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A Specialization Approach to Competition: Self-Evaluation Maintenance in Highly Relevant Performance Domains Within the Context of Romantic Relationships

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A SPECIALIZATION APPROACH TO COMPETITION:

Self-Evaluation Maintenance in Highly Relevant Performance Domains Within the Context of Romantic Relationships

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Courtney L. Morewitz

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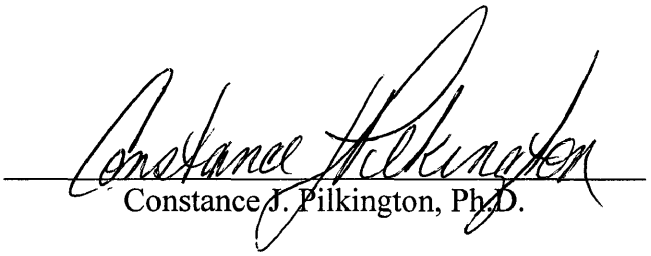
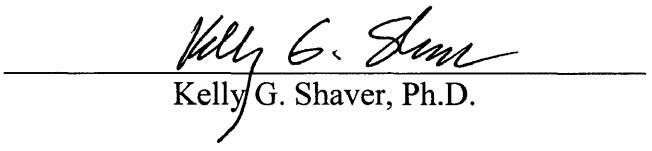


Constance J. Pilkington, Ph.D.



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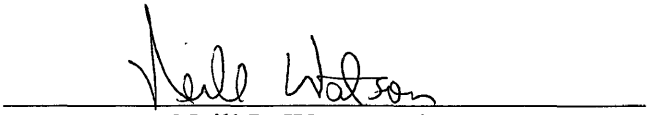

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ABSTRACT

The Self-Evaluation Maintenance (SEM) model (Tesser, 1988) assumes that individuals will strive towards maintaining or improving a positive self-image and that our interactions with others will have a major impact on how this evaluation is maintained. The likelihood and extent to which a person will evaluate his or herself in relation to others is heavily influenced by the complex interplay of three parameters – *performance*, the actual outcome of the performance domain; *closeness*, the amount of association between two people; and *relevance*, how important the domain is to an individual's self-definition. Research has shown that individuals handle the threat to self-evaluation from competition by reducing closeness to the person (e.g., Pleban & Tesser, 1981), by reducing relevance of the area (e.g., Tesser & Paulhus, 1983), or by modifying the performance of the self or other (e.g., Tesser & Campbell, 1982).

Within the context of romantic relationships, it seems likely that there will be overlaps in self-definitions, and consequently, overlaps in performance areas that are highly relevant to both partners. When these competitive situations arise, the modification of the SEM parameters becomes more difficult because there are some instances when the performance area is such an integral part of a person's self-definition that it cannot be altered. Moreover, reducing closeness is not an option because that would result in a disintegration of the relationship. Thus, a way to resolve this threat to self-evaluation, as well as to ease tensions between the two individuals, would be to specialize within the performance domain.

The present study sought to examine specialization as a response to competition in these highly relevant performance areas. Couples individually completed a task in a general performance area that was rated to be highly relevant to both partners. Participants received bogus feedback that they had performed at a higher or lower percentile than either their romantic partner or the stranger – the opposite-sex partner from the other couple in the same group session.

After the performance manipulation, the level of relevance for the general performance area and its six subdomains was assessed to determine if there was a change in relevance following feedback. In addition, participants made performance comparisons between themselves and the romantic partner or stranger by predicting future performance on the subdomains of the general performance area.

The present study did not find the anticipated active efforts to specialize within romantic relationships. Although performance feedback was influential in each of the dependent variables of interest, the SEM mechanisms hypothesized to occur exclusively in comparisons to the romantic partner emerged in comparisons to the stranger as well. It appears that specialization may be an especially important self-enhancing mechanism for the *individual alone* to maintain a positive self-image when confronted with negative feedback. Applications of these mechanisms in other contexts (e.g., interpersonal functioning within business organizations) are discussed.

A SPECIALIZATION APPROACH TO COMPETITION:

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INTRODUCTION

Research on romantic relationships can focus on how couples interact and function as a unit as well as separate individuals. O'Mahen, Beach, and Tesser (2000) state that an ideal relationship is one that maintains a high level of closeness, while at the same time allows both individuals to satisfy their identity needs in personal performance. Although this ideal relationship would seem relatively easy to attain when partners are not pursuing the same goals, the likelihood of this situation seems implausible because a great number of relationships are based on similarities between the individuals. Indeed, increased similarity between individuals is associated with increased attraction, whether that similarity is based on physical attributes (Murstein, 1972; White, 1980), values (Newcomb, 1961), cognitive organization (Neimeyer & Mitchell, 1988; Tesser, 1971, 1972), or similarities in personality (Blankenship, Hnat, Hess, & Brown, 1984). Thus, conflict can arise in couples when both individuals are striving for unique identities, when in actuality their identities have overlapping characteristics. This conflict is particularly visible in the context of performance evaluation. The Self-Evaluation Maintenance model (Tesser, 1988) provides insight as to how each member of the relationship maintains a positive self-evaluation of his or herself, while maintaining closeness with the other.

The Self-Evaluation Maintenance (SEM) model (Tesser, 1988) assumes that

people will strive towards maintaining or improving a positive self-image and that our interactions with others will have a significant impact on how we maintain this evaluation. There are two antagonistic processes that that underlie how we evaluate ourselves in relation to others. In the process of reflection, we attempt to maintain or improve our self-image by mere association with others (Cialdini et al., 1976). For example, a person could engage in reflection processes by using phrases such as "my daughter, the CEO" or "my friend, the Mayor" as a way of heightening his or her personal self-evaluation. On the other hand, with comparison processes we attempt to maintain or improve our image by comparing our performance with that of others (Tesser, 1988). In this case, receiving the highest grade in the class would serve as a comparison that would result in an increased self-image, whereas receiving the lowest grade would result in a decreased self-image.

There are three parameters that influence the likelihood and extent to which a person will engage in reflection or comparison processes—performance, closeness, and relevance (Tesser, 1988). Performance is the actual quality or outcome of the activity—for example, winning a game or having greater success at making funny jokes. One's performance relative to another's is important because it will determine the outcome of the SEM process. For example, if another has a worse performance than the individual, then there is little to gain by association with the performer, and the process of reflection would seem unlikely.

The second parameter, closeness, entails the amount of association between two people (Tesser, 1988). Closeness does not apply solely to social relationships, but also includes physical proximity, age, background similarity, and the like (Tesser &

Campbell, 1982). According to the SEM model, greater psychological closeness leads to increased use of reflection and comparison processes.

Relevance, the third parameter, involves how important the performance domain is to an individual's self-definition (Tesser, 1988). The higher the relevance, the more likely the person is to engage in comparison processes. If another outperforms an individual on something that is seen as important and highly relevant to the individual, most likely a decrease in self-evaluation will result; conversely, if the individual outperforms another, an increase in self-evaluation will result. On the other hand, low relevance allows an individual to engage in reflection processes as their performance is not as central to their self-definition, and they can benefit from the success of others through association.

The likelihood to engage in reflection or comparison processes and the corresponding changes in self-evaluation maintenance are heavily influenced by these three parameters. Of utmost importance is the complex interplay among the three factors (Tesser, 1988). Any variation in one parameter results in a change in the others. A great deal of research supports the SEM model and the interaction of these parameters.

The relevance parameter will be affected by changes in the parameters of closeness and performance. The SEM model predicts that a superior performance by a close other (but not a distant other) will result in reduced relevance for that task (Tesser, 1988). This prediction has been empirically supported when people report a decrease in self-relevance when outperformed by a close other (Tesser & Paulhus, 1983; Pilkington & Smith, 2000). This change in self-definition is also found when the self outperformed a close other; relevance of the domain is rated as high (Pilkington & Smith). It can be

concluded that people will modify their self-definition in response to variations in performance and closeness in order to avoid the threat of comparison.

The second parameter of performance will be affected by changes in relevance and closeness. The SEM model predicts that performance can be modified through changing the performance of the self or the other (Tesser, 1988). Two methods to change performance are to make behavioral changes by increasing one's efforts to succeed, or to make cognitive changes on how we perceive our performance. Examples of these cognitive modifications would be to attribute another's superior performance to just luck or to claim you were having a bad day (Tesser & Campbell, 1982).

On the other hand, an individual can attempt to change the performances of another. The SEM model would predict that in high relevance situations, a person would be less likely to help a close other than a distant other (Tesser, 1988). Indeed, Tesser and Smith (1980) found that during a verbal task with a friend and a stranger, participants gave harder clues to close others (the friend) than to distant others (the stranger) in high self-relevance conditions, whereas participants gave harder clues to strangers than to friends in low self-relevance conditions.

Similar results have been found in studies looking at perceptions of performances (Tesser & Cambell, 1982). When asked to respond and evaluate their own performance as well as the performance of friends and strangers on cognitive-perceptual tasks, individuals gave more positive ratings of strangers than of friends when the task was rated high in self-relevance. In contrast, they gave more positive ratings for friends than for strangers in low self-relevance tasks. It appears that in this case, both relevance and the degree of closeness predicted the perceived quality of performance. It can be

concluded that performance will be changed either cognitively or behaviorally in order to maintain or improve a positive self-evaluation.

The last parameter, closeness, will be affected by changes in performance and relevance. The SEM model predicts that closeness will be modified in response to both the comparison and reflection processes (Tesser, 1988). Specifically, in situations where another outperforms an individual in a highly self-relevant area, closeness will be reduced to minimize the impact of the negative comparison. Conversely, in situations where another outperforms an individual in low self-relevance areas, closeness will be increased in order to maximize reflection benefits.

This prediction has been confirmed when closeness was examined in behavioral, affective, and cognitive capacities. Pleban & Tesser (1981) found that when bogus feedback was given comparing the participants to confederates, participants who were told they performed poorly on a high self-relevance task (a) increased the actual physical distance in seating arrangements between themselves and the confederate, (b) were less likely to wish to work with the confederate again, and (c) were less likely to note personal similarities. It is important to note that this was found only when the confederate outperformed the participant on high relevance tasks; on low self-relevance tasks, participants increased all aspects of closeness in order to gain the positive benefits of reflection.

It is easy to see how variations in the three parameters of relevance, performance, and closeness all interact to determine whether one will engage in comparison or reflection processes. Recall the previously mentioned SEM assumptions that interactions with others have a major impact on how a person maintains a positive self-image. We

know that attraction is a result of similar interests (e.g., Blankenship et al., 1984; Murstein, 1972; Neimeyer & Mitchell, 1988; Newcomb, 1961; Pilkington, Tesser, & Stephens, 1991; Tesser, 1971, 1972; White, 1980). Therefore, it is likely that there will be overlaps in the self-definitions of those in close relationships, which would likely result in the same types of performance opportunities. When outperforming the other or actually being outperformed becomes an issue, research has shown how individuals handle this conflict through modification of performance by the self or other, by reducing relevance, or by reducing closeness. Keeping in mind that there is an interaction among all three parameters, what does an individual do to maintain a positive self-evaluation while, at the same time, maintain a desired close relationship with the other? Specifically, in romantic relationships special considerations need to be taken into account when modifying any of the parameters in light of the fact that it could potentially result in a disintegration of the relationship. When involved in a romantic relationship, closeness is the parameter that is least likely to change in attempts to maintain a positive self-image. Thus, it appears the SEM model has important implications in the realm of romantic relationships.

The extended SEM model was proposed in order to take the romantic partner's self-evaluation maintenance needs into account (Beach & Tesser, 1995). Whereas the original model failed to include the consequences of a decrease in self-evaluation on behalf of the romantic partner, the extended model proposes that partners will respond empathetically and make efforts to maintain positive evaluations of the self as well as to facilitate the romantic partner's own positive self-evaluation needs. Along these lines, recall that if the self is outperformed by a close other on high relevance tasks, conflict

arising from this threat to self-definition can be resolved by modifying the self-definition or reducing closeness (Pilkington & Tesser, 1991; Tesser, 1988). However, in some cases the performance domain is such an integral part of a person's self-definition that it cannot be altered. Moreover, reducing closeness is not an option to reduce conflict because that would result in a disintegration of the relationship. Thus, a way to resolve this personal threat to self-definition, as well as to ease tensions between the two individuals, would be to specialize within the specific performance domain. This would allow each individual to have a unique self-definition in addition to allowing both partners to have expertise within the same domain. These compatible levels of domain relevance would allow both individuals to fully maximize the benefits of reflection processes while avoiding negative comparisons. Indeed, this complementarity within romantic relationships seems to be a plausible hypothesis for maintaining or improving self-evaluation that would correspond to predictions made by the extended SEM model (Pilkington et al., 1991).

For example, if both individuals in a romantic relationship are psychologists involved in academics, performance discrepancies are likely to occur in the number of grants received, the feedback of teaching evaluations, and the number of articles published. Assuming that one's job or career would be highly relevant to the self-definition and cannot be changed, then being outperformed by one's partner would likely result in a threat to self-evaluation and a conflict between the partners that could only be resolved by a reduction in closeness. To respond to these potential performance conflicts yet maintain closeness, the individuals may focus on an aspect of that relevant domain and specialize within the specific area of academic psychology—one may become a

clinical psychologist and the other a social psychologist. This would allow both partners to reflect in the other's glory, while decreasing comparison processes because partners would be in two distinct, non-competing subdivisions of psychology.

This idea of specialization is consistent with the Performance Ecology Perspective on self-evaluation maintenance (Beach et al., 1996; Beach & Tesser, 2000; O'Mahen et al., 2000). With this perspective, expertise on specific tasks and domains are distributed to the self and to the partner in a conscious effort to maintain positive self-evaluations for both individuals—specialized roles for each partner can be identified (Beach & Tesser, 2000). The Performance Ecology Perspective predicts that couples will attempt to make clear definitions of the roles for each partner, which will result in greater relationship satisfaction (O'Mahen et al.).

Research is consistent with the predictions of the Performance Ecology Perspective that couples will display empathetic responses towards each other. Couple reports have shown that individuals ascribe expertise to themselves when the task is high in self-relevance and ascribe expertise to their partner when the task has low self-relevance (Morewitz & Pilkington, unpublished manuscript; Pilkington & Tesser, 1991; Pilkington et al., 1991). This can be seen as demonstrating task complementarity between partners.

Complementarity can also be viewed as reflecting the SEM needs for both partners in the distribution of power to make decisions (Beach & Tesser, 1993). This distribution of power is assumed to reflect expertise for particular topics within the relationship. An examination of decision-making power distributions along with the corresponding importance of having that power according to the individual and the

romantic partner demonstrates that there is an association between power distribution and marital satisfaction that coincides with the extended SEM model. That is, Beach and Tesser conclude that couples distribute decision-making power (i.e., expertise or performance) in a way that maximizes the self-evaluation, while also maximizing the self-evaluation needs of their partner.

Complementarity is also seen in the actual affect expressed by both partners. Mendolia, Beach, and Tesser (1996) examined videotapes of couples working through a disagreement and found that if the couples incorporated the needs of both partners, the discussion was much more constructive than when a partner focused exclusively on his or her own needs. An additional testing session examined affective responses to eight self-recalled scenarios varying by level of performance and relevance. Consistent with the SEM model, high self-relevance activities were accompanied by increased positive affect when the individual outperformed the partner, and decreased positive affect when the partner outperformed the individual. Of further interest to the Performance Ecology Perspective, if the activity in question was high on partner-relevance and the individual outperformed the partner, less positive affect was experienced. On the other hand, for this same high partner-relevance activity, if the partner outperformed the individual, no change in affect was reported. These results are consistent with the idea that couples will attempt to meet the self-evaluation needs for both partners.

These empathetic responses have been seen in married couples, as well as in dating couples (Beach et al., 1998; Pilkington et al., 1991). When asked to recall SEM situations with variations in relevance and performance, spouses reported more pleasant reactions to outperforming their partner when the task was low on partner-relevance, as

well as more pleasant feelings when the partner outperformed them on high partner-relevance tasks (Beach et al.). Similarly, Pilkington et al. found that the amount of liking towards the partner was predictive of the extent to which an individual would engage in the SEM processes, with greater liking associated with decreased comparison and increased reflection. These results are consistent with previous literature proposing that increases in commitment (which is central to long-term relationships) corresponds with an understanding that maintaining the needs of both partners is worthwhile to the relationship (Beach & Tesser, 1993). Thus, it seems that there is an inclination for spouses and dating partners to take action to maintain positive evaluations for the sake of the relationship and by providing benefits to both the individual and the romantic partner.

Indeed, it has been found that relationship development was associated with the tendency to engage in complementary responses among partners (Beach, Whitaker, Jones, & Tesser, 2001). In couples with long-term commitment, comparison feedback in which the self was outperformed resulted in the relinquishing of the domain to the partner; that is, self-relevance decreased. The authors conclude that this change in relevance cannot be solely explained as a self-defense against a decrease in self-evaluation; rather the change represents an active effort to maintain evaluations of behalf of both partners. It seems that this demonstration of empathy within relationships gives further support for the Performance Ecology Perspective in that individuals recognize their contribution to maintaining their partner's positive self-image.

All of the previously mentioned perspectives (SEM model, extended SEM model, and Performance Ecology Perspective) regarding self-evaluation maintenance have ties to a Self-Zoo perspective. The Self-Zoo can be defined as a "wide variety of systematic

conceptions of what affects the well-being of the self and how behavior can be understood as an attempt either to restore or to increase self-evaluation" (Tesser, Martin, & Cornell, 1996, p. 49). Tesser et al. argue that although there are numerous self-defense or self-validating mechanisms, any one of them could be able to serve the purpose of maintaining a positive self-evaluation—in other words, they could be substitutable.

Self-affirmation is a specific type of mechanism that serves to maintain self-evaluation by giving the opportunity to assert and confirm values and personal characteristics (Tesser & Cornell, 1991). Steele and Liu (1981; 1983) found that after poor performance on a domain of high personal importance, the opportunity to self-affirm resulted in a decrease of negative affect following this performance discrepancy. Similarly, as seen in a replication of Tesser & Smith's (1980) study, if individuals are provided the opportunity to self-affirm, then they will be less likely to engage in the SEM processes (Tesser & Cornell, 1991). Individuals participated in a guessing game along with a friend and a stranger and were able to help or hinder the performance of others. Both Tesser and Smith and Tesser and Cornell found that in high relevance situations, individuals were less likely to help their friend, and more likely to help a stranger by giving harder clues to their friend. However, if they were given the opportunity to engage in self-affirmation, their tendency to engage in comparison or reflection processes was reduced and they were more likely to be helpful to a friend. This evidence suggests that the mechanisms of comparison and reflection, as well as self-affirmation serve the same self-evaluation maintenance function.

In addition, additional groupings of possible mechanisms that are involved in the Self-Zoo to maintain or maximize self-evaluation have been examined (Tesser et al.,

1996; Tesser, Crepaz, Collins, Cornell, & Beach, 2000). The grouping of social comparison mechanisms includes the SEM model, and can be defined as making a comparison between the performance of the individual and another that will affect an individual's self-evaluation (Tesser et al., 2000). A second grouping is composed of performance consistency mechanisms, which takes into account the consistency or inconsistency between an individual's thoughts and actual performance (Tesser et al.). In this grouping, inconsistency in performance is thought to be associated with a decrease in self-evaluation. In contrast to the SEM model, inconsistency should result in changes in attitudes, rather than a change in relevance, closeness, or performance. A third grouping of mechanisms involves value expression—the significance of certain values expressed in an individual's self-definition. Self-affirmation is an example of a value expression mechanism. A series of studies by Tesser et al. confirmed that all three of these groupings are substitutable for one another because they all serve the same purpose of maintaining self-esteem. To clarify, if one mechanism does not successfully maintain an individual's self-evaluation, then a different mechanism may be employed.

