It means that the amount of information that exists in the world is growing at an exponential pace. The number of people with access to this information is growing rapidly - and not only the number of people, but the nature of those people. In the future, the dynamics of the world will shift due to the information shift. Nearly everyone will have access to the information that we currently have access to. The questions that you must ask yourself are, "How can you prepare for this shift?" "What can be done?" "How can you put yourself in a position to benefit from this shift as opposed to being left behind and having your knowledge become obsolete?"



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Appendix B

Measures

Optimism/Hope Scale From Values in Action (Peterson & Seligman, 2004)

1. Strongly Disagree
2. Moderately Disagree
3. Neutral
4. Moderately Agree
5. Strongly Agree

+ keyed Look on the bright side.
 Can find the positive in what seems negative to others.
 Remain hopeful despite challenges.
 Will succeed with the goals I set for myself.
 Think about what is good in my life when I feel down.

- keyed Expect the worst.
 Have no plan for my life five years from now.
 Am not confident that my way of doing things will work out for the best.

Job Satisfaction Questionnaire

Based on : Cammann, C., Fichman, M., Jenkins, D., & Klesh, J. (1983)). Adapted for educational context.

Instructions: Listed below is a series of statements that represent your overall feelings about the statistics course. Please indicate the degree of your agreement or disagreement with each statement, using the following scale.

1	2	3	4	5	6	7
Strongly disagree	Moderately disagree	Slightly disagree	Neutral	Slightly agree	Moderately agree	Strongly agree

- | | |
|--|---------------|
| 1. All in all, I am satisfied being in this statistics course. | 1 2 3 4 5 6 7 |
| 2. In general, I don't like being in the statistics course. | 1 2 3 4 5 6 7 |
| 3. In general, I enjoy being in the statistics course. | 1 2 3 4 5 6 7 |

Turnover Intention: Adapted for educational context

Based on: Aryee, S., Budhwar, P. S., & Chen, Z. X.(2002). Trust as a mediator of the relationship between organizational justice and work outcomes: test of a social exchange model. *Journal of Organizational Behavior*, 23, 267-285.

Instructions: Please read the following statements carefully, and then which answer best describes your situation.

1	2	3	4	5
Strongly disagree	Moderately disagree	Neutral	Moderately agree	Strongly agree

1. I often think back and wish I'd considered dropping the statistics course
2. If I could do it without penalty, I would probably look for another time to take the statistics course

1	2	3	4	5
Not at all Likely	Not Very Likely	Neutral	Very Likely	Extremely Likely

3. If I could do it without penalty, I would seriously consider dropping the statistics course in the near future

Organizational (Instructor) Trust (Adapted for use in educational contexts)

Based on the measure presented by Gabarro & Athos, 1978 and subsequently used by Robinson, 1996 and Aryee, Budhwar, and Chen, 2002.

1	2	3	4	5
Strongly disagree	Moderately disagree	Neutral	Moderately agree	Strongly agree

1. I believe my instructors has high integrity
2. I can expect my instructors to treat me in a consistent and predictable fashion
3. My instructors are not always honest and truthful (- coded)
4. In general, I believe my instructors' motives and intentions are good
5. I don't think my instructors treat me fairly (- coded)
6. My instructors are open and up front with me
7. I am not sure that I fully trust my instructors (- coded)