This notion of the Self-Zoo has important implications for how the SEM processes of reflection and comparison are managed in romantic relationships. In order to fully maximize the self-esteem benefits of reflection and comparison, each individual within the couple must make modifications to the three parameters of closeness, relevance, and performance. Beach and Tesser (1993) found that spouses were able to maintain closeness and still reduce performance conflict through a modification of the overall relevance of a domain when one spouse outperformed the other. However, in the case where the domain is too important to give up, the Self-Zoo perspective suggests that

people will specialize so as to avoid major changes in each of the three SEM parameters—closeness will be maintained, overall domain relevance does not need to be changed, and performance does not need to be changed because each partner can succeed in his or her own right while also basking in the glory of his or her partner's success. Specifically, if each partner can claim superiority in performance subdomains, changes in the overall parameters may be unnecessary. Thus, consistent with the Self-Zoo perspective, subdomain superiority may provide enough self-validation to minimize or eliminate the need to reduce overall relevance or closeness.

Subdomain specialization also plays a role in allowing both partners to enjoy similarities between the two individuals, while at the same time allowing a unique self-definition. Tesser et al. (1998) found evidence for this connection between similarity and self-defensiveness by asking members of a couple to write an essay about how the partners were similar or how they were different. After the essay was written, individuals completed a computer task and were given performance feedback. Affect was measured by means of facial expressions coded by several experimenters. Subjects writing the similarity essay showed more distress when they learned they had outperformed their partner in comparison to those writing the uniqueness essay. Note that it seems those who wrote the similarity essays seem to have engaged in comparison processes. An additional result showed that those who wrote the uniqueness essay were less likely to be self-defensive about their own performance, thus, not engaging in comparison processes. These two pieces of evidence support the idea that the presence of unique self-definitions would decrease the likelihood of comparison processes. Thus, through subdomain specialization, task relevance and performance discrepancies are no longer overlapping

between the partners and possible self-evaluation decrements are avoided, along with the resulting distress, negative affect, and conflict. Accordingly, the idea of subdomain specialization allows unique self-definitions that would allow both partners to cope with discrepancies in overall performance in a less-defensive manner.

The idea of allowing both partners to maintain positive self-images through subdomain specialization to resolve conflict and display complementarity has had little investigation. As previously noted, overall domain relevance has been previously examined (Beach et al., 2001); however, the examination of the frequency of subdivisions in order to specialize is relatively new territory. Beach et al. looked at the average total score for performance dimensions to compare partners. They found that partners would cede certain areas to each other when they found they had been outperformed. Although empathy and complementarity is demonstrated, keep in mind that only an average score was used, and entire performance dimensions would be ceded. What would happen if both partners were allowed to be experts in the same performance dimension?

Theoretically, through subdomain specialization, both partners would be able to support their SEM needs as well as the SEM needs of their partner. For example, suppose the overall dimension was cooking, and this was highly self-relevant to both partners. If partner A consistently outperformed partner B, partner B would be likely to decrease the amount of self-relevance or leave the relationship. However, if both partners specialized, neither partner would need to change the task self-relevance. In this case, if specialization took place among several subdomains of cooking (e.g., baking desserts, grilling, and creating original recipes), it is hypothesized that both partners

would be able to be experts. This would allow both partners to maintain high relevance ("We are both great cooks") and a unique self-definition ("I am the expert at baking cookies, and my partner is the expert at grilling"). Following this hypothesis, both partners would be able to engage in reflection processes, and decrease negative comparison processes.

An initial examination of the frequency of specialization within performance domains indeed lends support to the specialization hypothesis (Morewitz & Pilkington, unpublished manuscript). Participants involved in romantic relationships rated expertise and level of self and partner relevance on 15 primary categories and their 120 subdomains. In accordance with the SEM model (Tesser, 1988) it was predicted that when an activity was rated as highly relevant to the self and the partner, more activities would be claimed by the self as the expert in order to avoid the threat of negative comparison to the participant's self-definition. Contrary to what was predicted, it was found that in this high self-relevance/high partner-relevance situation, the number of activities for both the primary category expertise and the subdomain expertise were approximately equally distributed to the self and the partner, with a tendency to give slightly more activities to the partner as the expert. This finding contrasted with Pilkington et al. (1991) who found that in this same situation, more activities were claimed by the self as the expert. These results could be early evidence of empathetic responses on behalf of the partner to equally cede performance expertise when the activity was important to both partners.

Examination of the remaining two conditions (high self-relevance/low partner-relevance and low self-relevance/high partner relevance) in the pattern of interaction

between performance and relevance for both the primary categories and subdomains did follow the exact pattern predicted in the SEM model (Tesser, 1988) and replicated the pattern found in Pilkington et al. (1991). As predicted, when a primary category or subdomain was highly relevant to the self, but not to the partner, the majority of the expertise was claimed by the self (Morewitz & Pilkington, unpublished manuscript). In contrast, when an activity was not very important to the self, but highly relevant to the partner, the majority of the expertise was ceded to the partner. The results from this interaction show that couples were maximizing the benefits from reflection in the superior performance by their partner, and benefiting by comparison processes in their superior performance next to their partner.

Of greatest interest to the current proposed study, a specialization matrix was constructed to examine the consistency between the designated initial expert from the primary category to the distribution of expertise along each of the eight subdomains within that primary category (Morewitz & Pilkington, unpublished manuscript). Analyses on this specialization matrix showed significant differences in the overall distribution of expertise, with a greater percentage of subdomains claimed by the self as the expert than to the partner. The significant main effect of performance supported the original hypotheses that when participants are forced to make comparisons along activities, they would usually claim more for the self in order to avoid negative comparison to their partners. However, the primary interest lay in the question of whether or not participants would continue to claim more areas to themselves when the activity was important to both partners and the opportunity existed for couples to specialize in the same activity.

This critical question was answered by the results of a significant performance by relevance interaction (Morewitz & Pilkington, unpublished manuscript). It was hypothesized that in situations where the primary category was high on self-relevance and high on partner-relevance, and given the opportunity to specialize within the primary category's subdomains, 50% of that category's subdomains would have been claimed by the self as the expert, and the other 50% would have been ceded to the partner. It is important to note that the predicted 50/50 distribution represented the actual prediction; the null hypothesis was that 100% of the subdomains would either be claimed by the self or ceded to the partner depending on overall performance. The results confirmed that in this high self and high partner relevance activity, there were no significant differences between the percentages of subdomains where the self was considered to be the expert as compared to the percentages where the partner was considered to be the expert. In fact, the mean percentages of 49% (as well as the standard deviation percentages of 17%) were *exactly the same* for the self versus partner as the expert. The distribution between the two performance levels could not have possibly been distributed with a greater equality. This result confirmed that couples did indeed specialize within the overall performance domain when it is important to both partners.

An examination of the other relevance conditions of this interaction provided insight into how the distribution changed when the activity was not equally important to both partners (Morewitz & Pilkington, unpublished manuscript). As predicted, when the primary category had high self-relevance but low partner-relevance, a tremendous proportion of subdomains were claimed by the self as the expert to minimize comparison processes. Conversely, when the primary category had low self-relevance but high

partner-relevance, a tremendous proportion of subdomains were ceded to the partner as the expert to maximize reflection processes.

Further analyses attempted to determine if the frequency of specialization had an impact on the quality of the relationship (Morewitz & Pilkington, unpublished manuscript). It was hypothesized that increased frequency of specialization would have lead to reduced interpersonal conflict between the couple, reduced feelings of ambivalence towards the relationship, increased positive feelings towards the partner, and greater relationship satisfaction. However, the sample contained very little variability, with very high ratings of positive feelings towards their partners and very few negative feelings. Thus, no clear distinctions were made. Additionally, a median split analysis on length of the relationship failed to show any significant differences in frequency of specialization.

Although research by Morewitz & Pilkington (unpublished manuscript) indicates that couples do specialize, a major limitation of the study was the sole utilization of questionnaires. Thus, the present study was designed to replicate these findings by examining the frequency of specialization in an experimental setting and to manipulate level of performance. After a general performance area rated as highly relevant to both romantic partners was selected, participants individually completed a task presented as an accurate assessment of performance in this area. Following completion of the task, participants received bogus feedback that they performed at a higher or lower percentile than either their romantic partner or a stranger.

After this feedback, the level of relevance for the overall performance domain and for its six subdomains was assessed to determine if there was a change in relevance

following the feedback. Recall that the typical response to threatening information is to reduce the overall relevance of the task. However, specialization should alleviate the threat. It was hypothesized that when the other is a romantic partner, the relevance of 50% of the subdomains should remain high and the relevance of the other 50% of the subdomains should decrease. Again, the 50/50 distributions in the present study represented the actual prediction; the null hypothesis was that 100% of the subdomains would be rated as high or low in self-relevance depending on overall performance. Given specialization in a 50/50 distribution, the relevance of the general performance area should still remain high. When the other is a stranger, the SEM model states that no threat to self-evaluation occurs, and thus, no changes in relevance should be found.

Finally, participants made predictions about relative performances on tasks assessing subdomain abilities within the general performance area. It was hypothesized that the participants would predict that their romantic partners would have a superior performance on 50% of the subdomains, and the participants themselves would have a superior performance on the other 50% of the subdomains. The null hypothesis for this prediction was that the participant would predict a superior performance by the self or the romantic partner (depending on performance) on 100% of the subdomains. In contrast, it was hypothesized that participants would predict that their own performance would be superior on all of the subdomains in comparison to a stranger, regardless of performance. Additionally, it was hypothesized that increased frequency of specialization would be associated with less conflict between partners, less feelings of ambivalence about the relationship, and greater satisfaction with the relationship.

METHOD

Participants

A total of 128 participants (65 males, 63 females) completed the study. Participants were students enrolled in Introduction to Psychology courses and their romantic partners, who may or may not have been students of the college. All participants were at least 18 years of age and reported current involvement in a romantic relationship for a duration of at least six weeks at the time of the experimental session. Participants from the research participant pool received course credit for their participation, and their romantic partners received no compensation. All participants were treated in accordance with the ethical guidelines established by the American Psychological Association.

Materials

The experimenter created the names and the formal definitions for each of the four general performance areas and their subdomains, as well as all tasks and questionnaires unless otherwise noted. Cognitive-Perceptual Integration was defined as "the ability to visualize and manipulate shapes and objects in your head. People good at CPI tend to have excellent technical abilities and design skills; tend to be successful at engineering and other design occupations". Social Sensitivity was defined as "the ability to accurately assess social situations and human behavior. People good at SS tend to be

people-oriented, well liked, and very adaptable to function effectively in a wide variety of situations; considered to be good, valuable friends". Logical-Analytical Reasoning was defined as "the ability to use logic to solve problems, create symbolic meanings; break down and critically evaluate components of a subject and their interrelations. People good at LAR tend to be excellent critical thinkers and problem solvers; tend to be successful lawyers and highly effective business managers". Creativity was defined as "the ability to create original, imaginative, and expressive works. Highly creative people tend to be open-minded, full of ideas, and innovative; tend to be successful in a variety of jobs and admired for their resourcefulness and high productivity". Each of the four general performance areas consisted of six subdomains (for definitions see Appendices J-M). The tasks used to assess each of the four general performance areas were specifically arranged in order to give the participant the impression that there were several facets, or subdomains, of the general performance area.

A Pre-Session Relevance Questionnaire (see Appendix A) was completed during a departmental mass testing session. This questionnaire was used to select a general performance area that was highly relevant to both the participants' self-definition as well as to his or her romantic partner's self-definition. Participants who confirmed a current involvement in a romantic relationship for a duration of at least six weeks indicated the level of relevance of the four general performance areas for themselves and their romantic partner on a 5-point scale (where 1 = *low relevance* and 5 = *high relevance*). Relevance was defined as "how important it is to an individual's identity (self-definition) to be knowledgeable and skilled at activities related to an area". Because of technical difficulties with the computerized testing procedure, the Pre-Session Relevance

Questionnaire was utilized to select responses for only approximately 12 participants. Thus, the data from the mass testing session were removed from further consideration. For all participants, levels of relevance were assessed solely through a questionnaire given during the experimental session.

A Pre-Task Questionnaire (see Appendix B) assessed demographic information (gender, age, and the length of the relationship), as well as participants' familiarity with members of the other couple. Participants also indicated on the Pre-Task Questionnaire the level of relevance of the four general performance areas to themselves and to their romantic partner on 6-point scales (where 1 = *low relevance* and 6 = *high relevance*). This questionnaire was used to select a general performance area that was considered to be highly relevant to both romantic partners.

The Cognitive-Perceptual Integration task (see Appendix C) was an arrangement created by the experimenter containing problems from three different assessments. Eight problems from The Judgment of Interpolated Lines (Educational Testing Service, year unknown) required the participant to judge distances on a line segment. An additional 21 problems from the Concealed Figures Test (Form A) (Thurstone & Jefferey, 1951) required the participant to decide whether or not a designated figure appeared embedded within several drawings. An additional 25 questions from the Lowry-Lucier Reasoning assessment (Lowry & Lucier, 1956) required the participant to solve a series of problems asking about the arrangement and removal of matchsticks from a drawing.

The Social Sensitivity task (see Appendix D) contained five photographs selected from a psychology textbook (Carson, Butcher, & Mineka, 1998). Photographs were selected on the basis of containing one or more people in a relatively ambiguous situation

(e.g., three adults having a discussion in an office setting with a child standing nearby). A series of questions followed each photograph that required the participant to describe what was happening in the photograph, the emotional state of one or more of the characters, and the relationship among the characters. Participants were asked to indicate what aspects of the photograph influenced their evaluation. In addition, participants completed a rating scale measuring the degree of the "Big Five" personality traits (openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism) for a specific character on a 4-point scale (where 1 = *low* and 4 = *high*). The definitions provided for the five traits were those given by McAdams (2000).

The Logical-Analytical Reasoning task (see Appendix E) contained an arrangement of items selected by the experimenter from the analytical section of a GRE textbook (Robinson & Katzman, 1997). Eighteen questions required the participant to solve a variety of problems by assigning elements to places using rules and conditional statements, answer questions about connections between the elements, and identify premises, conclusions, and inferences from an argument. Participants indicated their answers by circling one of five choices for each problem.

The Creativity task (see Appendix F) was a modification of the Thinking Creatively with Words task (Torrance, 1966). This assessment consisted of three separate sections. The product improvement section required the participant to list interesting and unusual ways to change an elephant toy in order to make it a more fun play toy. The unusual uses section required the participant to list interesting and unusual uses for cardboard boxes. The ask-and-guess section required participants to write the following: (a) five unique questions about what is happening in a picture, (b) five unique

possible causes for the picture, and (c) five unique outcomes or consequences as a result of what is taking place in the picture.

The Relationship Questionnaire (see Appendix G) was designed specifically for the current study. It assessed feelings for the romantic partner, relationship satisfaction, degree of closeness, and degree of seriousness of the relationship. This questionnaire consisted of five questions on 5-point scales with varying anchor definitions; on all five items, a response of "1" indicated low positive feelings and "5" indicated high positive feelings.

The Braiker and Kelley (1979) scale (see Appendix H) assessed relationship conflict and ambivalence. This questionnaire consisted of 10 total questions, with five assessing levels of interpersonal conflict between the couple and five assessing feelings of ambivalence towards the relationship. Participants responded to each item on a 7-point scale (where 1 = *strongly disagree* and 7 = *strongly agree*).

A Feedback Sheet (see Appendix I) was given to each participant to review his or her performance on the general performance area task. The condition-appropriate names and percentiles were written in by hand in order to give the appearance of a quick scoring during the brief time delay.

Participants completed one of two versions within each general performance area of the Predicted Future Performance Questionnaire depending on the comparison condition (romantic partner or stranger). Participants assigned to the romantic partner comparison condition completed the task-appropriate version of either the Predicted Future Performance Questionnaire – CPI (see Appendix J), the Predicted Future Performance Questionnaire – SS (see Appendix K), the Predicted Future Performance

Questionnaire – LAR (see Appendix L), or the Predicted Future Performance Questionnaire – C (see Appendix M). Participants assigned to the stranger comparison condition completed the task-appropriate version of either the Predicted Future Performance Questionnaire – CPI (see Appendix N), the Predicted Future Performance Questionnaire – SS (see Appendix O), the Predicted Future Performance Questionnaire – LAR (see Appendix P), or the Predicted Future Performance Questionnaire – C (see Appendix Q).

These questionnaires assessed the predicted future performance on a task that assessed each individual subdomain (for definitions see Appendices J-M) within the task-appropriate general area. Each participant was asked to make a comparison between themselves and the assigned "other" (romantic partner or stranger) and rate who they would predict to be the superior performer on 6-point scales (where 1 = *self as the superior performer* and 6 = *romantic partner/other as the superior performer*) for each of the six subdomains of the general performance area.

Participants completed one of four versions of a relevance questionnaire according to the type of task completed. The Relevance of Performance Area Questionnaire – CPI (see Appendix R), Relevance of Performance Area Questionnaire – SS (see Appendix S), Relevance of Performance Area Questionnaire – LAR (see Appendix T), and Relevance of Performance Area Questionnaire – C (see Appendix U) assessed the level of self-relevance for the general performance area and its six subdomains on 6-point scales (where 1 = *low relevance* and 6 = *high relevance*).

Finally, participants completed a manipulation check (see Appendix V) under the auspices as a brief summary of the experiment. The check asked participants to indicate

the following: (a) the name of the general performance task they completed, (b) the name of the other person who completed the task, (c) if the task was particularly important to the other person by circling "yes" or "no", and (d) who had a better performance on the task by circling "yourself" or "other person".

Procedure

Participants registered for an experimental session and were required to bring their romantic partners with them in order to receive credit. A total of 32 group sessions were conducted with 4 participants (2 couples) in each session. To begin the session, participants completed an informed consent form (see Appendix W) that notified them that the study was examining the dynamics of romantic relationships. Participants were told that they would be asked to fill out a few brief questionnaires assessing the relevance of and performance on one of four performance domains in addition to completing a few tasks within the performance domain.

After collecting the consent forms, the experimenter requested introductions in order for everyone in the group session to know each other. Participants introduced themselves and their romantic partner by first names and stated if they were acquainted with either member of the other couple.

Following introductions, the experimenter described the purpose of the experiment:

> Let me go ahead and tell you all the purpose of the experiment. We are interested in seeing if a person can predict someone else's behavior better if they know the other person well or if they just met. Some research, for

> example, has shown that sometimes friends can predict one another's answers to items measuring certain skills or attitudes better than strangers can. But other research has found that in some cases, there is no difference between a person's predictions about a friend and a stranger. We think that we can resolve this discrepancy by comparing predictions people make about their romantic partner to predictions people make about a stranger.

A version of this statement has been used in previous deception research by Tesser, Pilkington, and McIntosh (1989) in order to give a false impression of the purpose of the experiment.

As the first portion of the experiment, participants completed the Pre-Task Questionnaire. Following its completion, the experimenter stated that each participant would be completing the task individually in separate rooms. Each participant was shown to a separate room and was told that the experimenter would return in a moment.

While the participants waited, the experimenter examined the Pre-Task Questionnaires to identify a general performance area that was considered to be highly relevant to both the participant and their romantic partner (indicated by a "5" or "6" rating for both). A performance area was selected following these ratings *according to each individual participant*. In other words, it was possible for each romantic partner to be completing a different performance area task even though the bogus feedback indicated that both completed the same task. This should not be of methodological concern, however, because the present objective is to determine how individuals – not

couples as a unit – respond to feedback when they are compared to their romantic partners when they believe the task is highly relevant to each of them. For each participant, if more than one area was rated as highly relevant to both partners, a performance area was randomly selected. If no areas were rated as highly relevant to both partners, then an area was randomly selected but the participant's data was excluded from further analyses.

After participants were assigned to complete one of the four general performance area tasks, the experimenter entered each room and gave specific task instructions:

> This is a task assessing [cognitive-perceptual abilities/social sensitivity/logical-analytical reasoning skills/creativity]. The task was originally developed using a strategy called criterion-keying, which focuses on the collective responses of individuals who have already demonstrated excellent skills in this area. Thus, the actual content of some questions may not seem applicable to [name of general performance area]. However, despite any questionable content of what the task actually measures, research has shown that this task is able to successfully discriminate between those people with excellent [name of general performance area] skills and people with poor [name of general performance area] skills.
>
> You will have 15 minutes to complete as much of the task as possible. Please keep in mind that the test has been

designed to avoid ceiling effects, so do not get too upset if you have difficulty finishing the task. Any questions? Great, go ahead and begin.

The purpose of stating that the task was designed using a key-criterion strategy was to ensure that the participant believed the task was truly an accurate assessment of the stated abilities despite any questionable content. Additionally, the statement that the task was designed to be lengthy in order to avoid ceiling effects was included in order to make the bogus feedback appear valid. In other words, it was anticipated that those who did not finish the task and received high scores would think that they must have done well in order to still score so high, whereas those who did not finish the task and received low scores would think that their abilities were so poor that they were unable to do well. Following the instructions, participants were given 15 minutes to complete the task.

During task completion, the experimenter randomly assigned participants to a closeness condition (romantic partner as "close other" or stranger as "distant other"). The stranger was the opposite-sex partner from the other participating couple. Participants were also randomly assigned to a performance condition ("higher percentile than other" or "lower percentile than other").

After completion of the general performance area task, the experimenter collected the task and told participants individually that the research team was going to assess their score on the task. During the scoring delay, participants were asked to complete the Relationship Questionnaire and the Braiker and Kelley (1979) scale.

After a 7-minute delay to seemingly determine the "score" of the task, the experimenter went back into each individual room and made another false statement in

order to tell the participant that the task area was rated as very important to the comparison other:

> Now there is one thing that I did not tell you earlier about this experiment. Research also suggests that the ability to predict a person's performance depends on how important the task is to that person.
>
> You have been randomly assigned to predict [your romantic partner's performance/the performance of (opposite-sex stranger's name), the person you just met].
>
> In addition, you have also been randomly assigned to the condition in which the task is particularly important to [your romantic partner/stranger's name].

After these statements, the experimenter gave a feedback sheet to the participant to review his or her performance. The names and percentiles were written in by hand in order to give the appearance of a quick scoring during the brief time delay. The same order of names was listed on each feedback sheet, with the participant's name listed first, followed by their romantic partner's name, the same-sex stranger's name, and the opposite-sex stranger's name. Only two percentiles were indicated on each sheet. For the "higher percentile than other" condition, "80th" percentile was written in as the participant's percentile and "60th" percentile was written in as the other's percentile. The percentiles were reversed in the "lower percentile than other" condition. These percentiles were specifically selected for three reasons: (a) a slightly above average performance was preferred over a very poor performance for the "lower percentile

condition" so as not to induce a complete sense of failure, with the same preference for an excellent performance over a first-rate performance in the "higher percentile condition"; (b) it was thought that more moderate scores would lead to higher credibility; and (c) previous research (e.g., Pleban & Tesser, 1981) has used these percentiles.

The experimenter gave further explanation of the performance feedback by gesturing to the scores and stating the following for participants assigned to the "higher percentile than other" condition:

> Keeping this in mind, we have the results of your general task performance. I have a copy of the scoring sheet for you to look over. As you can see only two of you did this particular task measuring [name of general performance area]. [Romantic partner's/stranger's name] scored in the 60th percentile. Evidently you did better than them and scored in the 80th percentile on this general measure.

The experimenter read the following statement for participants assigned to the "lower percentile than other" condition:

> Keeping this in mind, we have the results of your general task performance. I have a copy of the scoring sheet for you to look over. As you can see only two of you did this particular task measuring [name of general performance area]. You scored in the 60th percentile. Evidently [romantic partner's name/stranger's name] did better than

> you and scored in the 80th percentile on this general measure.

Following the bogus feedback, participants were given the Predicted Performance Questionnaire that was appropriate to their assigned performance area and closeness condition (i.e., the romantic partner or stranger version of either the Predicted Future Performance Questionnaire – CPI, Predicted Future Performance Questionnaire – SS, Predicted Future Performance Questionnaire – LAR, or the Predicted Future Performance Questionnaire – C). The experimenter gave instructions on how to complete the questionnaire:

> Now it is time to make your predictions. The general performance area of [name of general performance area] can be broken down into six facets, or subdomains, that are listed on the sheet. Specifically, we are asking you to make predictions about how well you will perform in comparison to [your romantic partner/stranger's name] on the upcoming tasks that assess each individual subdomain. In other words, who would be the superior performer for each subdomain of [name of general performance area]?

After a 2-minute delay (or until the participant finished), the experimenter re-entered the room and collected the Predicted Future Performance Questionnaire and asked the participant to complete an additional questionnaire while the experimenter finished setting up for the subdomain tasks. Participants completed a condition-appropriate version of the relevance questionnaire (Relevance of Performance Area

Questionnaire – CPI, Relevance of Performance Area Questionnaire – SS, Relevance of Performance Area Questionnaire – LAR, or Relevance of Performance Area Questionnaire – C).

After an additional 2-minute delay (or until the participant finished), the experimenter re-entered the room and collected the relevance questionnaire. Participants were then told that they had actually finished the experiment, and that there were no subdomain tasks that they needed to complete. The experimenter then asked participants to complete a brief summary of the experiment, which served as the manipulation check.

Following the manipulation check, all the participants were brought back into the main room together and the experimenter distributed copies of the debriefing form (see Appendix X) that fully explained the nature of the deception involved in the study. While the experimenter recited the form verbatim, participants were able to follow along with the provided copy. During the debriefing process, participants were asked to confirm that their responses could be used for research purposes and were asked if they had any suspicions as to the true nature of experiment. The experimenter recorded any expressed suspicions about the bogus feedback. After answering any questions, participants were thanked for their participation.

RESULTS

Data Management

Data from 60 participants were removed from all statistical analyses resulting in a final sample size of $N = 68$ (33 males, 35 females). A total of 20 participants were excluded from analyses because they did not rate any of the four performance areas as highly relevant (either a "5" or "6") to both themselves and their romantic partner on the Pre-Task Questionnaire. An additional 25 participants were excluded due to one or more incorrect responses on the manipulation check sheet. An additional six participants were excluded from analyses because they reported suspicions about the bogus feedback. Six additional participants were excluded because they were randomly assigned to be compared to a stranger, with whom they reported a previous acquaintance or friendship. Lastly, an additional three participants were excluded because of the participation of one homosexual couple in the group session; those two partners and the member of the heterosexual couple in that session who was compared to one member of the homosexual couple were excluded. Theoretically, it is not anticipated that homosexual couples would react to comparison feedback any differently than a heterosexual couple; however, to be consistent in all conditions these three participants were excluded from analyses. Thus, the data set used for all statistical analyses consisted of heterosexual participants who rated the task as highly relevant to both romantic partners, confirmed an effective

experimental manipulation, reported no suspicions about the performance feedback, and reported no familiarity with the comparison stranger (if applicable to the performance condition).

It was of interest to determine whether the reduction in sample size specifically due to expressed suspicions or an ineffective manipulation would be strongly associated with one of the four conditions varying by closeness and performance. A total of 45% and 56% of the participants were removed from the higher performance than the romantic partner or stranger conditions, respectively. From the lower performance than the romantic partner or stranger conditions, a total of 26% and 28% of the participants were removed, respectively. The differences in percentages due to performance level could potentially be problematic and will be further examined in the discussion.

Consistency Across Conditions

Within this subset, random assignment was approximately equal in each of the four cell conditions varying by closeness and performance: higher performance than the romantic partner ($n = 16$), higher performance than the stranger ($n = 12$), lower performance than the romantic partner ($n = 22$) and lower performance than the stranger ($n = 18$). A Pearson Chi-Square analysis showed that there were no significant differences in the number of participants randomly assigned to each cell, χ^2 $(1, N = 68) = 0.031, p > .05$. In addition, a 2 (closeness) x 2 (performance) x 2 (pre-task relevance for self and romantic partner) mixed ANOVA yielded no significant differences in the mean levels of relevance for the selected general performance area across random assignment to each of the four conditions.

Within-couple Pearson product-moment correlations were calculated to determine the level of agreement in pre-task relevance. There was a significant correlation for pre-task relevance for the self and the romantic partner according to the ratings by the female member of the couple, r (33) = .69, $p < .01$. In addition, there was a significant correlation for pre-task relevance for the self and the romantic partner according to the ratings by the male member of the couple, r (31) = .48, $p < .05$. Thus, pre-task relevance can be assumed to be equivalent between the individual and his or her romantic partner according to each individual's perceptions. In other words, because the relevance of the general performance area task was selected to be high to both partners, the significant positive correlations confirm that the pre-task relevance was equivalent according to each individual's viewpoint.

A series of 2 (closeness) x 2 (performance) x 4 (task type) between-subjects ANOVAs were conducted for each of the three main dependent variables (the post-feedback relevance of the general performance area, the percentage of subdomains rated as highly self-relevant, and the percentage of subdomains with a predicted superior performance by the self). Task type provided no significant main effects or interactions. There was a single exception, with a significant performance by task interaction for the predicted future performance on the subdomains, F (3,53) = 2.95, $p < .04$. However, the subsample size for the cognitive-perceptual integration task was extraordinarily low for the analyses (n ranging from 2 to 4). Because of the general lack of meaningful differences between tasks, data were collapsed across task types for all further analyses.

A series of 2 (closeness) x 2 (performance) x 2 (gender) between-subjects ANOVAs were conducted for the same three main dependent variables. Gender provided

no significant main or interactive effects at or below the $p = .05$ level. Therefore, gender was excluded from the statistical analyses and the reported results are from a series of 2 (closeness) x 2 (performance) between-subjects ANOVAs.

Post-Feedback Relevance of the General Performance Area

A 2 (closeness) x 2 (performance) between-subjects ANOVA was conducted on the level of post-feedback relevance of the general performance area following performance feedback (see Table 1). There was no significant main effect of closeness, $F < 1$, nor was there a significant interaction between closeness and performance, $F(1,60) = 2.52$, *n.s.* However, there was a significant main effect of performance, $F(1,60) = 4.07$, $p < .05$. The relevance of the general performance area was rated as significantly higher when the participant received feedback that he or she had outperformed the other ($M = 5.02$, $SE = 0.14$) than when they received feedback that they were outperformed by the other ($M = 4.67$, $SE = 0.11$). The effect of performance explained 6.4% of the variance ($\eta^2 = .064$).

Percentage of Subdomains Rated as Highly Relevant

A 2 (closeness) x 2 (performance) between-subjects ANOVA was conducted on the percentage of subdomains of the general performance area that were rated as highly relevant (either a "4","5" or "6" rating) following performance feedback (see Table 2). There was no significant main effect of closeness, $F < 1$, nor did closeness significantly interact with performance, $F < 1$. However, there was a significant main effect of performance, $F(1,63) = 3.96$, $p \leq .05$. The percentage of subdomains rated as highly self-relevant was significantly greater when the participant received feedback that he or she had outperformed the other ($M = 0.89$, $SE = 0.03$) than when he or she received

feedback that they were outperformed by the other ($M = 0.81$, $SE = 0.03$). The main effect of performance explained 6.0% of the variance ($\eta^2 = .060$).

Predicted Future Performance on Subdomain Tasks

A 2 (closeness) x 2 (performance) between-subjects ANOVA was conducted on the percentage of subdomains where the self was predicted to have a superior performance (either a "1", "2", or "3" rating) following performance feedback on the general area (see Table 3). There was no significant main effect of closeness, $F < 1$, nor a significant interaction between closeness and performance, $F < 1$. However, there was a significant main effect of performance, $F(1,64) = 22.91$, $p < .001$. The percentage of subdomains where the self was predicted to have a superior performance was significantly higher when the participant received feedback that he or she had outperformed the other on the general performance area ($M = 0.75$, $SE = 0.04$) than when he or she received feedback that they were outperformed by the other on the general performance area ($M = 0.48$, $SE = 0.04$). The effect of performance explained 26.4% of the variance ($\eta^2 = .264$).

Romantic Relationship Factors and Specialization

A total of 38 individuals were given performance feedback relative to their romantic partner. The following analyses focused exclusively on this subsample to determine if qualities of the relationship were related to specialization. The four relationship qualities examined were length of the relationship, relationship positive feelings, feelings of ambivalence about the relationship, and levels of conflict within the relationship. Specifically, it was of interest to determine if these variables interacted with performance to predict specialization.

Length of Relationship. The length of relationships for participants in the romantic partner closeness condition ranged from 6 weeks to 272 weeks ($M = 67.29$, $SD = 75.33$). A median split ($Mdn = 36.50$ weeks) was done resulting in two groups differing by length of the relationship. Short-term relationships ($n = 19$) ranged from 6 to 35 weeks ($M = 16.79$, $SD = 9.81$), and long-term relationships ($n = 19$) ranged from 38 to 272 weeks ($M = 117.79$, $SD = 78.65$).

A 2 (performance) x 2 (length of relationship) between-subjects ANOVA was conducted on the relevance of the general performance area for participants in the romantic partner comparison condition. There was no significant main effect for the length of the relationship, $F(1,31) = 1.90$, *n.s.*, nor an interaction between performance and length, $F < 1$.

A 2 (performance) x 2 (length of relationship) between-subjects ANOVA was conducted on the percentage of subdomains that were rated as highly self-relevant following performance feedback for participants who were compared to their romantic partner. There was no significant main effect for the length of the relationship, $F(1,33) = 3.08$, *n.s.* However, there was a significant interaction of performance and length, $F(1,33) = 6.30$, $p < .03$, which accounted for 16% of the variance ($\eta^2 = .160$). Figure 1 illustrates this interaction for the mean percentage of subdomains that were rated as highly self-relevant in comparisons to the romantic partner.

Post-hoc analyses were conducted to determine the nature of the interaction (see Table 4). When participants were outperformed by their romantic partner, participants in short-term relationships rated a significantly greater percentage of subdomains as highly self-relevant ($M = 0.94$, $SE = 0.05$) than participants in long-term relationships ($M = 0.72$,

SE = 0.04), $F(1,19) = 9.81$, $p < .01$. In contrast, when participants outperformed their romantic partner there were no significant differences in the percentages as a function of length of the relationship.

Finally, a 2 (performance) x 2 (length of relationship) between-subjects ANOVA was conducted on the predicted percentage of subdomains in which the self would have a superior performance relative to their romantic partner. There was a significant main effect for length of the relationship, $F(1,34) = 4.26$, $p < .05$, that accounted for 11% of the variance ($\eta^2 = .111$). Participants involved in long-term relationships predicted personal superior performance over the romantic partner on a greater percentage of the subdomains (*M* = 0.70, *SE* = 0.04) than did participants involved in short-term relationships (*M* = 0.58, *SE* = 0.04). There was no significant interaction between performance and length of the relationship, $F(1,34) = 3.86$, *n.s.*

Relationship Positive Feelings. In addition to relationship length, positive feelings towards the romantic partner and the relationship were assessed. A factor analysis of the four positive feelings assessed (feelings of like, love, overall relationship satisfaction, and seriousness of the relationship) produced one factor that accounted for 54.03% of the variance (Eigenvalue = 2.16). Table 5 shows the individual factor loadings for the single relationship positive feelings factor. The four positive feelings also displayed an acceptable degree of internal consistency (Cronbach's alpha = .69). As a result, these four ratings were averaged to form an index of overall positive feelings.

Mean overall relationship positive feelings for participants in the romantic partner closeness condition ranged from 3.75 to 5.00 (*M* = 4.57, *SD* = 0.42) on a 5-point scale, (where 1 = *low positive feelings* and 5 = *high positive feelings*). A median split (*Mdn* =

4.50) was done resulting in two groups differing by low and high levels of positive feelings. Participants with low positive feelings (n = 13) reported a mean range from 3.75 to 4.49 (M = 4.08, SD = 0.21), and participants with high positive feelings (n = 18) reported a mean range from 4.51 to 5.00 (M = 4.94, SD = 0.11).

A 2 (performance) x 2 (positive feelings) between-subjects ANOVA was conducted on the relevance of the general performance area for participants in the romantic partner comparison condition. There was no significant main effect for amount of positive feelings, $F < 1$, nor for an interaction between performance and positive feelings, $F < 1$. A 2 (performance) x 2 (positive feelings) between-subjects ANOVA was also conducted on the percentage of subdomains that were rated as highly self-relevant. There was no significant main effect of positive feelings, $F < 1$, nor a significant interaction of performance and positive feelings, $F < 1$. Finally, a 2 (performance) x 2 (positive feelings) between-subjects ANOVA was conducted on the percentage of subdomains in which the self was predicted to have a superior performance. There was no significant main effect of positive feelings, $F < 1$, nor a significant interaction between performance and positive feelings, $F < 1$.

Ambivalence. Mean feelings of ambivalence about the relationship for participants in the romantic partner closeness condition ranged from 1.00 to 4.00 (M = 2.08, SD = 0.71) on a 7-point scale (where 1 = *low levels of ambivalence* and 7 = *high levels of ambivalence*). A median split (Mdn = 2.00) was done resulting in two groups differing by low and high feelings of ambivalence about the relationship. Low mean feelings of ambivalence (n = 15) ranged from 1.00 to 1.99 (M = 1.41, SD = 0.27), and

high mean feelings of ambivalence (n = 17) ranged from 2.01 to 4.00 (M = 2.69, SD = 0.53).

A 2 (performance) x 2 (ambivalence) between-subjects ANOVA was conducted on the relevance of the general performance area for participants in the romantic partner comparison condition. There was no significant main effect of level of ambivalence, $F < 1$, nor a significant interaction of performance and ambivalence, $F < 1$. A 2 (performance) x 2 (ambivalence) between-subjects ANOVA was also conducted on the percentage of subdomains that were rated as highly self-relevant. There was no significant main effect of level of ambivalence, $F < 1$, nor a significant interaction of performance and ambivalence, F (1,27) = 1.25, *n.s.* Finally, a 2 (performance) x 2 (ambivalence) between-subjects ANOVA was conducted on the percentage of subdomains where the self was predicted to be the superior performer. There was no significant main effect of level of ambivalence, $F < 1$, nor a significant interaction of performance and ambivalence, $F < 1$.

Conflict. Mean levels of conflict within the relationship for participants in the romantic partner closeness condition ranged from 1.40 to 6.80 (M = 3.05, SD = 0.97) on a 7-point scale (where 1 = *low levels of conflict* and 7 = *high levels of conflict*). A median split (Mdn = 3.00) was done resulting in two groups differing by low and high levels of conflict. Low mean conflict levels (n = 16) ranged from 1.40 to 2.79 (M = 2.31, SD = 0.44), and high mean conflict levels (n = 14) ranged from 3.01 to 6.08 (M = 3.91, SD = 1.00).

A 2 (performance) x 2 (conflict) between-subjects ANOVA was conducted on the relevance of the general performance area for participants in the romantic partner

comparison condition. There was no significant main effect of levels of conflict, $F < 1$, nor a significant interaction between performance and conflict, $F < 1$.

A 2 (performance) x 2 (conflict) between-subjects ANOVA was conducted on the percentage of subdomains that were rated as highly self-relevant. There was no significant main effect of levels of conflict, $F < 1$, nor a significant interaction of performance and conflict, $F < 1$.

A 2 (performance) x 2 (conflict) between-subjects ANOVA was conducted on the percentage of subdomains in which the self was predicted to have a superior performance. There was no significant main effect of levels of conflict, $F(1,26) = 3.54$, *n.s.* However, there was a significant interaction between performance and conflict, $F(1,26) = 4.60$, $p < .05$, (see Table 6). The interaction predicted 15% of the variance ($\eta^2 = .150$). Post-hoc analyses were conducted to determine the nature of the interaction. In terms of differences in performance, participants who outperformed their romantic partner and reported high levels of conflict predicted a personal superior performance on a significantly greater percentage of the subdomains ($M = 0.88$, $SE = 0.08$) than participants who reported low levels of conflict ($M = 0.62$, $SE = 0.06$), $F(1,9) = 8.75$, $p < .03$. In contrast, there were no significant differences in the subdomain percentages when the participant was outperformed by their romantic partner regardless of levels of conflict.

This interaction can also be viewed in terms of the differences as a function of levels of conflict. When outperforming the romantic partner, participants who reported high levels of conflict predicted a significantly greater percentage of subdomains in which the self would have a superior performance ($M = 0.88$, $SE = 0.08$), than

participants who were outperformed by the romantic partner ($M = 0.48$, $SE = 0.05$), $F(1,12) = 12.10$, $p < .01$. In contrast, participants with low levels of conflict reported no significant differences between the performance conditions. Figure 2 further illustrates that this effect was stronger for participants with high levels of conflict as evidenced by the steeper slope.

DISCUSSION

As a whole, the results of the study do not indicate that couples are specializing in the hypothesized manner. Rather than specializing within an area in order to take into account the SEM needs of the romantic partner, individuals appeared to engage in rather selfish tendencies by specializing only in response to a personal threat to self-evaluation. The present study does support the original Self-Evaluation Maintenance (SEM) model (Tesser, 1988) in that the participant made modifications in performance or relevance in order to maintain a positive self-evaluation. However, contrary to the SEM model, the responses to performance feedback were consistent across the closeness condition – in other words, the self-evaluation maintenance mechanisms hypothesized to occur exclusively in comparisons to the romantic partner, appeared to occur in comparisons to the stranger as well.

Furthermore, these results are contrary to the extended SEM model (Beach & Tesser, 1995) as well as the Performance Ecology Perspective (Beach et al., 1996; Beach & Tesser, 2000; O'Mahen et al., 2000) because participants appeared to fail to take the SEM needs of their romantic partner into account. Despite this self-oriented focus on self-evaluation maintenance, specialization does appear to be a useful mechanism for the individual to maintain a positive self-evaluation when competing in highly relevant areas.

The first study objective was to determine if the relevance for the general performance area and its subdomains would decrease or remain at a high level following performance feedback. All participants originally rated the general performance area as highly self-relevant; it was specifically of interest to determine the change in relevance as a function of performance feedback from the task assessing the general performance area as well as a function of the performance comparison to the romantic partner or the stranger. The SEM model (Tesser, 1988) predicts that the usual response to the threatening information of negative performance feedback is to decrease the relevance of the area. However, it was hypothesized that if specialization takes place, it will alleviate that threat and relevance of the general performance area would be able to remain stable at a high level.

In addition, it was hypothesized that when participants were compared to their romantic partners, the relevance of 50% of the subdomains should remain high and the relevance of the other 50% of the subdomains should decrease. In the interest of supporting the SEM needs of the individual, this was hypothesized to occur in response to negative performance feedback. In the interest of supporting the SEM needs of the romantic partner, this was also hypothesized to occur even when the individual received positive performance feedback because the area was still considered to be highly relevant to the romantic partner as well. In contrast, when the participant was compared to the stranger, the SEM model states that little to no threat to self-evaluation would occur; thus, it was hypothesized that both relevance of the general performance area and the relevance of all of the subdomains would remain high regardless of performance feedback.

The results of the present study indicate that the relevance of the general performance area was in fact greater when the participant received positive feedback in contrast to negative feedback. However, contrary to the hypotheses, there were no differences in general relevance as a function of closeness. This would imply that participants were experiencing an equal amount of threat to their self-evaluation when they received negative feedback regardless of how close they were to the competitor. There are several possible explanations for this finding. First of all, because of the highly relevant nature of the area to the individual's self-definition, perhaps any negative feedback will trigger a competitive response and a threat to self-evaluation regardless of the comparison target. Second, there is the possibility that participants saw themselves as similar to the stranger. The false consensus effect (Ross, Greene, & House, 1977) states that even when among strangers, participants are likely to overestimate similarity in attitudes. It seems logical that, if for no other reason, participants could view the fact that both of them completed the same task, along with the fact that the participant was told that the task was very important to the stranger, as evidence that they were indeed similar. Because perceived similarity can occur due to similarities in personality, (e.g., Blankenship et al., 1984) it is likely that it will result in greater closeness (Tesser, 1988) which could result in a similar competitive response to the stranger and to the romantic partner. Unfortunately, perceived similarity to the stranger was not measured in the current study. In the future, researchers should be sure to assess closeness and perceived similarity in both comparison conditions to the romantic partner and the stranger.

Similar to the relevance of the general performance area, the percentage of subdomains that were rated as highly self-relevant did not significantly differ as a

function of closeness; 83% of the subdomains were rated as highly self-relevant when the other was the romantic partner, and 87% when the other was the stranger. Thus, participants appeared to rate the vast majority of subdomains as highly self-relevant. Although it was predicted that the percentage would be high when compared to the stranger, the equivalent high percentage in comparison to the romantic partner implies that the individual was focused exclusively on self-relevance. Further disconfirming the hypotheses, there was no significant interaction between closeness and performance. These findings could indicate that the wording of the questionnaire, which assessed only self-relevance, may fail to fully examine attempts to maintain the SEM needs of the romantic partner. Future researchers should further explore this distribution by assessing relevance of the subdomains to both the self and the romantic partner. If similar high percentages were still found utilizing this revised version of the questionnaire, then it would confirm that individuals might be failing to meet the SEM needs of the romantic partner. Alternatively, if the romantic partner was more salient, then the partner's SEM needs may be more of a concern, and specialization would occur. Despite the presence of the romantic partner during the experimental session, the "self" was alone in a small room, which could increase self-awareness and self-concern. An idea for future researchers would be to make the romantic partner more salient by completing the questionnaires in the same room or attaching a photograph of the romantic partner to the questionnaires.

The analyses did, however, produce a significant main effect of performance. A greater percentage of subdomains were rated as highly relevant when the individual outperformed the other, regardless of closeness, in contrast to being outperformed. Thus,

it appears that in response to negative feedback, participants reduced relevance even when compared to a stranger – contrary to the SEM model. However, this reduced relevance was still relatively high with 80% of the subdomains rated as highly self-relevant. It appears that although negative feedback may be more threatening to self-evaluation than positive feedback, participants still indicated a consistent high level of subdomain relevance. This suggests there are other self-evaluation maintenance mechanisms that allow high levels of relevance to be preserved despite negative feedback. A plausible example of one of these mechanisms is performance consistency – perhaps the task performance was not seen as consistent with an individual's global beliefs about their performance in general. If this were the case, then relevance may have been rated as a function of more stable global beliefs about performance rather than this specific instance of performance that could be relatively inconsistent with a participant's global beliefs.

The consistently high percentage of subdomains rated as highly self-relevant (ranging from 80-92%) regardless of performance or closeness seems to indicate a lack of specialization. Recall the study hypothesis that if specialization is occurring, then the relevance of the general performance area should still remain high even when the individual has been outperformed in a highly relevant area. Because evidence of specialization of relevance was not present, it would logically follow that in this threatening condition, the relevance of the general performance area would decrease in order to compensate for this threat to self-evaluation. Indeed, the present study did find this anticipated decrease in the relevance of the general performance area when the participant was outperformed regardless of closeness to their competitor.

The second study objective was to examine the distribution of expertise on the subdomains of the general performance area when participants made predictions about how well they would perform in comparison to either their romantic partner or the stranger on the hypothetical tasks that assessed each individual subdomain. It was hypothesized that regardless of performance, participants who were compared to their romantic partners would predict that their own performance would be superior on 50% of the subdomains, and their romantic partners would have a superior performance on the other 50% of the subdomains. Because the performance area was highly relevant to both partners, this specialization would reflect efforts to engage in complementarity by supporting both the SEM needs of the individual as well as his or her romantic partner because the performance area was highly relevant to both partners. In contrast, it was hypothesized that participants who were compared to the stranger would predict that their own performance would be superior on all of the subdomains, because the SEM model predicts that low closeness to the stranger will not induce complementary responses.

Contrary to the hypotheses, the degree of closeness had no impact on the percentage of subdomains allotted to the self as the superior performer; participants in both closeness conditions predicted they would outperform the other on approximately two-thirds of the subdomains. As noted earlier, perhaps the very nature of completing the same task and the knowledge that the same area was also important to the stranger was enough to induce perceived similarity and a comparable degree of specialization. Although the percentage of subdomains was approximately equal regardless of closeness, the actual percentage itself of roughly 60% could reflect some evidence of specialization.

However, this specialization would reflect a SEM mechanism solely for the individual and not on behalf of both romantic partners as originally hypothesized.

Indeed, the significant main effect of performance also reflects some evidence of specialization to benefit the individual alone. Participants who outperformed the comparison other predicted that they themselves would outperform that other on approximately three-fourths of the subdomains; in contrast, participants who had been outperformed predicted that they themselves would outperform that other only on approximately half of the subdomains. It is important to note that the latter percentage does demonstrate specialization as a self-enhancing mechanism for the individual alone. Even when the participant received negative feedback, they still claimed expertise on approximately 50% of the subdomains. This suggests that the threat to self-evaluation for the individual can successfully be reduced via specialization.

Although there was no significant interaction between performance and closeness, an interesting pattern of specialization still emerged in the distribution of subdomain expertise. Regardless of closeness, participants who received positive feedback claimed expertise on approximately 75% of the subdomains, indicating some inclination to maintain the SEM needs of others by still allotting expertise to the other on approximately 25% of the subdomains. On the other hand, participants who received negative feedback still claimed expertise on approximately 50% of the subdomains, thus maintaining a positive self-evaluation through specialization of expertise. In sum, although the results do not lend support to the SEM model because closeness did not influence the tendency to specialize as hypothesized, these results cannot be seen as conclusive due to the unknown perceived similarity to the stranger. As previously

mentioned, future research should address this issue and assess perceived similarity and closeness to the stranger both before and after performance feedback. With the variable of closeness aside, the significant differences as a result of performance do reflect a tendency to specialize and do lend support to the SEM model as a mechanism to maintain a positive evaluation for the self.

The third study objective was to examine the role of gender in the three major dependent variables of interest. Previous research has indicated gender differences in the general performance area with a greater tendency for women to cede expertise to their romantic partner (Morewitz & Pilkington, unpublished manuscript) and to show more empathetic comparison processes to maintain the SEM needs of their partners (Pilkington et al., 1991). However, when given the opportunity to specialize, women and men ceded subdomain expertise to an equivalent degree (Morewitz & Pilkington, unpublished manuscript).

The present study found no significant gender differences in the main effects or interactions for the three main dependent variables. Theoretically, there should be no differences in the general relevance of an area because this reflects an individual's compensatory response to performance feedback in an effort to support one's own SEM needs. Thus, it was not anticipated that the gender differences previously found (e.g., Morewitz & Pilkington, unpublished manuscript; Pilkington et al., 1991) would be replicated for a variable that has no bearing on the SEM needs of others. On the other hand, consistent with previous research, (Morewitz & Pilkington, unpublished manuscript; Pilkington et al., 1991) no significant main effects or interactions were found for the relevance of the subdomains or the predicted future performance on the

subdomain tasks. When participants had the opportunity to specialize, women and men ceded expertise along the subdomains in an equivalent manner.

The fourth study objective was to examine how specialization within the couple would be related to the quality of the relationship. Previous research has found that greater investment in the relationship results in a greater understanding of the mutual benefits of maintaining the SEM needs of both the individual and the romantic partner (Beach & Tesser, 1993). Other research supports this assertion in that the tendency to engage in complementary responses increases as a function of the development of the relationship (Beach et al., 2001) and the tendency to engage in reflection processes (rather than comparison) increases with greater liking of the romantic partner (Pilkington et al., 1991). Thus, it was hypothesized that specialization would be greater in relationships of a longer duration.

Length of the relationship had no impact on the relevance of the general performance area. There was, however, a significant interaction with performance on the percentage of subdomains that were rated as highly self-relevant. Although there were no differences in the percentages for participants in short or long-term relationships when actually outperforming their romantic partner (approximately 88%), participants in long-term relationships who were outperformed by their romantic partner reported a smaller percentage of subdomains as highly self-relevant (72%) as compared to participants in short-term relationships (94%). Thus, those who were outperformed by their romantic partner reported a decrease in relevance of the subdomains. This finding replicates previous research by Beach et al. (2001) who found that when participants in long-term relationships were outperformed by their romantic partner, there was a significant

decrease in self-relevance. The fact that there were no reductions in the relevance of the general performance area indicates that the reduced relevance of subdomains could be evidence of some specialization – partners appear to take into account partner relevance and performance and cede areas to their romantic partner. However, contrary to this evidence of specialization, participants in long-term relationships claimed a significantly greater percentage of subdomains (89%) as highly self-relevant when they outperformed the romantic partner. This latter evidence does not demonstrate complementarity.

Perhaps a more plausible explanation for these inconsistent results is that greater length of the relationship *strengthens* the reaction process to performance feedback. When outperformed, greater reflection processes occur with a decrease in self-relevance of the subdomains, whereas when outperforming the romantic partner, greater comparison processes occur with an increase in self-relevance of the subdomains. Indeed, a key tenet of the SEM model is that closeness determines the strength of the comparison or reflection process (Tesser, 1988). In other words, greater closeness to the romantic partner as a result of increased time in the relationship could result in an exaggerated tendency to engage in either the reflection process when outperformed, or the comparison process when the individual outperforms the romantic partner.

Interestingly, length of the relationship alone produced significant differences in the predicted future performance on subdomain tasks. When compared to their romantic partner, participants in long-term relationships predicted their own superior performance on a greater percentage of the subdomains (70%) than did participants involved in short-term relationships (only 58%). This finding could reflect a greater attempt at specialization in the early stages of the relationship; young couples may engage in more

give and take as they develop their roles and gain comfort with one another. Alternatively, participants in longer relationships may have a greater comfort in making attributions about performance that may not specifically support the SEM needs of the romantic partner – specialized roles could already be established and the participant may well know that an occasional selfish act (e.g., claiming more subdomains) will not have severe repercussions for the relationship. Indeed, it may very well be that an occasional selfish act may be acceptable because the romantic partner may not know about it. If the distribution of relevance or expertise had obvious implications for the romantic partner (e.g., the romantic partner would see their responses on the questionnaire, or decisions must be made in real-life interactions), then the individual may be less selfish. Future researchers could further examine this explanation by examining how the couple works on a general performance area task together. As previously mentioned, an additional explanation for the differences seen as a function of length of the relationship could be related to increased closeness. Greater length of the relationship may have strengthened the impact of the comparison process, which could have lead to a greater percentage of subdomains claiming expertise by the self.

Seemingly fortunate to those participants involved in long-term relationships, specialization was not significantly related to positive feelings about the relationship and romantic partner or feelings of ambivalence about the relationship. Although it was hypothesized that greater specialization would be related to higher levels of positive feelings towards the romantic partner and the relationship, and lower levels of ambivalence towards the relationship, no distinctions were found. A plausible explanation for these findings would be the low variability of positive feelings and levels

of ambivalence in the study sample. The highest mean levels of ambivalence reported were at 4 on a 7-point scale, and averaged around 2. This indicates low levels of ambivalence towards the relationship across the sample. For positive feelings, the lowest mean level reported was only 3.75 on a 5-point scale, and averaged around 4.5. This indicates that the vast majority of participants in the study sample appeared to quite satisfied and content in the current relationship.

Despite these high ratings of positive feelings, levels of conflict within the relationship appeared to show a different pattern. It was hypothesized that individuals who specialized less frequently would report higher levels of conflict in the relationship. In contrast to positive feelings, there was considerable variability (ranging from 1.4 to 6.8 on a 7-point scale) in the levels of conflict reported by participants. Although levels of conflict were not related to the relevance of the general performance area or subdomains, they were related to the distribution of expertise on the subdomains. When outperforming the romantic partner, participants with low levels of conflict claimed expertise on a significantly smaller percentage of the subdomains (62%) than did participants with high levels of conflict (88%). In contrast, there were no significant differences according to levels of conflict in the percentage of subdomains claiming expertise when the romantic partner outperformed the participant. Thus, it appears that participants who claimed expertise on a larger percentage of the subdomains also experienced higher degrees of conflict within the relationship.

Although it cannot be determined if the conflict is a result of failure to specialize within the relationship and engage in complementary responses, or if the distribution of expertise is a result of decreased desire to support the SEM needs of the partner due to

conflict already present in the relationship for other reasons, this finding has interesting implications. If low levels of conflict are, in fact, a result of greater frequency of specialization, then it appears that specialization is an effective mechanism to maximize the reflection processes and minimize the comparison processes while allowing closeness, relevance, and performance to be held at a consistent high level. Thus, this would be clear evidence that specialization allows both members of the couple to perform well in the same highly relevant areas yet still maintain closeness with each other.

As a whole, the results of the present study seem to strongly indicate that specialization is especially important in the maintenance of a positive self-evaluation *for the individual alone* in response to negative performance feedback. Although individuals do demonstrate a tendency towards specialization when outperforming another by not claiming all of the subdomains, the percentage of subdomains still remained significantly higher than the hypothesized 50%, which would have indicated equal levels of specialization. Thus, it appears that specialization may be an important self-enhancing mechanism for the individual to maintain closeness, maintain high relevance, and maintain a high performance despite negative feedback regardless of the nature of the relationship. The Self-Zoo perspective (Tesser et al., 1996) consists of a "zoo" of self-validating mechanisms that can serve to restore or protect an individual's self-evaluation. It appears that in the present study, specialization is consistent with the mechanisms in this perspective because it appears to provide enough self-validation that a positive self-evaluation is maintained. Thus, specialization does appear to have the moderating effects to avoid changing the SEM parameters as hypothesized; however, this effect is apparent

only for the individual and it does not demonstrate an active effort to maintain the SEM needs of the romantic partner.

Although the results of the present study imply a tendency for the individual alone to specialize, it is important to note several study limitations. Recall that a significant percentage of participants were removed due to expressed suspicions about the feedback or an ineffective experimental manipulation. The greatest overall percentages were removed from the "higher performance than other" condition. The majority (six out of eight) of expressed suspicions were seen in the "lower performance than other" condition, which would logically seem to be a result of a more defensive reaction to being outperformed. On the other hand, the majority (26 out of 35) of ineffective experimental manipulations were seen in the "higher performance than other" condition. It is interesting to note that the most common manipulation check error was indicating that the task was not important to the comparison other, when in fact the participant was told it was important. This occurred even in instances when the comparison other was the romantic partner; thus, the participant who previously indicated a high level of area relevance for their romantic partner on the pre-task questionnaire frequently changed the ratings of importance for their romantic partner on the manipulation check. Theoretically, this could be evidence for reducing relevance for the romantic partner in order to reduce dissonance about the outperformance. However, these statements are purely speculative and future research should examine these possibilities further.

As previously mentioned, an additional study limitation is the failure to assess ratings of perceived similarity and closeness to the stranger. Thus, at this point it is difficult to make any definitive conclusions regarding the role of specialization in the

context of Tesser's (1988) SEM model. Although it was predicted that no threat to self-evaluation would occur in comparisons to the stranger because of an assumed lack of psychological closeness, the results indicate that this assumption may have been unwarranted. It appeared that participants had an equivalent response to threatening information regardless of closeness. Prior to making any conclusions concerning the main effects of closeness, future studies should assess similarity and closeness ratings to both the stranger and the romantic partner before and after task completion in order to successfully demonstrate that these perceived differences do exist.

In addition, examination of the percentages of subdomains rated as highly self-relevant does indicate a tendency towards specialization. However, it remains unknown if this reflects an active ceding of some areas to the comparison other or simply a decrease in personal relevance in response to feedback. Future studies should examine this further by assessing relevance of the subdomains for the romantic partner in addition to examining self-relevance. If participants are supplementing their decrease in self-relevance on the subdomains by increasing partner relevance on other subdomains, then it can be concluded that participants are actively engaging in the complementary responses seen in specialization. This would also provide further evidence that individuals are developing a unique self-definition (Tesser et al., 1998) and lend additional support for the Performance Ecology Perspective (Beach et al., 1996; Beach & Tesser, 2000; O'Mahen et al., 2000) in that specialized roles could be identified within the couple.

The results of the current research provide some evidence for specialization as an effective mechanism for the individual to maintain a positive self-evaluation, and they lay a foundation for future research to further examine this process. A replication of the

present study could examine complementary responses not only in relevance and expertise, but also include the emotional affect expressed by both romantic partners. Recall that Mendolia et al. (1996) examined affective responses to situations that varied as a function of performance and relevance in both partners. They found that participants reported less positive affect when they outperformed their romantic partner in an area that was highly relevant to their partner. Similarly, if the individual was outperformed in an area of high self-relevance, less positive affect was reported. Thus, future research should examine if specialization influences affective responses to performance feedback. In accordance with specialization theory, it would be anticipated that specialization of expertise in highly relevant performance areas would result in equivalent amounts of positive affect – the participant's self-evaluation would not be threatened, yet their romantic partner's self-evaluation would be preserved.

In addition, it is of interest to determine if the process of specialization occurs over the course of a relationship and how it develops. The present research suggests that specialization could be present in the early stages of the relationship, as evidenced by a greater tendency to specialize in short-term relationships and a tendency to engage in specialization with strangers. In fact, the very presence of specialization with strangers could indicate that it could be a mechanism for positive self-evaluation maintenance for the individual in a multitude of relationship types. Specialization could be thought of as a universal process involved with families, close friends, and even cooperative work settings and learning environments. For example, it would be interesting to examine the process of specialization within the context of an office environment. Given that an individual's job is usually an important part of his or her self-definition (high relevance),

and given that some degree of competition exists in attempts to have superior performances (high performance), how is closeness maintained among co-workers? The process of specialization according to each individual may allow these types of applied environments to function effectively without any modification of the SEM parameters.

The presence of objective performance criteria within the present study, as well as in applied environments such as work organizations and academic environments, introduces the question of whether specialization would still occur in performance areas where assessment criteria for success are ambiguous. Pemberton and Sedikides (2001) proposed the diagnosticity of comparison information – the ease of determining relative standing to one another – as an addition to Tesser's (1988) SEM model. Pemberton and Sedikides hypothesized that when performance criteria are objective and diagnostic (e.g., grades), then it is easy to determine relative standing, and an individual will be less inclined to aid in the performance of close others. However, when performance criteria are relatively ambiguous and non-diagnostic (e.g., social domains), there should be no differences in the amount of aid given to a close or distant other. These hypotheses were confirmed, even when the area was rated as highly relevant to all participants (Pemberton & Sedikides, 2001).

If participants were allowed to specialize within the performance domain, then perhaps there would be no differences in the amount of helpful information given to others regardless of closeness because the specialization would alleviate the personal threat to self-evaluation that could arise from a potential outperformance by the other in the future. Following this logic, the performance ambiguity in non-diagnostic areas could

serve as a self-validating mechanism that would deem specialization as unnecessary to protect self-evaluation.

The present study provided diagnostic performance feedback, even in performance domains where the criteria are generally considered to be ambiguous (Pemberton & Sedikides, 2001), such as the domains of creativity and social sensitivity. The fact that specialization took place in these non-diagnostic domains with the presentation of objective performance criteria lends support to the hypothesis that diagnosticity of the domain may be a vital addition to the parameters of Tesser's (1988) SEM model. Future research could further test this addition as well as determine the underlying self-evaluation maintenance mechanisms of specialization by examining the occurrence of specialization in domains that vary by objective and ambiguous performance criteria.

Although the present study did not find the active efforts to specialize within romantic relationships as anticipated, the results provide clear evidence that, at the very least, specialization may serve as an effective self-enhancing or self-validating mechanism for the *individual alone* within the context of romantic relationships as well as interactions with strangers. Perhaps specialization may indicate a necessary inclusion of an additional grouping of self-validating mechanisms in the Tesser et al. (1996) Self-Zoo Perspective – a grouping of cognitive re-organization mechanisms. By definition, specialization is essentially a re-organization of self-definition and social roles. If it can be assumed that specialization may occur in all types of highly relevant interactions, does it imply that an individual is constantly changing and refining his or her self-definition? If this is correct, would this constant refinement be troublesome to the individual or does

it merely reflect an adaptable nature to take positive actions towards preserving their self-evaluation? In conclusion, a greater understanding of how individuals respond to competition in highly relevant performance areas can have important applications towards more conducive and satisfying interactions in all contexts of the social world.

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TABLE 1

Post-Feedback Mean Relevance of the General Performance Area

	Closeness	
Performance	Romantic Partner	Stranger
Higher Percentile than Other	5.13_a (0.18)	4.91_a (0.21)
Lower Percentile than Other	4.50_b (0.15)	4.83_b (0.16)

Note. Relevance was rated on a 6-point scale (1 = *low relevance*, 6 = *high relevance*). Means in the same column with different subscripts significantly differ at the $p < .05$ level. The standard errors are noted in parentheses.

TABLE 2

Mean Percentage of Subdomains Rated as Highly Self-Relevant

	Closeness	
Performance	Romantic Partner	Stranger
Higher Percentile than Other	0.87_a (0.04)	0.92_a (0.05)
Lower Percentile than Other	0.80_b (0.04)	0.82_b (0.04)

Note. Relevance was rated on a 6-point scale (1 = *low relevance*, 6 = *high relevance*). Subdomains were considered to be highly self-relevant with a score of 4, 5, or 6. Means in the same column with different subscripts significantly differ at the $p < .06$ level. The standard errors are noted in parentheses.

TABLE 3

Mean Percentage of Subdomains Predicting a Superior Performance by the Self

	Closeness	
Performance	Romantic Partner	Stranger
Higher Percentile than Other	0.77_a (0.06)	0.74_a (0.07)
Lower Percentile than Other	0.49_b (0.05)	0.48_b (0.05)

Note. Expertise performance predictions were rated on a 6-point scale (1 = *self superior performer*, 6 = *other superior performer*). Subdomains were considered to predict a superior performance of by the self with a score of 1, 2, or 3. Means in the same column with different subscripts significantly differ at the $p < .001$ level. The standard errors are noted in parentheses.

TABLE 4

Interaction of Performance and Length of Relationship:
Mean Percentage of Subdomains Rated as Highly Self-Relevant
in Comparisons to the Romantic Partner

	Length of Relationship	
Performance	Short-Term	Long-Term
Higher Percentile than Other	0.85_{ac} (0.05)	0.89_{ac} (0.06)
Lower Percentile than Other	0.94_{ac} (0.05)	0.72_{bd} (0.04)

Note. Relevance was rated on a 6-point scale (1 = *low relevance*, 6 = *high relevance*). Subdomains were considered to be highly self-relevant with a score of 4, 5, or 6. Means in the same row with different subscripts ($_{a,b}$) significantly differ at the $p < .01$ level. Means in the same column with different subscripts ($_{c,d}$) significantly differ at the $p < .06$ level. The standard errors are noted in parentheses.

TABLE 5

Factor Loadings for the Relationship Positive Feelings Factor

Variable	Factor Loading
Feelings of Like	0.73
Feelings of Love	0.84
Relationship Satisfaction	0.68
Seriousness of the Relationship	0.68

Note. Eigenvalue = 2.16. Proportion of variance = 54.03%.

TABLE 6

Interaction of Performance and Levels of Conflict:
Mean Percentage of Subdomains Predicting a Superior Performance by the Self
in Comparisons to the Romantic Partner

	Levels of Conflict	
Performance	Low Conflict	High Conflict
Higher Percentile than Other	0.62_{ac} (0.06)	0.88_{bc} (0.08)
Lower Percentile than Other	0.50_{ac} (0.06)	0.48_{ad} (0.05)

Note. Expertise performance predictions were rated on a 6-point scale (1 = *self superior performer*, 6 = *other superior performer*). Subdomains were considered to predict a superior performance of by the self with a score of 1, 2, or 3). Means in the same row with different subscripts ($_{a,b}$) significantly differ at the $p < .03$ level. Means in the same column with different subscripts ($_{c,d}$) significantly differ at the $p < .01$ level. The standard errors are noted in parentheses.

FIGURE 1

Interaction of Performance and Length of the Relationship:
Mean Percentage of Subdomains Rated as Highly Self-Relevant
in Comparisons to the Romantic Partner

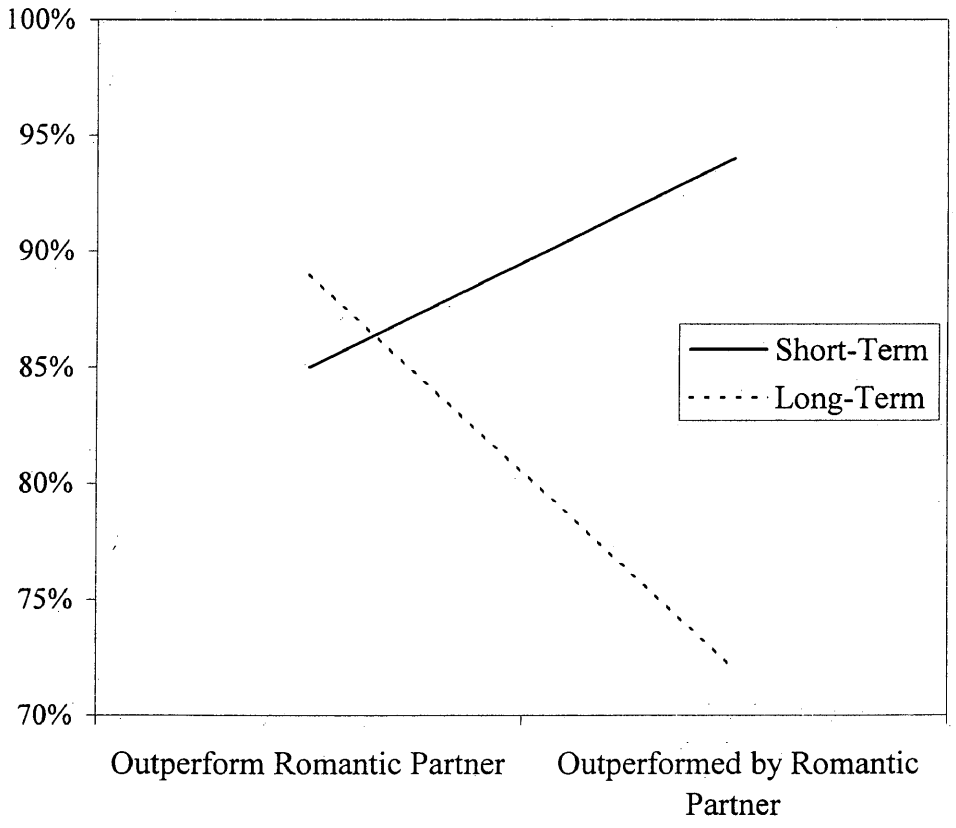
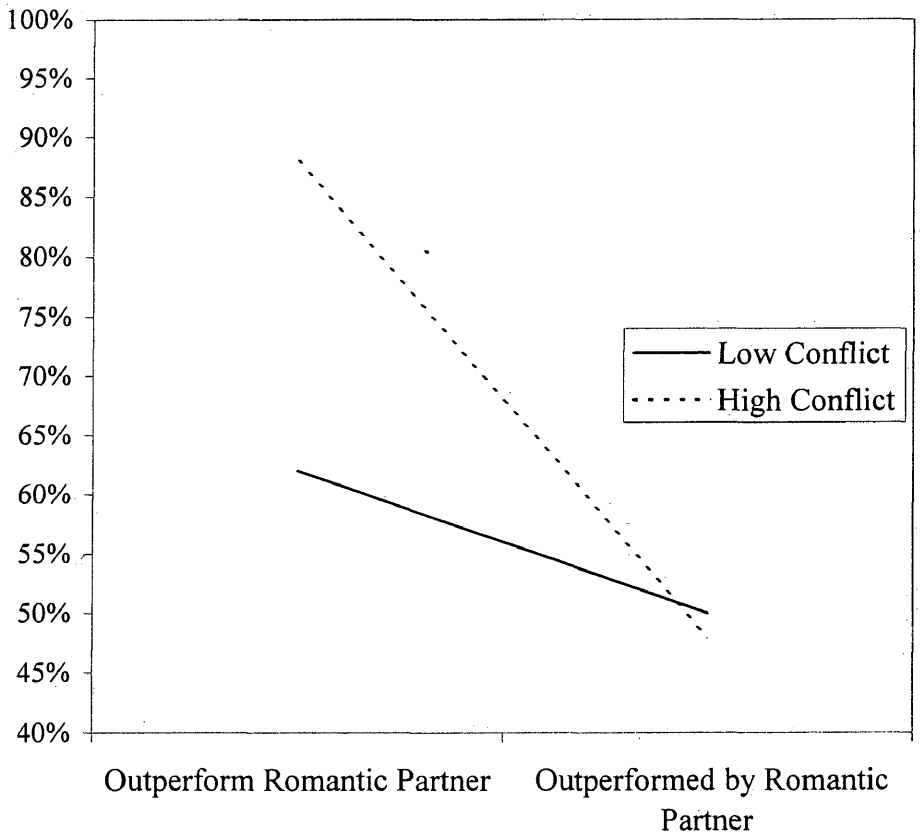


FIGURE 2

Interaction of Performance and Levels of Conflict:
Mean Percentage of Subdomains Predicting a Superior Performance by the Self in Comparisons to the Romantic Partner



APPENDIX A

PRE-SESSION RELEVANCE QUESTIONNAIRE

Are you currently involved in a romantic relationship of at least 6 weeks duration?
____ Yes ____ No If YES, please complete the following questions.

For each area below, please indicate the amount of relevance for yourself & your romantic partner. "RELEVANCE" can be defined as how important it is to an individual's identity (self-definition) to be knowledgeable and skilled at activities related to an area. It is possible for your ratings to be the same or they may be different.

*COGNITIVE-PERCEPTUAL INTEGRATION
-The ability to visualize and manipulate shapes and objects in your head.
-People good at CPI tend to have excellent technical abilities and design skills; tend to be successful at engineering and other design occupations.

	Low Relevance				High Relevance
Yourself	1	2	3	4	5
Your Romantic Partner	1	2	3	4	5

*SOCIAL SENSITIVITY
-The ability to accurately assess social situations and human behavior.
-People good at SS tend to be people-oriented, well liked, and very adaptable to function effectively in a wide variety of situations; considered to be good, valuable friends.

	Low Relevance				High Relevance
Yourself	1	2	3	4	5
Your Romantic Partner	1	2	3	4	5

*LOGICAL-ANALYTICAL REASONING
-The ability to use logic to solve problems, create symbolic meanings; break down and critically evaluate components of a subject and their interrelations.
-People good at LAR tend to be excellent critical thinkers and problem solvers; tend to be successful lawyers and highly effective business managers.

	Low Relevance				High Relevance
Yourself	1	2	3	4	5
Your Romantic Partner	1	2	3	4	5

*CREATIVITY
-The ability to create original, imaginative, and expressive works.
-Highly creative people tend to be open-minded, full of ideas, and innovative; tend to be successful in a variety of jobs and admired for their resourcefulness and high productivity.

	Low Relevance				High Relevance
Yourself	1	2	3	4	5
Your Romantic Partner	1	2	3	4	5

APPENDIX B

PRE-TASK QUESTIONNAIRE

---

1) Circle gender: MALE or FEMALE
2) Age: _____

3) Do you know either person of the participating couple also completing this session?
   Circle: YES or NO

   If 'YES': For each person you know, please complete the following:

   Other's Name: _____
   Circle your familiarity with the person:
   -an acquaintance
   -a friend
   -a close friend
   -just a known name even though you have not previously met
   -just a familiar face even though you have not previously met
   Other's Name: _____
   Circle your familiarity with the person:
   -an acquaintance
   -a friend
   -a close friend
   -just a known name even though you have not previously met
   -just a familiar face even though you have not previously met

4) How long have you been involved in your current romantic relationship?

   _____

5) For each of the following areas, please indicate the amount of relevance for yourself & your romantic partner. It is possible for your ratings to be the same or they may be different.

"RELEVANCE" can be defined as how important it is to an individual's identity (self-definition) to be knowledgeable and skilled at activities related to an area.

---

*COGNITIVE-PERCEPTUAL INTEGRATION

-The ability to visualize and manipulate shapes and objects in your head.
-People good at CPI tend to have excellent technical abilities and design skills; tend to be successful at engineering and other design occupations.

	Low Relevance					High Relevance
Yourself	1	2	3	4	5	6
Your Romantic Partner	1	2	3	4	5	6

*SOCIAL SENSITIVITY

-The ability to accurately assess social situations and human behavior.
-People good at SS tend to be people-oriented, well liked, and very adaptable to function effectively in a wide variety of situations; considered to be good, valuable friends.

	Low Relevance					High Relevance
Yourself	1	2	3	4	5	6
Your Romantic Partner	1	2	3	4	5	6

*LOGICAL-ANALYTICAL REASONING

-The ability to use logic to solve problems, create symbolic meanings; break down and critically evaluate components of a subject and their interrelations.
-People good at LAR tend to be excellent critical thinkers and problem solvers; tend to be successful lawyers and highly effective business managers.

	Low Relevance					High Relevance
Yourself	1	2	3	4	5	6
Your Romantic Partner	1	2	3	4	5	6

*CREATIVITY

-The ability to create original, imaginative, and expressive works.
-Highly creative people tend to be open-minded, full of ideas, and innovative; tend to be successful in a variety of jobs and admired for their resourcefulness and high productivity.

	Low Relevance					High Relevance
Yourself	1	2	3	4	5	6
Your Romantic Partner	1	2	3	4	5	6

APPENDIX C

COGNITIVE-PERCEPTUAL INTEGRATION TASK

ID Number: _____

COGNITIVE-PERCEPTUAL INTEGRATION TASK

~Concealed Figures
~Judgment of Interpolated Lines
~Lowry-Lucier Reasoning

CLOSURE FLEXIBILITY

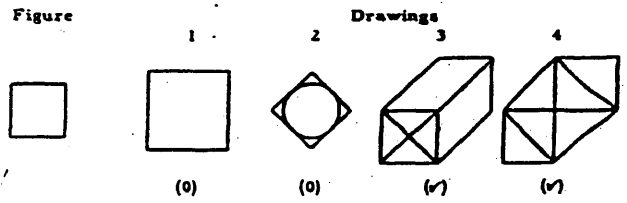
(Concealed Figures)

(Form A)

eveloped by: L.L. Thurstone, Ph.D. and T.E. Jeffrey, Ph.D. - The Psychometric Laboratory - The University of North Carolina

Directions:

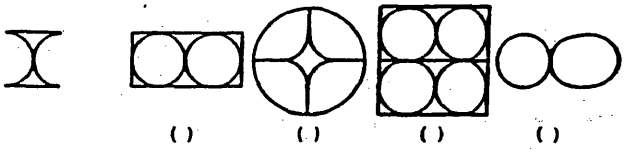
The row of designs below is a sample item of this test. The parts have been labeled to make description easier. These labels do not appear in the test items. The left hand design in each row is the figure. You are to decide whether or not the figure is concealed in each of the four drawings to the right. Put a check mark (✓) in the parentheses under a drawing, if it contains the figure. Put a zero (0) in the parentheses under a drawing, if it does not contain the figure. Look at the row of designs below.



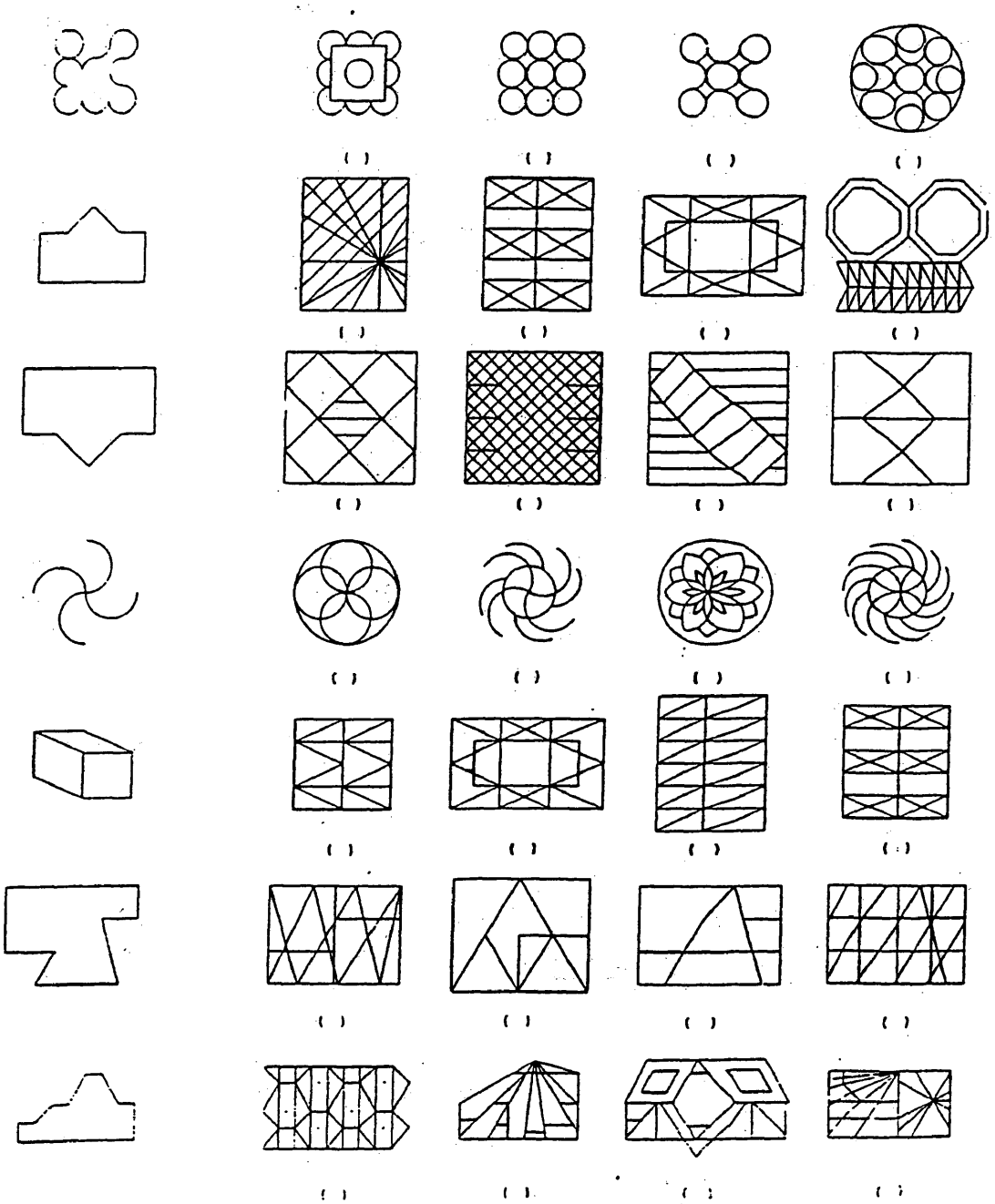
In the row above a zero (0) has been written in the parentheses under drawing 1. The first drawing is a square but it is larger than the figure. A zero (0) has been written under drawing 2. Although the second drawing contains a square of exactly the same size as the figure, it has been turned. Check marks (✓) have been written under the third and fourth drawings since they each contain a square of exactly the same size as the figure and have not been turned. It does not matter that the figure contained in drawings three and four is on a different level from the figure at the left.

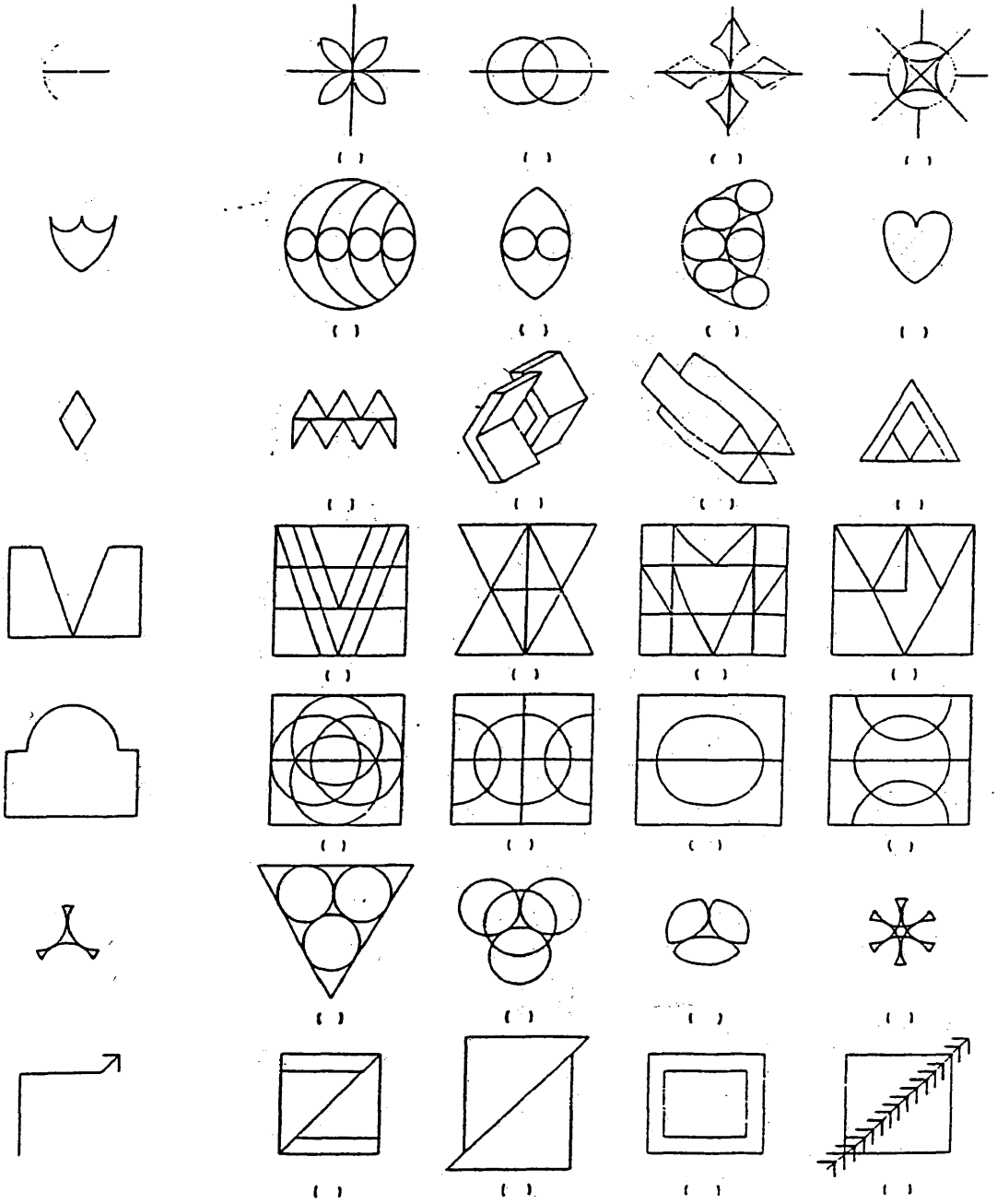
Sample:

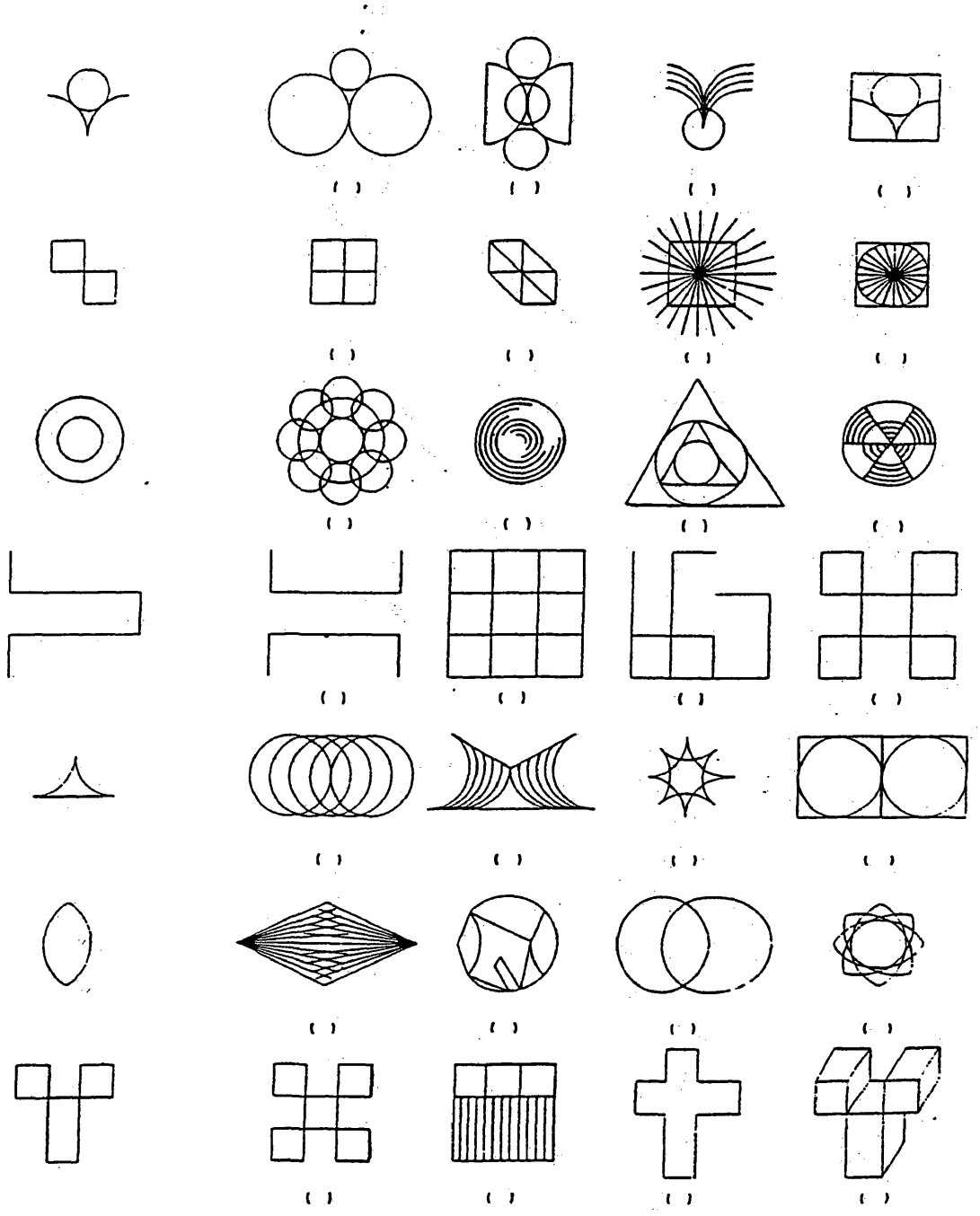
Here is another example for practice. Try it.



You should have placed check marks (✓) in the parentheses under the first and third drawings and zeros (0) in the parentheses under the second and fourth drawings.





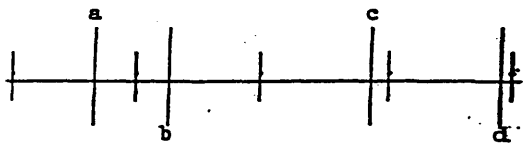


JUDGMENT OF INTERPOLATED LINES

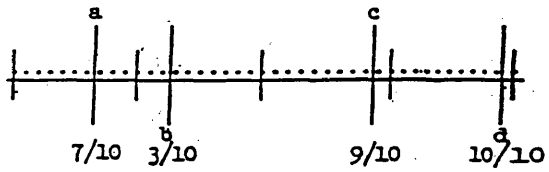
Instructions

This is a test of your ability to judge distances. The test items present a number of line segments each of which contains a vertical dash. You are to judge how far each separate dash is from the left-hand to the right-hand edge of the segment. You are to judge whether a given dash is the first, second, third, etc., or tenth part of the segment counting from left to right. Please do this visually without trying to use a ruler or any other artificial "prop."

Here is an enlarged sample:

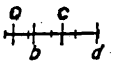


You are asked to tell in which tenth of the line segment each of the dashes, a, b, c, and d, appears. If the line segment was actually divided into tenths it would appear thus:

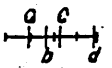


It is apparent then that dash a is in the seventh part of the segment; b is in the third; c is in the ninth; and d is in the tenth part.

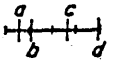
Stop here until you get the signal to begin.

1 

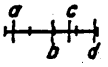
a _____
b _____
c _____
d _____

3 

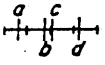
a _____
b _____
c _____
d _____

2 

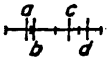
a _____
b _____
c _____
d _____

4 

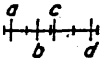
a _____
b _____
c _____
d _____

5 

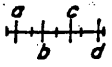
a _____
b _____
c _____
d _____

7 

a _____
b _____
c _____
d _____

6 

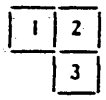
a _____
b _____
c _____
d _____

8 

a _____
b _____
c _____
d _____

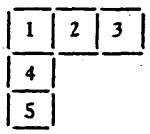
LOWRY-LUCIER REASONING

DIRECTIONS: The answer is always a number, or two or three numbers.



1. How many matches must be removed so that square number "2" will be eliminated—be entirely gone—leaving the other two complete? (.....)

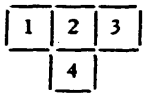
2. By removing two matches, only, which square can be eliminated? (.....)



3. What two squares can be eliminated by removing three matches from each? (.....)

4. What two squares can be eliminated by removing four matches, two from each, leaving three squares complete? (.....)

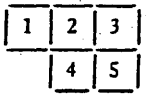
5. Which square not included in question "4", can be eliminated by removing two matches? (.....)



6. How many matches must be removed so that square number "2" will be eliminated, leaving the other three complete? (.....)

7. With square number "2" eliminated, how many matches must be removed to eliminate square number "1"? (.....)

8. When none of the squares are gone which one can be eliminated by removing one match only? (.....)

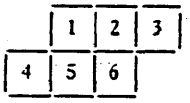


9. Which square can be eliminated by removing three matches? (.....)

10. Which square can be eliminated by removing one match? (.....)

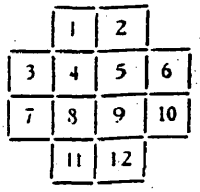
11. What is the sum of the two squares that can be eliminated by removing three matches—not for each, but three to eliminate the two squares? (.....)

12. Which 2 squares can be eliminated by removing 4 matches?—Add the answers to this question. What is the smallest answer you can get? (.....)



13. What is the sum of the two answers to this question. Which square can be eliminated by removing two matches? (.....)

14. What is the sum of the two squares that can be eliminated by removing two matches—that is, one match for each square? (.....)

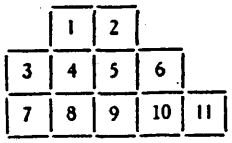


15. How many matches must you remove so that squares numbered "4", "5", "8" and "9" will be eliminated? (.....)

16. How many correct answers can be given for this question—What squares can be eliminated by removing two matches?—Don't give the answers, just the number of answers. (.....)

17. How many correct answers can be given for this question?—What two squares can be eliminated by removing one match? (.....)

18. What is the smallest sum possible of two squares that can be eliminated by removing four matches? (.....)



19. What is the sum of two squares that can be eliminated by removing one match? (.....)

20. What is the smallest sum of two squares that can be eliminated by removing two matches? (.....)

21. What is the largest sum of two squares that can be eliminated by removing two matches? (.....)

22. What is the smallest sum of three squares that can be eliminated by removing two matches? (.....)

23. What is the smallest sum of four squares that can be eliminated by removing four matches? (.....)

24. What is the largest sum possible of three squares that can be eliminated by removing three matches? (.....)

25. What is the smallest sum of three squares that can be eliminated by removing three matches? (.....)

APPENDIX D

SOCIAL SENSITIVITY TASK

ID Number: _____

SOCIAL SENSITIVITY TASK

Directions:
Carefully examine each of the following pictures. A series of questions and rating scales will follow each picture. Please fully describe your answers and state what aspects of the picture influenced your evaluation.

1. What is going on in the picture? What aspects of the picture influenced your evaluation and how?

2. Describe the emotional state of the girl sitting in the middle of the couch.
What aspects of the picture influenced your evaluation?

3. Describe the emotional state of the man sitting on the couch in the right-hand side of the picture.
What aspects of the picture influenced your evaluation?

4. What is the relationship between the girl sitting in the middle of the couch and the man sitting by himself on the chair?

5. Please circle one number on each rating scale measuring the degree of the specified trait for the *girl sitting in the middle of the couch*.

Openness to Experience (how reflective, imaginative, artistic)
LOW 1 2 3 4 HIGH

Conscientiousness (denotes self-control, responsibility, persistence)
LOW 1 2 3 4 HIGH

Extraversion (tendency to be outgoing, sociable, impulsive)
LOW 1 2 3 4 HIGH

Agreeableness (interpersonal warmth, altruism, empathy)
LOW 1 2 3 4 HIGH

Neuroticism (emotional lability, nervousness, self-consciousness)
LOW 1 2 3 4 HIGH

1. What is going on in the picture? What aspects of the picture influenced your evaluation and how?

2. Describe the emotional state of the woman sitting on the couch.
What aspects of the picture influenced your evaluation?

3. Please circle one number on each rating scale measuring the degree of the specified trait for the *woman sitting on the couch.*

Openness to Experience (how reflective, imaginative, artistic)
LOW 1 2 3 4 HIGH

Conscientiousness (denotes self-control, responsibility, persistence)
LOW 1 2 3 4 HIGH

Extraversion (tendency to be outgoing, sociable, impulsive)
LOW 1 2 3 4 HIGH

Agreeableness (interpersonal warmth, altruism, empathy)
LOW 1 2 3 4 HIGH

Neuroticism (emotional lability, nervousness, self-consciousness)
LOW 1 2 3 4 HIGH

1. What is going on in the picture? What aspects of the picture influenced your evaluation and how?

2. Describe the emotional state of the man in the picture. What aspects of the picture influenced your evaluation?

3. Describe the emotional state of the woman sitting down. What aspects of the picture influenced your evaluation?

4. What is the relationship between the man and the woman in the picture?

5. Please circle one number on each rating scale measuring the degree of the specified trait for the *man sitting down in the picture*.

Openness to Experience (how reflective, imaginative, artistic)
LOW 1 2 3 4 HIGH

Conscientiousness (denotes self-control, responsibility, persistence)
LOW 1 2 3 4 HIGH

Extraversion (tendency to be outgoing, sociable, impulsive)
LOW 1 2 3 4 HIGH

Agreeableness (interpersonal warmth, altruism, empathy)
LOW 1 2 3 4 HIGH

Neuroticism (emotional lability, nervousness, self-consciousness)
LOW 1 2 3 4 HIGH

1. What is going on in the picture? What aspects of the picture influenced your evaluation and how?

2. Describe the emotional state of the woman in the picture. What aspects of the picture influenced your evaluation?

3. Please circle one number on each rating scale measuring the degree of the specified trait for the *woman in the picture*.

Openness to Experience (how reflective, imaginative, artistic)
LOW 1 2 3 4 HIGH

Conscientiousness (denotes self-control, responsibility, persistence)
LOW 1 2 3 4 HIGH

Extraversion (tendency to be outgoing, sociable, impulsive)
LOW 1 2 3 4 HIGH

Agreeableness (interpersonal warmth, altruism, empathy)
LOW 1 2 3 4 HIGH

Neuroticism (emotional lability, nervousness, self-consciousness)
LOW 1 2 3 4 HIGH

1. What is going on in the picture? What aspects of the picture influenced your evaluation and how?

2. Describe the emotional state of the woman facing the camera? What aspects of the picture influenced your evaluation?

3. Describe the emotional state of the man sitting down. What aspects of the picture influenced your evaluation?

4. Describe the emotional state of the young girl in the right-hand side of the picture. What aspects of the picture influenced your evaluation?

5. Please circle one number on each rating scale measuring the degree of the specified trait for the *man sitting down in the picture*.

Openness to Experience (how reflective, imaginative, artistic)

LOW 1 2 3 4 HIGH

Conscientiousness (denotes self-control, responsibility, persistence)

LOW 1 2 3 4 HIGH

Extraversion (tendency to be outgoing, sociable, impulsive)

LOW 1 2 3 4 HIGH

Agreeableness (interpersonal warmth, altruism, empathy)

LOW 1 2 3 4 HIGH

Neuroticism (emotional lability, nervousness, self-consciousness)

LOW 1 2 3 4 HIGH

APPENDIX E

LOGICAL-ANALYTICAL REASONING TASK

ID Number: _____

LOGICAL-ANALYTICAL REASONING TASK

Directions: Each question or group of questions is based on a passage or set of conditions. In answering some of the questions, it may be useful to draw a rough diagram. You may use the attached sheet as scratch paper. For each question, select the best answer choice given.

Questions 1-6

A strand of ten lights is to be hung in a store to decorate for the holidays. The bulbs to be used in the strand are three red bulbs, two blue bulbs, two green bulbs, two yellow bulbs, and a white bulb. The bulbs are located every three feet on the strand.

The strand has two different colored bulbs at either end.
The red bulbs must all be next to each other.
The white bulb must have a blue bulb immediately on either side of it.
A green bulb and a red bulb cannot be next to each other.
If a yellow bulb is at the end of the strand, then a blue bulb must be next to it.

1. Which of the following is a possible order for the bulbs on the strand?
   (A) Yellow, red, red, red, yellow, green, green, blue, white, blue
   (B) Green, blue, white, blue, red, red, red, yellow, yellow, green
   (C) Blue, white, blue, green, yellow, yellow, green, red, red, red
   (D) Yellow, blue, white, yellow, red, red, red, blue, green, green
   (E) Green, green, yellow, red, red, red, yellow, blue, white, blue

2. If a red bulb is at one end of the strand and a yellow bulb is at the other, which of the following statements must be true?
   (A) The two middle bulbs are both blue.
   (B) The two middle bulbs are both red.
   (C) The two middle bulbs are both green.
   (D) The two middle bulbs are green and blue.
   (E) The two middle bulbs are yellow and green.

3. If the two yellow bulbs are next to each other and the green bulbs are not next to each other, which of the following statements must be true?
   (A) A red bulb is next to a blue bulb.
   (B) A yellow bulb is next to a blue bulb.
   (C) A blue bulb is not next to a green bulb.
   (D) A white bulb is not next to a blue bulb.
   (E) A yellow bulb cannot be at either end of the strand.

4. If a yellow bulb is at the end of the strand, which of the following statements must be true?
   (A) A green bulb is next to a yellow bulb.
   (B) A white bulb is at the other end of the strand.
   (C) A blue bulb is at the other end of the strand.
   (D) A yellow bulb is at the other end of the strand.
   (E) A blue bulb is next to a red bulb.

5. If a white bulb is next to the bulb at the end of the strand and the two yellow bulbs are next to each other, which of the following statements could be true?
   (A) There is a yellow bulb at the end of the strand.
   (B) There is a red bulb next to a green bulb.
   (C) There is a blue bulb next to a green bulb.
   (D) There is not a yellow bulb next to a green bulb.
   (E) There is a blue bulb next to a yellow bulb.

6. Which of the following is NOT possible?
   (A) A yellow bulb is at one end of the strand, and a green bulb is at the other end.
   (B) A red bulb is at one end of the strand, and a green bulb is at the other end.
   (C) A yellow bulb is directly adjacent to a red bulb and a green bulb.
   (D) There are red bulbs next to a yellow bulb, a blue bulb, and a white bulb.
   (E) There are blue bulbs next to a red bulb, a white bulb, and a yellow bulb.

7. Over the past five years, Clean toothpaste has been advertised as the most effective means of preventing tooth decay. However, according to dentists' records, many patients experiencing severe tooth decay used Clean toothpaste. Clearly, Clean toothpaste is not an effective means of preventing tooth decay.

   Which of the following statements, if true, would most seriously weaken the conclusion above?

   (A) Of the patients experiencing tooth decay, two-thirds indicate that they would be willing to switch brands of toothpaste.
   (B) The advertisements for Clean toothpaste advocate brushing twice a day.
   (C) If Clean toothpaste were not available, more patients would experience severe tooth decay.
   (D) Dentists continue to recommend Clean toothpaste more than any other brand.
   (E) Of those who experienced severe tooth decay, only one-eighth also experienced gum disease.

8. A group of physicians wishing to explore the link between protein intake and high blood pressure performed a nutrition experiment on a selected group of ten vegetarians. Five of the people were given a high-protein, low-fat diet. The group given the high-protein, low-fat diet exhibited the same 5 percent increase in blood pressure as did the group given the low-protein, high-fat diet.

   Which of the following conclusions can most properly be drawn if the statements above are true?

   (A) The physicians did not establish a link between protein intake and high blood pressure.
   (B) The sample chosen by the physicians was not representative of the general vegetarian population.
   (C) Some physicians believe there is a link between protein intake and high blood pressure.
   (D) Vegetarians are more likely to eat a high-protein, low-fat diet than a low-protein, high-fat diet.
   (E) There is a link between protein intake and high blood pressure.

9. Whenever Joe does his laundry at the Main Street Laundromat, the loads turn out cleaner than they do when he does his laundry at the Elm Street Laundromat. Laundry done at the Main Street Laundromat is cleaner because the machines at the Main Street Laundromat use more water per load than do those at the Elm Street Laundromat.

   Which of the following statements, if true, helps support the conclusion above?

   (A) The clothes washed at the Elm Street Laundromat were, overall, less clean than those washed at the Main Street Laundromat.
   (B) Joe uses the same detergent at both laundromats.
   (C) The machines at the Oak Street Laundromat use twice as much water as do those at the Main Street Laundromat.
   (D) Joe does three times as much laundry at the Main Street Laundromat as he does at the Elm Street Laundromat.
   (E) Joe tends to do his dirtier laundry at the Elm Street Laundromat.

Questions 10-13

A clothing designer is presenting shows in five different cities in five days. The first four outfits of each show are either checkered, dotted, striped, or plaid. In every city the models wear these four outfits in a different order.

In successive cities, the first outfits are never the same.
In successive cities, the fourth outfits are never the same.
The plaid outfit is never modeled directly after the striped outfit.
The dotted outfit is never modeled first.

10. Which of the following could be an outfit order on the night following a night when the outfit order is plaid, striped, dotted, and checkered?
(A) Checkered, dotted, striped, and plaid
(B) Dotted, checkered, plaid, and striped
(C) Plaid, dotted, checkered, and striped
(D) Striped, plaid, checkered, and dotted
(E) Striped, checkered, plaid, and dotted

11. All of the following could be an outfit order for the evening following an evening in which the outfit order has the checkered outfit fourth and the plaid outfit third EXCEPT
(A) checkered, dotted, plaid, and striped
(B) checkered, plaid, dotted, and striped
(C) striped, dotted, plaid, and checkered
(D) plaid, checkered, striped, and dotted
(E) plaid, striped, checkered, and dotted

12. If the outfit order on one evening is checkered, plaid, dotted, and striped, and on the next evening the outfit order has the plaid outfit fourth, which of the following must be true of the outfit order on the second evening?
(A) The checkered outfit is modeled first.
(B) The striped outfit is modeled first.
(C) The checkered outfit is modeled immediately before the striped outfit.
(D) The dotted outfit is modeled immediately before the striped outfit.
(E) The dotted outfit is modeled directly before the checkered outfit.

13. If on a Monday the outfit order is striped, dotted, plaid, and checkered, and on a Wednesday the outfit order is plaid, checkered, striped, and dotted, which of the following must be true about the outfit order for Tuesday?
(A) The plaid outfit is modeled second.
(B) The striped outfit is modeled second.
(C) The dotted outfit is modeled third.
(D) The striped outfit is modeled fourth.
(E) The checkered outfit is modeled first.

Questions 14-18

There are three hiking paths at Miller's Farm Resort in Vermont. The paths are marked by signs on eight tall trees in the woods surrounding the Pine Lodge and the Old Barn: an ash, a birch, a cherry, an elm, a fir, a hemlock, a maple, and an oak.

The Green Mountain Trail goes in a straight line from the Pine Lodge to the ash to the cherry to the maple to the birch and then to the Old Barn.

The Cross Country Trail goes from the Pine Lodge to the cherry to the fir to the hemlock to the birch to the elm and back to the Pine Lodge.

The Bethlehem Trail starts at the Pine Lodge and goes from the oak to the fir to the maple and back to the Pine Lodge.

There are no other routes available. Trails may be travelled in either direction.

14. Which of the following routes must be taken to go from the ash to the elm while passing the fewest trees?

(A) The Cross Country Trail
(B) The Green Mountain Trail, then the Cross Country Trail
(C) The Green Mountain Trail, then the Bethlehem Trail
(D) The Bethlehem Trail, then the Cross Country Trail
(E) The Green Mountain Trail, then the Bethlehem Trail, and then the Cross Country Trail

15. What is the maximum number of trees one can pass in order to get from the elm to the maple, without reusing any part of a path or passing the Pine Lodge?

(A) 1
(B) 2
(C) 3
(D) 4
(E) 5

16. Which sequence of trees is a possible route from the Old Barn to the Pine Lodge?

(A) Birch, maple, fir, oak
(B) Birch, elm, ash, cherry
(C) Birch, maple, fir, ash
(D) Birch, hemlock, cherry
(E) Birch, maple, cherry, elm, ash

17. How many different routes are there from the Pine Lodge to the birch which pass exactly three trees and do not reuse any part of a path?

(A) 2
(B) 3
(C) 4
(D) 5
(E) 6

18. If a new path is found that connects the fir tree to the Old Barn, what is the fewest number of trees that could be passed on a hike from the Pine Lodge to the Old Barn and back, taking a different route each way?

(A) 3
(B) 4
(C) 5
(D) 6
(E) 7

APPENDIX F

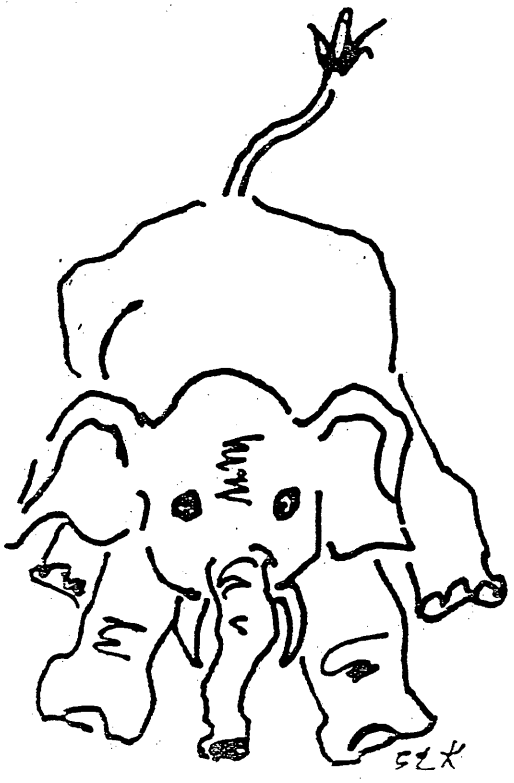
CREATIVITY TASK

ID Number: _____

CREATIVITY TASK

PRODUCT IMPROVEMENT

The picture below is a sketch of a stuffed toy elephant of the kind you can buy in most stores for about ten dollars. It is about six inches tall and weighs about a half pound. In the spaces below, list the cleverest, most interesting and unusual ways you can think of for changing this toy elephant so that children will have more fun playing with it. Do not worry about how much the change would cost. Think only about what would make it more fun to play with as a toy.



UNUSUAL USES

Most people throw their empty cardboard boxes away, but they have thousands of interesting and unusual uses. In the spaces below, list as many interesting and unusual uses as you can think of. Do not limit yourself to any one size of box. You may use as many boxes as you like. Do not limit yourself to the uses you have seen or heard about; think about as many possible new uses as you can.

ASKING

In the spaces below write five unique questions you can think of about the above picture. Ask questions you would need to ask to know for sure what is happening. Do not ask questions which can be answered just by looking at the drawing.

1._____

2._____

3._____

4._____

5._____

GUESSING CAUSES

In the spaces below write five unique possible causes of the action shown in the last picture shown. You may use things that might have happened just before the things that are happening in the picture, or something that happened a long time ago that made these things happen.

1._____

2._____

3._____

4._____

5._____

GUESSING CONSEQUENCES

In the spaces below write five unique possibilities of what might happen as a result of what is taking place in the last picture shown. You may use things that might happen right afterwards or things that might happen as a result long afterwards in the future.

1._____

2._____

3._____

4._____

5._____

APPENDIX G

RELATIONSHIP QUESTIONNAIRE

~Please respond honestly and circle only ONE response to each question.
~Remember your responses are confidential.

1. How much do you like your partner?

1	2	3	4	5
not at all				very much

2. How much do you love your partner?

1	2	3	4	5
not at all				very much

3. How satisfied are you with your current romantic relationship?

1	2	3	4	5
not at all				very much

4. How serious is your current romantic relationship?

1	2	3	4	5
not at all; very casual				very serious; we are committed

5. Six months from now, how close do you think you and your current romantic partner will be?

1	2	3	4	5
much less close than we are now		about the same		much closer than we are now

APPENDIX H

BRAIKER AND KELLEY (1979) SCALE

Circle the response that most closely describes your feelings about each statement.

	Strongly Disagree						Strongly Agree
1. My partner and I often argue with each other.	1	2	3	4	5	6	7
2. I try hard to alter my partner's attitudes and behaviors that bother me.	1	2	3	4	5	6	7
3. I never feel angry or resentful toward my partner.	1	2	3	4	5	6	7
4. When my partner and I argue, our arguments are rarely serious.	1	2	3	4	5	6	7
5. I communicate feelings of anger, dissatisfaction, or frustration with my partner.	1	2	3	4	5	6	7
6. I am confused about my feelings toward my partner.	1	2	3	4	5	6	7
7. I often worry about losing some of my independence by staying involved with my partner.	1	2	3	4	5	6	7
8. I am ambivalent or unsure about continuing my current relationship.	1	2	3	4	5	6	7
9. My partner does not demand too much of my time and attention.	1	2	3	4	5	6	7
10. I feel trapped and pressured to continue in my current relationship.	1	2	3	4	5	6	7

APPENDIX I

FEEDBACK SHEET

Participant ID: _____

Date: _____

Performance Domain: _____

Name	Score
_____ name	_____percentile
_____ name	_____percentile
_____ name	_____percentile
_____ name	_____percentile

APPENDIX J

PREDICTED FUTURE PERFORMANCE QUESTIONNAIRE – CPI

"COGNITIVE-PERCEPTUAL INTEGRATION" can be defined as the ability to manipulate shapes and objects in your head. People good at CPI tend to have excellent technical abilities and design skills; tend to be successful at engineering and other design occupations.

The overall performance area of cognitive-perceptual integration can be broken down into six facets, or subdomains. Given the performance feedback from your performance on the general area of cognitive-perceptual integration, please predict how well you would perform on a task that assesses each individual subdomain in comparison to your romantic partner—who would be the superior performer in each subdomain?

	Self Superior Performer					Romantic Partner Superior Performer
Closure Flexibility	1	2	3	4	5	6

~Ability to detect shapes and recognize patterns

2D Measurement Perception	1	2	3	4	5	6

~Ability to form accurate mental measurements of lines, shapes, patterns

Object Design	1	2	3	4	5	6

~Ability to manipulate varying lines and shapes to create aesthetic designs

Spatial Relationships	1	2	3	4	5	6

~Ability to accurately perceive spatial distances among and between objects

Mental Representations	1	2	3	4	5	6

~Ability to manipulate mental images of objects/elements to solve problems

Spatial Movement	1	2	3	4	5	6

~Ability to accurately determine object movement in space in relation to its previous location and among other objects

APPENDIX K

PREDICTED FUTURE PERFORMANCE QUESTIONNAIRE – SS

"SOCIAL SENSITIVITY" can be defined as the ability to accurately assess social situations and human behavior. People good at SS tend to be people-oriented, well-liked, and very adaptable to function effectively in a wide variety of situations; considered to be good, valuable friends.

The overall performance area of Social Sensitivity can be broken down into six facets, or subdomains. Given the performance feedback from your performance on the general area of social sensitivity, please predict how well you would perform on a task that assesses each individual subdomain in comparison to your romantic partner—who would be the superior performer in each subdomain?

	Self Superior Performer					Romantic Partner Superior Performer
Judgment of Social Situations	1	2	3	4	5	6

~Ability to accurately assess what is happening, what is appropriate in social situations

Recognition of Mental States	1	2	3	4	5	6

~Ability to accurately recognize the emotional state of a person

Observation of Human Behavior	1	2	3	4	5	6

~Ability to accurately observe behavior and assess causal influences; able to take another's perspective

Sense of Humor	1	2	3	4	5	6

~Ability to view a situation in a humorous way

Social Flexibility/Adaptability	1	2	3	4	5	6

~Ability to easily and successfully adapt to a variety of situations

Social Maturity	1	2	3	4	5	6

~Ability to recognize the varying degrees of complexity in relationships; successfully develop and maintain a variety of well-balanced relationships

APPENDIX L

PREDICTED FUTURE PERFORMANCE QUESTIONNAIRE – LAR

"LOGICAL-ANALYTICAL REASONING" can be defined as the ability to use logic to solve problems, create symbolic meanings; break down and critically evaluate components of a subject and their interrelations. People good at LAR tend to be excellent critical thinkers and problem solvers;
tend to be successful lawyers and highly effective business managers.

The overall performance area of logical-analytical reasoning can be broken down into six facets, or subdomains. Given the performance feedback from your performance on the general area of logical-analytical reasoning, please predict how well you would perform on a task that assesses each individual subdomain in comparison to your romantic partner—who would be the superior performer in each subdomain?

	Self Superior Performer					Romantic Partner Superior Performer
Element Analysis	1	2	3	4	5	6

~Ability to use specific clues and rules to assign elements to places

Conditional Analysis	1	2	3	4	5	6

~Ability to use conditional "if-then" statements to assign elements to places

Movement Analysis	1	2	3	4	5	6

~Ability to understand changes in relationships between elements when one of them is moved

Conclusion Analysis	1	2	3	4	5	6

~Ability to correctly identify conclusions of an argument

Inference Analysis	1	2	3	4	5	6

~Ability to correctly infer what is known to be true from information presented in an argument

Assumption Analysis	1	2	3	4	5	6

~Ability to correctly identify the unstated premise that supports an author's conclusion

APPENDIX M

PREDICTED FUTURE PERFORMANCE QUESTIONNAIRE – C

"CREATIVITY" can be defined as the ability to create original, imaginative, and expressive works. Highly creative people tend to be open-minded, full of ideas, and innovative; tend to be successful in a variety of jobs and admired for their resourcefulness and high productivity.

The overall performance area of creativity can be broken down into six facets, or subdomains. Given the performance feedback from your performance on the general area of creativity, please predict how well you would perform on a task that assesses each individual subdomain in comparison to your romantic partner—who would be the superior performer in each subdomain?

	Self Superior Performer					Romantic Partner Superior Performer
Lexical Creativity	1	2	3	4	5	6
~Expressing thoughts, ideas, knowledge through the creative use of words						
Productivity	1	2	3	4	5	6
~Quantity and ease of creative works, ideas						
Originality	1	2	3	4	5	6
~Creating new, innovative works; ideas						
Elaboration	1	2	3	4	5	6
~Amount of care and detail in creative works; ideas						
Resourcefulness	1	2	3	4	5	6
~Efficiently using creativity for problem analysis and solution development						
Creative Flexibility	1	2	3	4	5	6
~Creativity in multiple independent or contrasting areas						

APPENDIX N

PREDICTED FUTURE PERFORMANCE QUESTIONNAIRE – CPI

"COGNITIVE-PERCEPTUAL INTEGRATION" can be defined as the ability to manipulate shapes and objects in your head. People good at CPI tend to have excellent technical abilities and design skills; tend to be successful at engineering and other design occupations.

The overall performance area of cognitive-perceptual integration can be broken down into six facets, or subdomains. Given the performance feedback from your performance on the general area of cognitive-perceptual integration, please predict how well you would perform on a task that assesses each individual subdomain in comparison to the person you have just met (_____)—who would be the superior performer in each subdomain?

	Self Superior Performer					Other Superior Performer
Closure Flexibility	1	2	3	4	5	6

~Ability to detect shapes and recognize patterns

2D Measurement Perception	1	2	3	4	5	6

~Ability to form accurate mental measurements of lines, shapes, patterns

Object Design	1	2	3	4	5	6

~Ability to manipulate varying lines and shapes to create aesthetic designs

Spatial Relationships	1	2	3	4	5	6

~Ability to accurately perceive spatial distances among and between objects

Mental Representations	1	2	3	4	5	6

~Ability to manipulate mental images of objects/elements to solve problems

Spatial Movement	1	2	3	4	5	6

~Ability to accurately determine object movement in space in relation to its previous location and among other objects

APPENDIX O

PREDICTED FUTURE PERFORMANCE QUESTIONNAIRE – SS

"SOCIAL SENSITIVITY" can be defined as the ability to accurately assess social situations and human behavior. People good at SS tend to be people-oriented, well-liked, and very adaptable to function effectively in a wide variety of situations; considered to be good, valuable friends.

The overall performance area of Social Sensitivity can be broken down into six facets, or subdomains. Given the performance feedback from your performance on the general area of social sensitivity, please predict how well you would perform on a task that assesses each individual subdomain in comparison to the person you have just met (_____)—who would be the superior performer in each subdomain?

	Self Superior Performer					Other Superior Performer
Judgment of Social Situations	1	2	3	4	5	6

~Ability to accurately assess what is happening, what is appropriate in social situations

Recognition of Mental States	1	2	3	4	5	6

~Ability to accurately recognize the emotional state of a person

Observation of Human Behavior	1	2	3	4	5	6

~Ability to accurately observe behavior and assess causal influences; able to take another's perspective

Sense of Humor	1	2	3	4	5	6

~Ability to view a situation in a humorous way

Social Flexibility/Adaptability	1	2	3	4	5	6

~Ability to easily and successfully adapt to a variety of situations

Social Maturity	1	2	3	4	5	6

~Ability to recognize the varying degrees of complexity in relationships; successfully develop and maintain a variety of well-balanced relationships

APPENDIX P

PREDICTED FUTURE PERFORMANCE QUESTIONNAIRE – LAR

"LOGICAL-ANALYTICAL REASONING" can be defined as the ability to use logic to solve problems, create symbolic meanings; break down and critically evaluate components of a subject and their interrelations. People good at LAR tend to be excellent critical thinkers and problem solvers;
tend to be successful lawyers and highly effective business managers.

The overall performance area of logical-analytical reasoning can be broken down into six facets, or subdomains. Given the performance feedback from your performance on the general area of logical-analytical reasoning, please predict how well you would perform on a task that assesses each individual subdomain in comparison to the person you have just met (_____)—who would be the superior performer in each subdomain?

	Self Superior Performer					Other Superior Performer
Element Analysis	1	2	3	4	5	6

~Ability to use specific clues and rules to assign elements to places

Conditional Analysis	1	2	3	4	5	6

~Ability to use conditional "if-then" statements to assign elements to places

Movement Analysis	1	2	3	4	5	6

~Ability to understand changes in relationships between elements when one of them is moved

Conclusion Analysis	1	2	3	4	5	6

~Ability to correctly identify conclusions of an argument

Inference Analysis	1	2	3	4	5	6

~Ability to correctly infer what is known to be true from information presented in an argument

Assumption Analysis	1	2	3	4	5	6

~Ability to correctly identify the unstated premise that supports an author's conclusion

APPENDIX Q

PREDICTED FUTURE PERFORMANCE QUESTIONNAIRE – C

"CREATIVITY" can be defined as the ability to create original, imaginative, and expressive works. Highly creative people tend to be open-minded, full of ideas, and innovative; tend to be successful in a variety of jobs and admired for their resourcefulness and high productivity.

The overall performance area of creativity can be broken down into six facets, or subdomains. Given the performance feedback from your performance on the general area of creativity, please predict how well you would perform on a task that assesses each individual subdomain in comparison to the person you have just met (_____)— who would be the superior performer in each subdomain?

	Self Superior Performer					Other Superior Performer
Lexical Creativity	1	2	3	4	5	6
~Expressing thoughts, ideas, knowledge through the creative use of words						
Productivity	1	2	3	4	5	6
~Quantity and ease of creative works, ideas						
Originality	1	2	3	4	5	6
~Creating new, innovative works; ideas						
Elaboration	1	2	3	4	5	6
~Amount of care and detail in creative works; ideas						
Resourcefulness	1	2	3	4	5	6
~Efficiently using creativity for problem analysis and solution development						
Creative Flexibility	1	2	3	4	5	6
~Creativity in multiple independent or contrasting areas						

APPENDIX R

RELEVANCE OF PERFORMANCE AREA QUESTIONNAIRE – CPI

"RELEVANCE" can be defined as how important it is to an individual's identity (self-definition) to be knowledgeable and skilled at activities related to an area.

"COGNITIVE-PERCEPTUAL INTEGRATION" can be defined as the ability to manipulate shapes and objects in your head. People good at CPI tend to have excellent technical abilities and design skills; tend to be successful at engineering and other design occupations.

---

a) How relevant is the general performance area of Cognitive-Perceptual Integration to you?

Low Self-Relevance					High Self-Relevance
1	2	3	4	5	6

b) The general performance area of Cognitive-Perceptual Integration can be broken down into six facets, or subdomains. Please circle the level of relevance to you for each of these subdomains.

	Low Self-Relevance					High Self-Relevance
Closure Flexibility	1	2	3	4	5	6
~Ability to detect shapes and recognize patterns						
2D Measurement Perception	1	2	3	4	5	6
~Ability to form accurate mental measurements of lines, shapes, patterns						
Object Design	1	2	3	4	5	6
~Ability to manipulate varying lines and shapes to create aesthetic designs						
Spatial Relationships	1	2	3	4	5	6
~Ability to accurately perceive spatial distances among and between objects						
Mental Representations	1	2	3	4	5	6
~Ability to manipulate mental images of objects/elements to solve problems						
Spatial Movement	1	2	3	4	5	6
~Ability to accurately determine object movement in space in relation to its previous location and among other objects						

APPENDIX S

RELEVANCE OF PERFORMANCE AREA QUESTIONNAIRE – SS

"RELEVANCE" can be defined as how important it is to an individual's identity (self-definition) to be knowledgeable and skilled at activities related to an area.

"SOCIAL SENSITIVITY" can be defined as the ability to accurately assess social situations and human behavior. People good at SS tend to be people-oriented, well-liked, and very adaptable to function effectively in a wide variety of situations; considered to be good, valuable friends.

---

a) How relevant is the *general performance area of Social Sensitivity* to you?

Low Self-Relevance					High Self-Relevance
1	2	3	4	5	6

b) The general performance area of Social Sensitivity can be broken down into six facets, or subdomains. *Please circle the level of relevance to you for each of these subdomains.*

	Low Self-Relevance					High Self-Relevance
Judgment of Social Situations	1	2	3	4	5	6
~Ability to accurately assess what is happening, what is appropriate in social situations						
Recognition of Mental States	1	2	3	4	5	6
~Ability to accurately recognize the emotional state of a person						
Observation of Human Behavior	1	2	3	4	5	6
~Ability to accurately observe behavior and assess causal influences; able to take another's perspective						
Sense of Humor	1	2	3	4	5	6
~Ability to view a situation in a humorous way						
Social Flexibility/Adaptability	1	2	3	4	5	6
~Ability to easily and successfully adapt to a variety of situations						
Social Maturity	1	2	3	4	5	6
~Ability to recognize the varying degrees of complexity in relationships; successfully develop and maintain a variety of well-balanced relationships						

APPENDIX T

RELEVANCE OF PERFORMANCE AREA QUESTIONNAIRE – LAR

"RELEVANCE" can be defined as how important it is to an individual's identity (self-definition) to be knowledgeable and skilled at activities related to an area.

"LOGICAL-ANALYTICAL REASONING" can be defined as the ability to use logic to solve problems, create symbolic meanings; break down and critically evaluate components of a subject and their interrelations. People good at LAR tend to be excellent critical thinkers and problem solvers;
tend to be successful lawyers and highly effective business managers.

---

a) How relevant is the *general performance area of Logical-Analytical Reasoning* to you?

Low Self-Relevance					High Self-Relevance
1	2	3	4	5	6

b) The general performance area of Logical-Analytical Reasoning can be broken down into six facets, or subdomains. *Please circle the level of relevance to you for each of these subdomains.*

	Low Self-Relevance					High Self-Relevance
Element Analysis	1	2	3	4	5	6

~Ability to use specific clues and rules to assign elements to places

Conditional Analysis	1	2	3	4	5	6

~Ability to use conditional "if-then" statements to assign elements to places

Movement Analysis	1	2	3	4	5	6

~Ability to understand changes in relationships between elements when one of them is moved

Conclusion Analysis	1	2	3	4	5	6

~Ability to correctly identify conclusions of an argument

Inference Analysis	1	2	3	4	5	6

~Ability to correctly infer what is known to be true from information presented in an argument

Assumption Analysis	1	2	3	4	5	6

~Ability to correctly identify the unstated premise that supports an author's conclusion

APPENDIX U

RELEVANCE OF PERFORMANCE AREA QUESTIONNAIRE – C

"RELEVANCE" can be defined as how important it is to an individual's identity (self-definition) to be knowledgeable and skilled at activities related to an area.

"CREATIVITY" can be defined as the ability to create original, imaginative, and expressive works. Highly creative people tend to be open-minded, full of ideas, and innovative; tend to be successful in a variety of jobs and admired for their resourcefulness and high productivity.

---

a) How relevant is the *general performance area of Creativity* to you?

Low Self-Relevance					High Self-Relevance
1	2	3	4	5	6

b) The general performance area of creativity can be broken down into six facets, or subdomains. *Please circle the level of relevance to you for each of these subdomains.*

	Low Self-Relevance					High Self-Relevance
Lexical Creativity	1	2	3	4	5	6
~Expressing thoughts, ideas, knowledge through the creative use of words						
Productivity	1	2	3	4	5	6
~Quantity and ease of creative works, ideas						
Originality	1	2	3	4	5	6
~Creating new, innovative works; ideas						
Elaboration	1	2	3	4	5	6
~Amount of care and detail in creative works; ideas						
Resourcefulness	1	2	3	4	5	6
~Efficiently using creativity for problem analysis and solution development						
Creative Flexibility	1	2	3	4	5	6
~Creativity in multiple independent or contrasting areas						

APPENDIX V

MANIPULATION CHECK

Subject ID _____

What task did you complete? _____

Who else completed the task? _____

Was the task particularly important to the other person? Circle: Yes or No

Who had a better performance on this task? Circle: Yourself or Other Person

APPENDIX W

INFORMED CONSENT FORM

Title: Dynamics of Romantic Relationships
Investigators: Courtney Morewitz and Connie Pilkington

In this study conducted by Courtney Morewitz (under the supervision of Dr. Connie Pilkington) I understand that I will be asked to complete a few brief questionnaires assessing current feelings in the relationship and levels of relevance for the following four domains: cognitive-perceptual integration, social sensitivity, logical-analytical reasoning, and creativity. In addition, I understand that I will complete a few tasks within one of these performance domains. I further understand that my responses will be confidential and that my name will not be associated with my responses or any results of this study. I know that I may refuse to answer any question asked and that I may discontinue participation at any time. I also understand that any grade, payment, or credit for participation will not be affected by my responses or by exercising any of my rights. I further understand that upon completion of my participation I will be given a full and complete explanation of this study and that I have the right to withdraw the use of my data at that time. I am aware that I may report dissatisfactions with any aspect of this experiment to the Psychology Department Chair (Dr. Larry Ventis, 757-221-3775). I am aware that I must be at least 18 years of age to participate. My signature below signifies my voluntary participation in this study.

_____ _____

Date Signature

Class instructor: _____ Print Name: _____
(if applicable)

Please send a summary of the results of this study to my email address: _____

APPENDIX X

VERBATIM SCRIPT: DEBRIEFING

"Thank you all for participating in the study. I appreciate your help. Let me take a moment to explain the rationale behind the study. I am looking at how people maintain positive self-evaluations in romantic relationships when both partners are competing in the same performance domains. This research is based on the Self-Evaluation Maintenance (SEM) Model, which states that people strive to maintain a positive self-image, and that our interaction with others can have a major impact on how we maintain our self-evaluation whether it be by reflecting in the glory of our partner, or by negative comparisons.

Because many relationships are based on similarities, it seems likely that there will be situations where romantic partners are competing in the same performance domain that is equally important to both partners. What we are trying to do in this study is to find out how people will react to either outperforming their romantic partner or being outperformed in an area that is really important to both partners.

Research has shown that individuals handle this conflict of performance in three ways:

a) modifying their own performance or the performance of others (saying things like "they have more time to practice" or "I was having an off-day")

b) reducing relevance in that area ("playing tennis really isn't that important to me") or

c) reducing closeness

(this can be actual psychological closeness or physical proximity).

However, in some cases the performance domain, such as an academic major or job, is such an important part of a person's self-definition that it cannot be altered. Moreover, reducing closeness to the romantic partner is not an option to reduce conflict because that would result in a disintegration of the relationship.

Thus, in these situations, in order to maintain closeness and a positive self-evaluation, we hypothesize that romantic partners will specialize within the general performance domain. So when a task is important to both my partner and myself, I will claim expertise in the general performance domain, but the expertise will be evenly distributed between us along the subdomains of that area. This would allow both of us to resolve the potential conflict from the negative feedback yet maintain relevance and closeness with each other.

For example, suppose the general area of cooking is highly relevant to my romantic partner and myself. Tension may arise when it comes to decisions regarding expertise in this area—for example, who should cook for a dinner party? A way to resolve this tension would be for both of us to specialize. Perhaps I will consider myself the expert when it comes to grilling, and I will consider my partner to be the expert at baking desserts. Thus, we can both be experts in the general area of cooking, we can maintain the high relevance of the general area of cooking, and we can maintain closeness with each other.

The proposed study seeks to replicate these findings by examining the frequency of specialization in an experimental situation. A general performance area that was

highly relevant to both romantic partners was selected from your responses during mass testing. When you came into the lab, I told you that the purpose of the experiment was to see if a person could predict someone else's behavior better if they know the other person well. As you now know, this was a bit misleading. I stated this false purpose in order to prevent you from thinking about the true purpose of the experiment—finding out if the task relevance would change and if partners would specialize. Do you understand why I stated this false purpose?

The next part I want to explain is the general performance area task. The four areas of cognitive-perceptual integration, social sensitivity, logical-analytical reasoning, and creativity were created and defined by the experimenters. The definitions you read on each sheet were completely fabricated. To clarify, any statements such as, "People good at cognitive-perceptual integration tend to have excellent technical abilities and design skills" and "People good at social sensitivity are very adaptable to function effectively in a wide variety of situations" are false.

There were two reasons why I included the false definitions of the areas. The first purpose was to actually define the relatively ambiguous area so that each participant could have some understanding of what each area encompassed. For example, "Social Sensitivity" is open to interpretation and having a formal definition helps to clarify what exactly I am talking about. The second purpose was to make each area seem appealing—I wanted to make sure that some areas would be considered important to everyone. If the area's definition sounds like something you want to be (e.g. a successful lawyer), then you are more likely to react to feedback assessing that area. Do you understand why I included these fabricated performance areas and definitions?

In addition to having fabricated the definitions of the performance areas, the tasks used to assess these areas were fabricated as well. Regardless of which task you completed, each task was put together specifically to give you the impression that the performance area was composed of several subdomains. This became important when the time came for you to make predictions about performance on the subdomains of an area. More importantly to note, these tasks were not given with the specific purpose of actually measuring any abilities. I told you that the task was designed using a key-criterion strategy so that you should not worry if the task content did not seem applicable to the domain it was assessing. The purpose of stating this was to make sure that you believed that the task was truly an accurate assessment of the performance area despite any questionable content. In fact, because the purpose of the task was not to measure any abilities whatsoever, no individual, including myself even scored the tasks. The true purpose in having you complete the task was to be able to give you feedback comparing your performance with that of a stranger (the opposite sex partner of the other couple) or your romantic partner. Do you understand why I did not tell you about the true nature of the task before you completed it? Are you okay with the fact that I did not tell you this information beforehand?

In case you experienced any frustration or did not complete the task, you should note that the tasks were designed to take longer than the allotted time. Originally I told you that the tasks were designed to avoid ceiling effects, which can result in a number of high scores. The reason for doing this was to add to the validity of giving you the feedback. In other words, those who did not finish the task and received high scores would really think they must have done well in order to still score so high. On the other

hand, those who did not finish the task and received low scores would think it was because their abilities were so poor that they were unable to do well. Do you understand why the tasks were specifically created to be more difficult? Are you okay knowing that any frustration you may have experienced was not a result of your own abilities, but rather due to the nature of the task itself?

The last task component that I want to be sure you all understand is that the feedback I gave you was false. You were randomly assigned to receive feedback that your performance was higher (80^{th} percentile) or lower (60^{th} percentile) than either your romantic partner or the stranger. The time delay to supposedly "score" your tests was just included in the study in order to give you the impression that we were truly scoring your task.

To clarify, the feedback you received was randomly assigned. Remember that the tasks you completed were fabricated and were not scored or examined in any way. Do you understand that the tasks you completed were not scored and the feedback you received was false and in no way indicative of your true abilities? The purpose of giving the false feedback was to assess how your levels of relevance and how the distribution of expertise would change in response to this threatening information. Do you understand why it was critical to the study to give you bogus feedback? Are you okay with the fact that I gave you bogus feedback?

After the feedback I gave you the impression that you were going to complete some tasks assessing the subdomain areas for the general area. As you now know, this was not true. I wanted to give you this impression so that you would try to make accurate predictions about who would be the superior performer on these subdomains, whether it

is comparing yourself to your romantic partner or to a stranger. Are you okay that I gave you this false impression?

Next, you completed two questionnaires. The first one asked you to predict who would be the superior performer on tasks assessing the subdomain areas. The second questionnaire asked you to assess your level of relevance for the general performance area and for the subdomain. The purpose of these questions was to obtain the critical information for the study's objective.

Specifically for the predictive performance questionnaire, in accordance with the specialization theory, it is hypothesized that participants will predict that their romantic partners will have a superior performance on 50% of the subdomains and the participants themselves will have a superior performance on the other 50% of the subdomains. It is also hypothesized that participants will predict that their own performance will be superior on all of the subdomains in comparison to a stranger.

Specifically for the relevance questionnaire, in accordance with the specialization theory, it is hypothesized that when the other is a romantic partner, the relevance of 50% of the subdomains should remain high and the relevance of the other 50% of the subdomains should decrease. Given this specialization, the relevance of the general performance area should still remain high. When the other is a stranger, no threat to self-evaluation occurs and no changes in relevance should be found.

Additionally, it is hypothesized that greater frequency of specialization will lead to reduced conflict and feelings of ambivalence about the relationship, while contributing to greater relationship satisfaction.

Do you fully understand the procedure I have explained? Are you fully aware of the bogus nature of the task itself and the feedback I gave you?

Now that you know the true nature of the study, I want to ask if it is okay to use your responses in my research. Keep in mind that all of your responses are confidential and your name will not be associated with your ID number used to label the questionnaires, nor will it be associated with any aspect of the results or research itself. Your responses will only be used for research purposes.

Do you have any questions? Is it okay if I use your responses in my research?

Please do not discuss this study with others who might take part in the near future. If other subjects know that these tasks etc. are false, obviously their responses wouldn't be informative.

So, if someone asks (a classmate might) you could just tell him or her that you answered a bunch of questionnaires regarding various everyday abilities that you and your romantic partner have. Ok?

Thanks again!"

VITA

Courtney L. Morewitz

The author received her B.A. in Psychology from Randolph-Macon Woman's College (Lynchburg, VA) in May of 2000. She spent the following year coordinating pharmaceutical studies and engaging in behavioral research as a research assistant at the Sleep Disorders Center at Eastern Virginia Medical School (Norfolk, VA). In the fall of 2001, she began graduate studies at The College of William and Mary (Williamsburg, VA) in the Department of Psychology. While completing the course requirements to receive the M.A. degree, she has been actively engaged in conducting research in social and personality psychology, as well as serving as a teaching assistant within the department.